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Biological Resource Analysis

**BIOLOGICAL RESOURCE ANALYSIS
7630 BUTTS CANYON ROAD
NAPA COUNTY, CALIFORNIA**

September 16, 2015

Prepared for

Planning, Building and Environmental Services
County of Napa
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Table 4. Special-Status Wildlife Species Known To Occur within 5 Miles of the 7630 Butts Canyon Road Project Site.

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1. INTRODUCTION

Monk & Associates, Inc. (M&A) has prepared this biological resource analysis for the proposed 7630 Butts Canyon 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 (Department), 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 Department.

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 24 acre project site is located along a private driveway that is accessed via Butts Canyon Road in Pope Valley, Napa County, California (Figures 1 and 2). The private driveway borders the project site’s southern edge (Figure 3). The project site is surrounded by mostly undeveloped lands that support a few sprawling rural ranch homes and in some instances agriculture. Pope Creek lies 0.33-mile south of the project site and flows from northwest to southeast.

The project site is occupied by a main house, a smaller house, two barns with multiple stalls, three garages, a shed, a riding arena, a round pen, four square pastures with shelters, three smaller pastures, two large pastures, and a man-made pond with a dock and a manmade drainage that exits the pond (Figure 3). The immediate areas around these features are grazed by horses. The far south end of the project site is dominated by oak woodland composed of blue oaks (*Quercus douglasii*) and some valley oaks (*Quercus lobata*). The understory is heavily grazed non-native annual grassland. The man-made pond and its drainage channel take up the rest of the south end of the project site. The middle section of the project site contains horse pastures which are heavily grazed non-native annual grassland. There is also a strip of wetland vegetation along the west edge. A couple of recently graded fire roads go through the non-native annual grassland. These roads were emergency graded in response to the Butts Fire that burned from July 1 through July 9, 2014 and that destroyed over 4,300 acres.

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Running through non-native annual grassland at the north end of the project site (just below/south of the chaparral community) is a seasonally wet drainage channel that begins at a natural underground spring and drains to the west edge of the project site and into the neighboring property. In the northern portion of the project site it transitions to serpentine soil that supports chaparral habitat. The chaparral is untouched and ungrazed by current ranch activities and no new activities are proposed in this habitat (Figure 3).

3. PROPOSED PROJECT

The project site is owned by Mr. William Gardiner and Ms. 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. The largest upgrade will be to replace the existing smaller house with a new house. 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. Only half of the project site is in use, and the proposed project would not change this. The serpentine soil and chaparral community would remain untouched.

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.

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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 (CNDDDB 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 pond and drainage channel was completed using high-powered (10 x 42) binoculars. A nocturnal survey of the ponds and drainage channel was also

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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 Biologist 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 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 eaves 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 705 feet above sea level at the south end to 1,142 feet above sea level at the north end. The chaparral at the north end of the project site drains downhill through various drainage channels, most of which end up draining onto the neighboring property to the west. Starting just below/south of the chaparral community is a seasonally wet drainage channel that begins at a natural underground spring and drains to the west edge of the project site and into the neighboring property.

A small (approximately 0.72-acre) man-made pond occurs immediately north of the primary residence. This pond was excavated in uplands and relies on a large watershed area that sheet flows large storm event rainfall to the pond. In addition, large storm event flows coalesce in wetlands located to the north/upslope of the project site. These seasonal wetlands fill and on occasion, during severe storm events, spill into an 8-inch culvert that is routed onto the project site, under an outbuilding and a well-used driveway on the project site, to where it discharges on

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the upper bank of the pond. Apparently it does not flow frequently enough to cause down-cutting or erosion on the pond bank. Other hydrology may also be provided from ground water. It may also be that the pond was originally excavated deep enough that it intercepts the ground water table. This likely explains why the pond stays perennially hydrated. A man-made overflow drainage exits the pond on its west rim, and after the pond fills each winter, flows westward off the property. This culvert was placed in this man-made drainage creating a road crossing over the drainage.

5.2 Plant Communities and Associated Wildlife Habitats

Five plant communities were identified within the project site. These include oak woodland, landscape/ornamental, non-native annual grassland, seasonal wetland, and chaparral. A complete list of plant species observed on the project site during 2014 and 2015 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 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. In interior mountain ranges, oak woodlands grade into montane mixed coniferous forests. Oak woodlands are dominated by oaks (*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).

Densely populated blue oaks and some valley oaks along with an understory of heavily grazed non-native grasses and forbs characterize the south end of the project site (see Figure 3). The understory in this plant community is characterized by forbs and grasses including broad-leaved filaree (*Erodium botrys*), bur clover (*Medicago polymorpha*), sharp-pointed fluellin (*Kickxia elatine*), bristly-ox tongue (*Helminthotheca echioides*), soap plant (*Chlorogalum pomeridianum*), Bermuda grass (*Cynodon dactylon*), slender wild oats (*Avena barbata*), and dogtail grass (*Cynosurus echinatus*), among others. In different months of the year a different component of herbaceous, annual plant species can be observed in the oak woodland understory. This oak woodland community onsite is essentially devoid of a shrub stratum.

Trees in the oak woodland plant community provide foraging, roosting and nesting habitat for a large variety of wildlife species, including raptors such as the red-tailed hawk (*Buteo jamaicensis*) and red-shouldered hawk (*Buteo lineatus*). Common birds identified in the oak woodlands include acorn woodpecker (*Melanerpes formicivorus*), western bluebird (*Sialia mexicana*), savannah

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sparrow (*Passerculus sandwichensis*), western scrub jay (*Aphelocoma californica*), northern flicker (*Colaptes auratus*), and California towhee (*Pipilo crissalis*).

Signs of raccoon (*Procyon lotor*) 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 LANDSCAPE/ORNAMENTAL

A manmade pond (just under 1 acre) with an overflow drainage channel, a riding arena and associated buildings occur immediately north of the primary residence. These areas have been used for decades by the residents of the property and are planted with landscape/ornamental vegetation. The riding arena on the south end of the project site is surrounded by olive trees (*Olea europaea*). Trees surrounding the pond and its drainage channel include weeping willows (*Salix babylonica*) and Pacific willow (*Salix lasiandra* var. *lasiandra*). The well-developed pond edges are dominated by narrow-leaved cattail (*Typha angustifolia*) and alkali bulrush (*Bolboschoenus maritimus* ssp. *paludosus*), but also include grasses and forbs such as annual beard grass (*Polypogon monspeliensis*), blue-eyed grass (*Sisyrinchium bellum*), and rough cat's-ear (*Hypochaeris radicata*). Sago pondweed (*Potamogeton* sp.) and horned pondweed (*Zannichellia palustris*) were observed in the water column. There is also a small lawn near the main house. Landscaped areas only provide habitat value to common animals that are adapted to living in close association with man such as the northern mockingbird (*Mimus polyglottos*), western scrub jay (*Aphelocoma coerulescens*), Virginia opossum (*Didelphis virginiana*) and raccoon (*Procyon lotor*).

Wildlife reported to occur in the pond include catfish (*Ictalurus* sp.), smallmouth bass (*Micropterus dolomieu*), green sunfish (*Lepomis cyanellus*), and bullfrog (*Rana catesbeiana*). M&A also observed bullfrogs in this pond. Red-winged blackbirds (*Agelaius phoeniceus*) and marsh wren (*Cistothorus palustris*) were observed using the narrow-leaved cattails on the periphery of the pond during M&A's site visits.

5.2.3 NON-NATIVE ANNUAL GRASSLAND

Non-native annual grassland occurs in the fields and pastures in the middle of the project site and at the north end of the project site just below the chaparral community (Figure 3). The pastures and fields are heavily grazed and impacted, and a few fire roads were graded through the north end of the grassland community. This community is dominated by introduced grasses and forbs, including slender wild oats, Italian ryegrass (*Festuca perennis*), meadow barley, bristly-ox tongue, and prickly lettuce.

The project site's grassland habitat provides food and cover for a variety of wildlife species. The grasses, thistles, and some forbs provide seeds for passerine birds (perching birds) such as the house finch (*Carpodacus mexicana*) and lesser goldfinch (*Spinus psaltria*) which were observed on the project site, and burrowing/foraging opportunities for small mammals such as Botta's pocket gopher (*Thomomys bottae*), California meadow vole (*Microtus californicus*), and western harvest mouse (*Reithrodontomys megalotis*), among others.

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5.2.4 SEASONAL WETLAND

Seasonal wetlands are habitats that may appear dry in the summer and fall months, but by the first winter rains become 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.

Running through the non-native annual grassland at the north end of the site (just below/south of the chaparral community) is a seasonally wet drainage channel that begins at a natural underground spring and drains to the west edge of the project site and into the neighboring property. These seasonally wet areas are dominated by hydrophytic (*i.e.*, wetland) plant species that include meadow barley (*Hordeum brachyantherum*), California coyote thistle (*Eryngium aristulatum* var. *aristulatum*), iris-leaved rush (*Juncus xiphioides*), and white-stem hedge nettle (*Stachys albens*). Non-wetland plants that also occur on wetland edges include Ithuriel's spear (*Triteleia laxa*), Kellogg's yampah (*Perideridia kelloggii*), white hayfield tarweed (*Hemizonia congesta* var. *luzulifolia*), and prickly lettuce (*Lactuca serriola*). The seasonal wetlands inundate to the surface for only short periods and thus only provide a temporary water source for wildlife. They were dry during M&A's October 27, 2014 site visit and inundated again in March 2015.

5.2.5 CHAPARRAL

Chaparral is a one to two layer community characterized by a dominance of drought-adapted sclerophyllous (having thick, leathery leaves), evergreen shrubs approximately six to thirteen feet tall (Holland 1986). Common dominant shrub species for this community type include chamise (*Adenostoma fasciculatum*), toyon (*Heteromeles arbutifolia*), black sage (*Salvia mellifera*), different species of manzanita (e.g., *Arctostaphylos glandulosa* and *Arctostaphylos viscida*), ceanothus (e.g. *Ceanothus cuneatus* and *Ceanothus integerrimus*), and scrub oak (e.g. *Quercus dumosa* and *Quercus durata*). These shrubs often form a dense, impenetrable thicket with overlapping canopies that can shade out herbaceous species. The herbaceous understory, if present, varies both seasonally and annually. This community is adapted to fire and many of its species are capable of stump sprouting. The annual grasses and forbs change from year to year especially after a fire event. This plant community is well distributed from northwestern Baja to southern Oregon on shallow, rocky soils.

Serpentine chaparral occurs on serpentine soils scattered throughout Northern and Central California and is characterized by shrubs endemic to ultramafic (serpentine) soils such as leather oak (*Quercus durata*) and a high percentage of other native and endemic plant species. Ultramafic soils act as refugia for native, endemic and rare plant taxa by excluding exotic plant species via the nutrient imbalances (e.g. low calcium) and toxicities (e.g. chromium, nickel and manganese) inherent in ultramafic soils.

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On the project site, serpentine chaparral occurs at the very northern end (Figure 3), upslope and well outside the proposed project use areas, on a hill colloquially named “Rattlesnake Hill.” This chaparral community is dominated by chamise and ceanothus (*Ceanothus jepsonii*), with sub-dominants being manzanita (*Arctostaphylos* sp.), toyon (*Heteromeles arbutifolia*), gray pine (*Pinus sabiniana*), and the subshrubs interior golden bush (*Eriophyllum confertiflorum*) and yerba santa (*Eriodictyon californicum*). Herbaceous native wildflowers found on this rocky slope include Gambel’s milkvetch (*Astragalus gambelianus*), gillias (*Gilia achilleifolia* ssp. *achilleifolia*, *G. tricolor* ssp. *diffusa*), and buckwheats (*Eriogonum vimineum* and *E. nudum*). Grass and forbs such as slender wild oats, barbed goat grass (*Aegilops triuncialis*), climbing bedstraw (*Galium porrigens*) and summer cottonweed (*Epilobium brachycarpum*) are also present. During the course of M&A’s spring and summer special-status plant surveys, one special-status plant, two-carpellate western flax (*Hesperolinon bicarpetallum*), a CNPS Rank 1B.2 species was found on this rocky slope (Figure 3).

The proposed project would not affect the seasonal wetland or chaparral communities. The proposed project would also not affect the potential other waters or potential wetlands on the project site (Figure 3). The proposed project would only continue to use the existing disturbed and already heavily impacted oak woodland, landscape/ornamental, and non-native annual grassland communities.

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 California Department of Fish and Game (Department) 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 Department requesting their inclusion in EIRs. Plants

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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 Department (2013);
- 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 Department 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:

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- 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 Department’s CNDDDB, 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 CNDDDB 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.

M&A qualified botanists conducted 3 focused surveys for special-status plants on the project site: one in March, one in May, and one in July 2015; these surveys were appropriately timed to account for the special-status plants’ known blooming periods and the drought conditions affecting California’s landscape. Additionally, M&A experienced field biologists Geoff Monk and Bridgett Downs conducted general biological surveys of the project site in October 2014 and April 2015 and noted all plants observed during these two surveys. Plants that could not be identified to species in the field were collected to be “keyed” in the lab by M&A botanists under a high-powered dissecting microscope. During these 5 separate surveys only one special-status plant was identified onsite: two-carpellate western flax (*Hesperolinon bicarpellatum*), a CNPS Rank 1B.2 species. This plant has no special state or federal status. *This plant will not be*

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impacted by the proposed project since it occurs in the chaparral on the serpentine slope well above [outside of] the project use areas (Figure 3).

The areas that would be impacted by the proposed project are already heavily grazed and disturbed. Impact areas will not be expanded by the proposed project; uses will only change in already heavily impacted areas. No impacts will occur to the serpentinite chaparral or wetland habitats. Mitigation measures can be implemented to ensure that proposed impacts remain at a level regarded as less than significant pursuant to the CEQA. The Impacts and Mitigation section of this document details the avoidance and mitigation measures that will be implemented as part of the proposed project (that is, wetland setback distances).

6.3 Potential Special-Status Animals on the Project Site

A search of the CNDDDB found 9 special-status animal species occurring within 5 miles of the project site (Table 4). Figure 4 graphically depicts known CNDDDB record locations within 5 miles of the project site. No special-status animal records have 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 are 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 6 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. These 6 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 has been designated by USFWS. *The project site is located approximately 19.1 miles north of mapped Critical Habitat Unit SON-1, 20.9 miles north of mapped Critical Habitat Unit NAP-1, and 23.5 miles north of mapped Critical Habitat Unit SON-2 (Figure 5). It 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

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(*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 CNDDDB search resulted in a record for California red-legged frog 3.9 miles south of the project site (CNDDDB Occurrence No. 738). Two juvenile California red-legged frogs were seen in 1979 at this occurrence which is located in a spring and has a 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.

The seasonal wetlands/wetland drainage onsite do not provide suitable habitat for the California red-legged frog. These features do not inundate long enough during normal rainfall years to provide California red-legged frog breeding and larval development habitat. A man-made pond that occurs on the project site, however, provides suitable habitat conditions for the California red-legged frog. The presence of smallmouth bass, catfish, green sunfish, and bullfrogs that have been reported to occur in the pond are predatory on California red-legged frog eggs and/or larvae. Thus, this frog would not be able to successfully reproduce in this pond, if it was present.

M&A’s principal biologist Mr. Geoff Monk is a 10(a)(1)(A) federally permitted California red-legged frog biologist. Mr. Monk and Ms. Bridgett Downs, a qualified California red-legged frog biologist, conducted surveys for the California red-legged frog on and adjacent to the project site. No California red-legged frogs were seen during a diurnal survey of this pond conducted on October 27, 2014. Similarly, no California red-legged frogs were observed during diurnal and nocturnal surveys on March 12, 2015, during a diurnal survey on March 13, a diurnal/nocturnal and funnel trap survey on April 9, and a diurnal survey on April 10. M&A identified multiple bullfrogs in this pond; adult bullfrogs will prey on adult and sub-adult California red-legged frogs, larvae, and eggs. Accordingly, based on negative findings and the presence of bullfrogs in a man-made pond onsite, M&A concludes that the California red-legged frog does not occur on the project site. Thus, impacts to California red-legged frog are regarded as less than significant pursuant to the CEQA.

6.3.2 WESTERN POND TURTLE

The western pond turtle (*Emys marmorata*) is a California “species of special concern.” The sensitivity of this species requires consideration by the lead agency during the CEQA review process. In April of 2015 the USFWS issued 90-day findings on a petition to list this species under FESA. The 90-day findings concluded that listing this species under FESA is warranted; however, as of this writing there has been no update to its federal status.

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The western pond turtle is a habitat generalist, inhabiting a wide range of fresh and brackish, permanent and intermittent water bodies from sea level to about 4,500 feet above sea level (USFWS 1992). Typically, this species is found in ponds, marshes, ditches, streams, and rivers that have rocky or muddy bottoms. This turtle is most often found in aquatic environments with plant communities dominated by watercress, cattail, and other aquatic vegetation. It is a truly aquatic turtle that usually only leaves the aquatic site to reproduce and to overwinter. Field work has demonstrated that western pond turtles may overwinter on land or in water, or may remain active in water during the winter season; this pattern may vary considerably with latitude, water temperature, and habitat type and remains poorly understood (Jennings and Hayes 1994).

The pond turtle also requires upland areas where it digs nests and buries its eggs. These nests can extend from 52 feet to 1,219 feet from watercourses (Jennings and Hayes 1992), however most pond turtles nest in uplands within 250 meters of water (Bury, unpublished). Upland nest sites are usually found in areas with sparse vegetation. Sunny, barren, and undisturbed (not disked) land provides optimal habitat, while shady riparian habitat and planted agricultural fields do not provide suitable habitat (op. cit.). Eggs are typically laid from March to August (Zeiner et. al. 1988), with most eggs being laid in May and June. Hatchlings will stay in the nest until the following April (Bury, unpublished). Predators of juvenile pond turtles include the non-native bullfrog and Centrarchid fish (sunfish). This turtle is most visible between April and July when it can be observed basking in the sun. In areas where the water is very warm during these months, however, it will bask in the warm water and will be more difficult to observe. It eats plants, insects, worms, fish and carrion (Stebbins 2003).

The closest CNDDDB record discusses five adult western pond turtles observed in 2005 approximately 3.3 miles southeast of the project site in a man-made reservoir (CNDDDB Occurrence No. 642). The man-made pond on the project site provides suitable habitat for adult western pond turtles. However, no western pond turtles were seen during several diurnal and nocturnal surveys conducted by M&A in October 2014 and March and April 2015. The land owner also has never seen pond turtles on the property. M&A concludes that the western pond turtle does not occur on the project site. Accordingly, impacts to western pond turtle are regarded as less than significant pursuant to the CEQA.

6.3.3 PURPLE MARTIN

Purple martin (*Progne subis*) is a California "species of special concern." It has no special federal status. This member of the swallow family 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. 1988).

The closest purple martin CNDDDB record (Occurrence No. 12) is located approximately 4.7 miles southwest of the project site near Granite Lake. On the project site the purple martin could nest 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,

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nesting bird surveys should be conducted to determine if this species could be impacted prior to any demolition or construction 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 the purple martin and other nesting birds.

6.3.4 TRICOLORED BLACKBIRD

Tricolored blackbird (*Agelaius tricolor*) is a California "species of special concern." It has no federal status. A gregarious species, the tricolored blackbird is typically found near freshwater, particularly near marsh habitat. Loss of wetland habitats is regarded as the principal factor responsible for this species population decline (Beedy, 1992). Nesting colonies are typically found in stands of cattail (*Typha* spp.) and bulrush (*Scirpus* spp.), although they are also known to utilize blackberry patches (*Rubus* sp.) and thistle clumps (*Cirsium* spp. and *Cynara* spp.) adjacent to water. Flooded lands, margins of ponds, and grassy fields in summer and winter provide typical foraging habitat for this species.

The closest tricolored blackbird CNDDDB record (Occurrence No. 407) is located at four ponds and a vineyard location approximately 1.4 miles southeast of the project site. Twenty-four tricolored blackbirds were observed nesting at this location in 2000. While the project site's pond vegetation is likely not dense enough or extensive enough to be used by nesting tricolored blackbirds, a nesting bird survey should be conducted to determine if this species could be impacted prior to any construction or demolition work that is implemented as part of the proposed project. Pursuant to the CEQA, impacts to this species are regarded as potentially significant with mitigation. 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.

6.3.5 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). As a candidate species for listing under the CESA, this 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. Although these bats eat a variety of beetles and other soft-bodied insects, small moths make up the principle food source for this species. 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).*

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The closest CNDDDB record (Occurrence No. 127) for the Townsend's big-eared bat is located approximately 2.2 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. 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.

6.3.6 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 CNDDDB record (Occurrence No. 224) for the pallid bat is from 1968 and is located approximately 3.1 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.

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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

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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" — i.e., 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

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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.

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 expected to support regionally known federally listed animals. M&A conducted surveys for the federally listed California red-legged frog in the man-made pond on the project site. Diurnal and nocturnal surveys were conducted by a federally permitted California red-legged frog biologist. This frog was not found and thus is not believed to be present in the pond or on the project site, especially in light of the fact that the pond onsite supports Centrarchid fish and bullfrogs. 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.).

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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 PROPOSED PROJECT

The project site could provide nesting habitat for raptors (birds of prey) and common passerine birds (song birds). These birds are protected pursuant to the Migratory Bird Treaty Act. 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 Department considerations pursuant to CESA are limited to those actions that would result in the direct take of a listed species.

If the Department determines that a proposed project could impact a State listed threatened or endangered species, the Department 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

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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 Department 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 Department 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 Department 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 the FESA, to submit the federal opinion or permit to the Department for a determination as to whether the federal document is "consistent" with CESA. If after 30 days the Department 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 Department 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.

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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 PROPOSED PROJECT

No state listed plant species would likely be impacted by the proposed project. Calistoga popcorn flower (*Plagiobothrys strictus*) is the only state listed plant species known to occur within 5 miles of the project site (Table 3) and it was not observed during appropriately timed surveys. No state listed plants were observed during M&A's March, May and July 2015 special-status plant surveys. Based on M&A's survey results, no impacts to state listed plants are expected to occur from project implementation.

No state listed wildlife species are known to occur on the project site; there is no habitat for state listed wildlife species (Table 4). As such, no impacts to state listed animals are expected from project implementation.

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.

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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 PROJECT

Common song birds and raptors could nest on the project site. Preconstruction surveys would have to be conducted for these species 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:

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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 seasonally wet drainage channel and spring would 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 this drainage feature on the project site. The man-made pond and drainage that leaves the pond should not be subject to setback requirements as they are not natural features.

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

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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

There is no riparian vegetation on the project site. As such, 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 seasonally wet drainage and seasonal wetlands onsite do not provide fisheries habitat or support riparian vegetation. The man-made pond was stocked as some time in the past with non-native Centrarchid fish species. Hence, there is no native fisheries habitat onsite and thus should be no requirement to try to improve the habitats present.

- 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. All surface runoff currently flows over vegetated ground and will remain as such under the currently proposed project.

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

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Applicability: The man-made drainage channel is crossed on the project site via has an existing culvert that was installed many years ago to facilitate travel over/through this property. The man-made pond acts as silt collection basin and thus, treats 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:

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

Applicability: The actively used area of the project site does not support special-status plants or animals. The one special-status plant found on the property, two-carpellate western flax, is restricted to chaparral/serpentine habitats outside the active use area (see Figure 3). Although unlikely, the project site provides suitable nesting habitat for the state designated species of special concern purple martin. The project site also provides suitable roost sites for the state designated species of special concern Townsend's big-eared bat and pallid bat. In addition, the project site provides suitable nesting habitats for common raptors and passerine birds that are protected pursuant to California Fish and Game Code §§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. 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 Sections 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: The only special-status species that could be found onsite are birds and bats as discussed in the section above. No bat roost/maternity sites were found during M&A's March 12, 2015 surveys. If nesting birds or roosting bats are identified onsite during preconstruction surveys, temporary non-disturbance buffers would need to be established around the nesting or roosting site until the young had fledged or the bats had been humanely evicted. No replacement mitigation habitat would be necessary either on or offsite. 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.

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Applicability: The project site's proposed use areas do not support special-status plant or animal species, though preconstruction bat roosting surveys and nesting bird surveys will be conducted to re-confirm prior to project impacts. The serpentinite chaparral habitat where a special-status plant species was identified will not be affected by the proposed project. Thus, no restoration or replanting of native plant habitat should be necessary.

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 birds and raptors are identified during preconstruction surveys, mitigation measures BIO-1 and BIO-2 in the Impacts and Mitigations Section 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 federal 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. Special-status 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 (only a CNPS Rank 1B.2 species was found well outside the active use area). 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 riparian vegetation or native fisheries habitat.

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 (CNDDDB), or other

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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 CNDDDB. 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.

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: One special-status plant species was identified in the serpentine chaparral habitat on the project site. This habitat will not be affected by the proposed project. Special-status plant surveys have been conducted in the proposed affected areas of the project site. None were found during appropriately timed surveys. Potential impacts to special-status species are addressed in the Impacts and Mitigation Section of this report. 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: No potentially sensitive natural plant communities will be affected by the proposed project.

- 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: No potentially sensitive natural plant communities will be affected by the proposed project. Thus, no preservation or mitigation requirement should be necessary.

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.

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Applicability: The applicant would comply with all setback requirements for the seasonally wet drainage channel and spring, and man-made pond and drainage channel. No designated 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 Boards, California Department of Fish and Game, 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 proposed project will not impact 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 drainage channel and spring, and man-made pond and drainage channel. No proposed activity will affect the jurisdictional limits of the U.S. Army Corps of Engineers, California Regional Water Quality Control Board, or the California Department of Fish and Wildlife (the resource agencies). Any proposed activity inside established setbacks identified in Impact and Mitigation Measure 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

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Measure 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

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).

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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 occurs 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.

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 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

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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 7630 Butts Canyon 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 CNDDDB 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 and 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; none of these communities occur on the project site. The proposed project will not impact any sensitive wetland community; there is a small area of "seasonal wetland" on the west margin of 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 CNDDDB. Mixed serpentine chaparral is the only sensitive biotic community recognized by the CDFW that is on the project site; however this community will not 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 Department to determine those areas within a project area that would be subject to their regulation.

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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.

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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.

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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 Protection 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

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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

The drainage and seasonal wetlands on the project site would likely meet the Corps criteria as waters of the United States. Prior authorization from the Corps would be necessary to fill these features. However, under the currently proposed project, no Corps jurisdictional wetlands are proposed to be impacted. Thus, pursuant to Section 404 of the Clean Water Act a permit from the Corps is not required. No mitigation would be necessary.

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.

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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 any mapped wetland or tributary (see Figure 3). A vegetated buffer should be maintained between any manure disposal areas and any tributary or wetland.

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:

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- (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

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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 are with a mitigation prescription that when implemented would reduce impacts to the greatest extent possible.

10.1 Significance Criteria

A significant impact is determined using CEQA and 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

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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.

10.2 Thresholds of Significance

10.2.1.1 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 California Department of Fish and Game 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 California Department of Fish and Game 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.

10.2.1.2 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

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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.

10.2.1.3 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 and tricolored blackbird, could be impacted by the proposed project if avoidance measures are not implemented. The purple martin and tricolored blackbird are 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 August 31st, the nesting surveys should be completed 15 days prior to commencing with the work. If common (that is, not special-status) birds 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 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. 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 of the project site 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

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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 Planning Department 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 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, 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. No nesting raptors have been identified on the project site during surveys. As birds of prey are mobile animals that may maintain traditional nest sites or that can readily move nests each year, surveys shall be conducted to ensure that there are no impacts to nesting raptors from the proposed project. Impacts to nesting raptors, their eggs or young are considered **potentially significant** pursuant to the CEQA. Since nesting raptors are not known from the project site or area around the project site, but could nest there in the future, 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 or building 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 or ground that could be impacted by the proposed project.

If nesting raptors are identified during the surveys a 300-foot radius around the nest tree or ground-nesting location must be staked with bright orange construction fencing. If the tree or ground nest 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 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.

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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 buildings 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 **potentially significant** pursuant to CEQA. This impact could be mitigated to a less than significant level.

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 this mitigation measure 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 various drainage channels/wetlands and the spring at the north end of the project site would meet the Corps criteria as waters of the United States/State. These channels/wetlands as well as the man-made pond with culvert and overflow drainage channel will be avoided during the proposed project. 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.

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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 top-of-bank of the waters of the United States and State on the project site: the seasonally wet drainage channel/wetlands and the spring. These same features would 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. The proposed 50-foot setback would meet the County's setback requirement. The man-made pond and drainage that leaves the pond should not be subject to setback requirements as they are not natural features. **Implementation of this mitigation measure would ensure that there are no impacts to waters of the United States and State and thus, impacts would be mitigated to a less than significant level pursuant to CEQA.**

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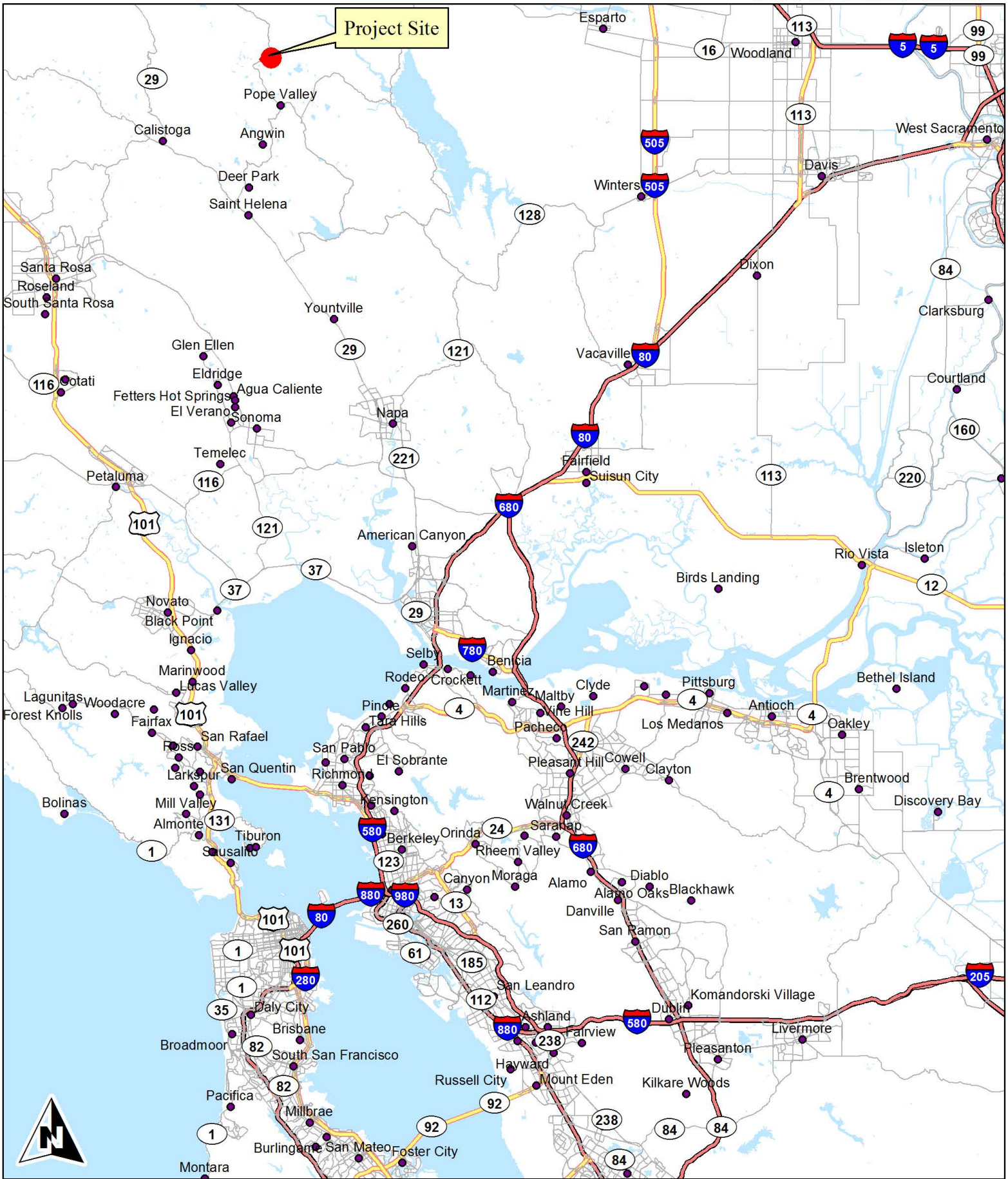
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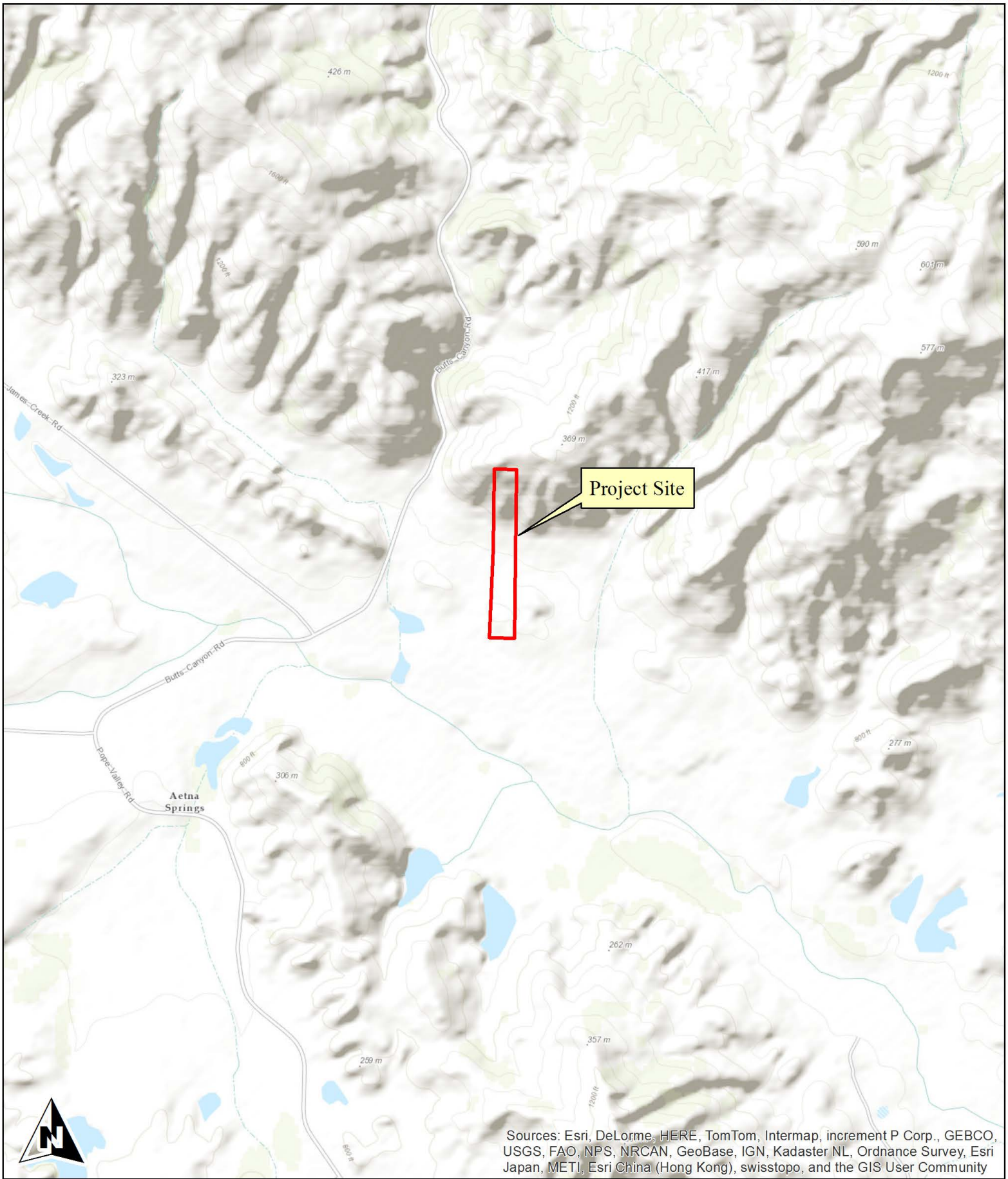
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Figure 1. 7630 Butts Canyon Road Project Site
 Regional Map
 Pope Valley, California

County: Napa
 Map Preparation Date: October 23, 2014

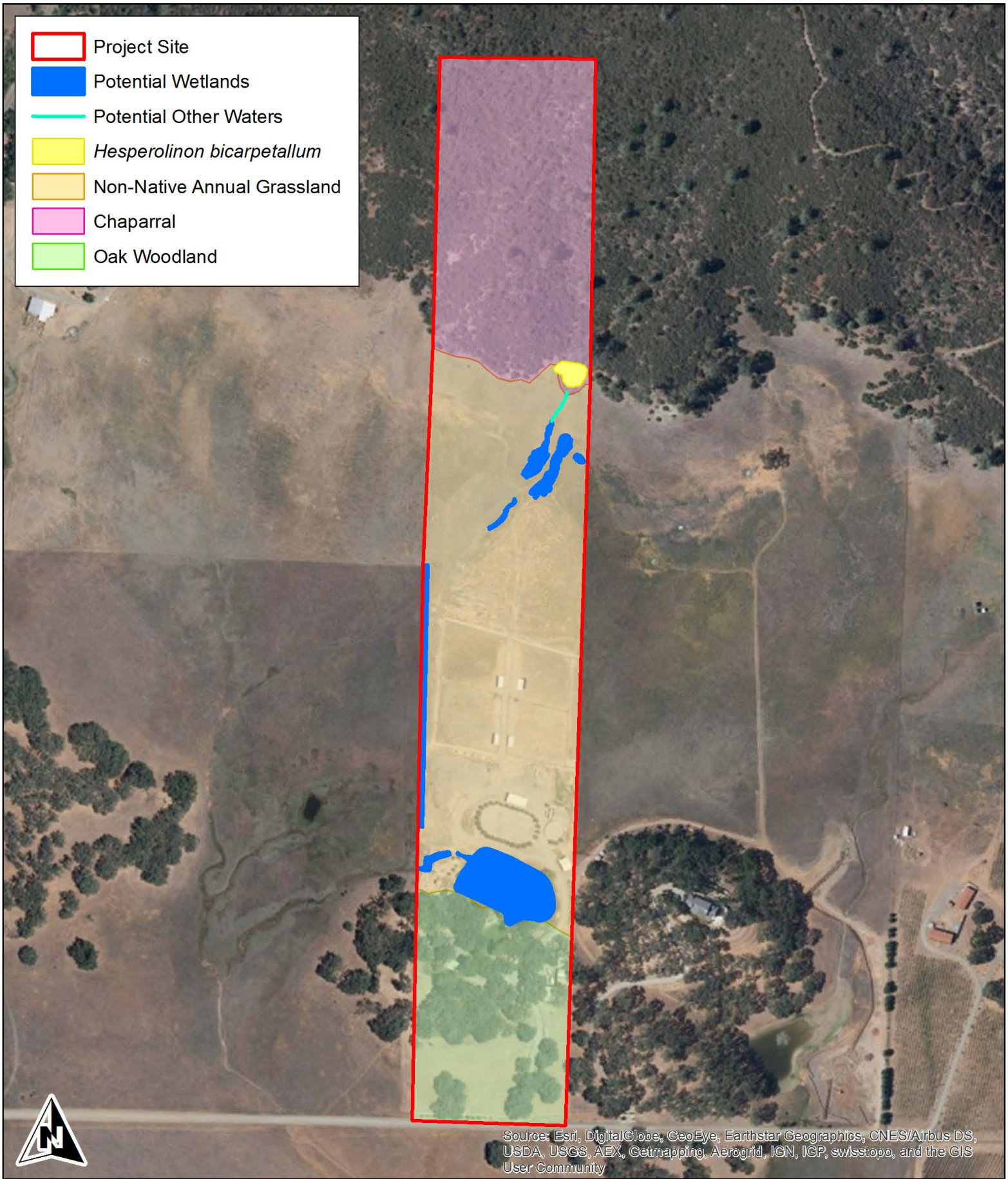


Sources: Esri, DeLorme, HERE, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, and the GIS User Community

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Figure 2. 7630 Butts Canyon Road Project Site
Location Map
Pope Valley, California

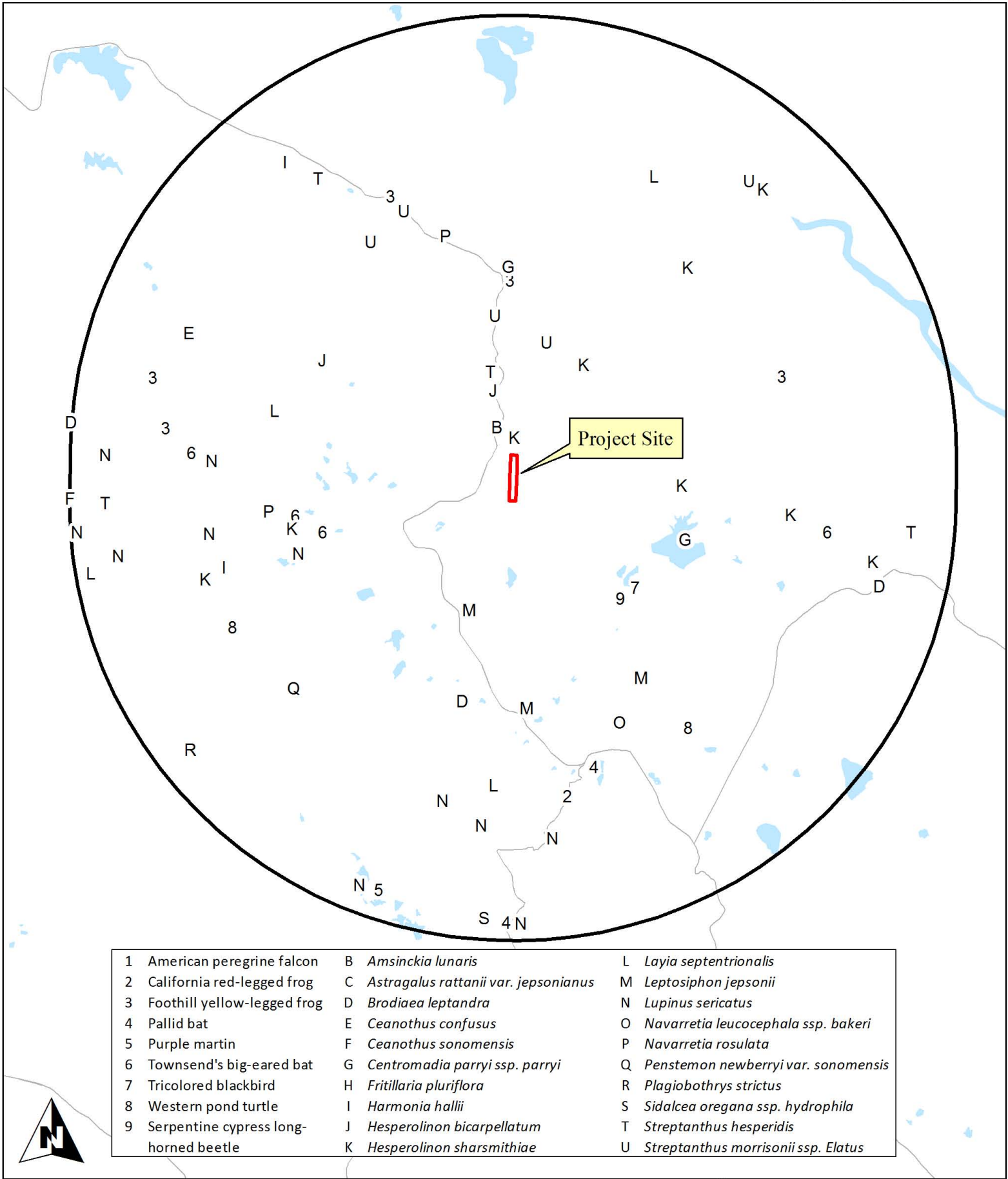
Sections: 5 & 32; T9N R5W & T10N R5W
7.5-Minute Aetna Springs quadrangle
Topography Source: ESRI
Map Preparation Date: October 23, 2014



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Figure 3. Vegetation Communities of the
7630 Butts Canyon Road Project Site
Pope Valley, California

Aerial Photograph Source: ESRI
Map Preparation Date: September 8, 2015



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

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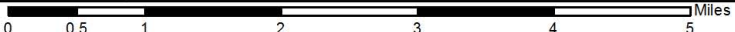


Figure 4. CNDDDB Special-Status Species Occurrences within 5 Miles of the 7630 Butts Canyon Road Project Site

Map Preparation Date:
 December 12, 2014
 — 5-Mile Radius
 Source: CDFW,
 California Natural Diversity Data Base, 2014

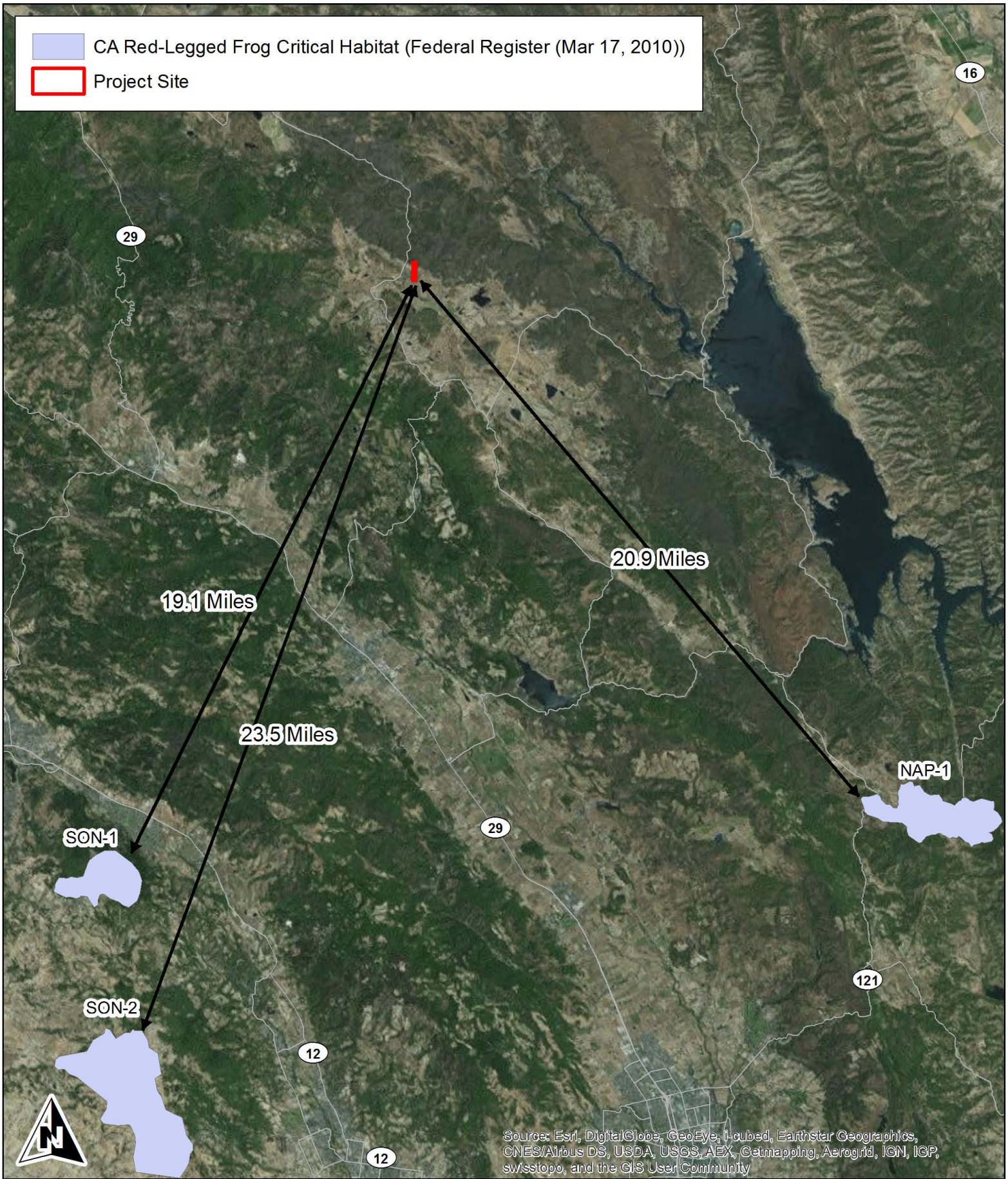


Figure 5. Nearest Designated Critical Habitats of the California Red-legged Frog in the Region of the Project Site. Pope Valley, California

Table 1

Plants Observed at 7630 Butts Canyon Rd in October 2014 and March-July 2015

Gymnosperms**Cupressaceae**

<i>Sequoia sempervirens</i>	Redwood
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Pinaceae

<i>Pinus sabiniana</i>	Gray pine
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Angiosperms - Dicots**Anacardiaceae**

<i>Toxicodendron diversilobum</i>	Western poison-oak
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Apiaceae

<i>Eryngium aristulatum</i> var. <i>aristulatum</i>	California coyote-thistle
<i>Lomatium dasycarpum</i> subsp. <i>dasycarpum</i>	Lace parsnip
<i>Lomatium utriculatum</i>	Bladder parsnip
<i>Perideridia kelloggii</i>	Kellogg's yampah
<i>Sanicula crassicaulis</i>	Gamble weed

Asteraceae

<i>Achillea millefolium</i>	Common yarrow
<i>Achyrachaena mollis</i>	Blow-wives
* <i>Centaurea solstitialis</i>	Yellow starthistle
<i>Erigeron canadensis</i>	Horseweed
<i>Eriophyllum confertiflorum</i>	Yellow-yarrow
* <i>Helminthotheca echioides</i>	Bristly ox-tongue
<i>Hemizonia congesta</i> subsp. <i>luzulifolia</i>	White hayfield tarweed
* <i>Hypochaeris glabra</i>	Smooth cat's-ear
* <i>Hypochaeris radicata</i>	Rough cat's-ear
* <i>Lactuca saligna</i>	Willow lettuce
* <i>Lactuca serriola</i>	Prickly lettuce
* <i>Lactuca virosa</i>	Bitter lettuce
<i>Layia platyglossa</i>	Tidy tips
* <i>Logfia gallica</i>	Narrowleaf cottonrose
* <i>Matricaria chamomilla</i>	German chamomile
<i>Packera eurycephala</i> var. <i>eurycephala</i>	Whithead groundsel
* <i>Pseudognaphalium luteoalbum</i>	Everlasting cudweed
<i>Psilocarphus tenellus</i>	Slender woolly-marbles
* <i>Senecio vulgaris</i>	Common groundsel
* <i>Sonchus oleraceus</i>	Common sow-thistle

Boraginaceae

<i>Amsinckia intermedia</i>	Common fiddleneck
<i>Amsinckia menziesii</i>	Common fiddleneck
<i>Eriodictyon californicum</i>	Yerba santa
<i>Nemophila heterophylla</i>	White nemophila
<i>Phacelia ramosissima</i>	Phacelia

* Indicates a non-native species

Table 1**Plants Observed at 7630 Butts Canyon Rd in October 2014 and March-July 2015****Brassicaceae**

<i>Athysanus pusillus</i>	Athysanus
* <i>Capsella bursa-pastoris</i>	Shepherd's purse
<i>Cardamine oligosperma</i>	Few-seed bittercress
<i>Lepidium strictum</i>	Peppergrass
<i>Thysanocarpus laciniatus</i> var. <i>laciniatus</i>	Lacepod

Cactaceae

<i>Opuntia basilaris</i> var. <i>basilaris</i>	Beavertail
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Caryophyllaceae

* <i>Cerastium glomeratum</i>	Mouse-ear chickweed
* <i>Spergularia rubra</i>	Ruby sand-spurrey
* <i>Stellaria media</i>	Common chickweed

Chenopodiaceae

* <i>Atriplex prostrata</i>	Hastate orache
* <i>Chenopodium album</i>	White pigweed

Convolvulaceae

<i>Cuscuta</i> sp.	Dodder
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Crassulaceae

<i>Crassula aquatica</i>	Water pygmy-weed
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Ericaceae

<i>Arctostaphylos</i> sp.	Manzanita
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Euphorbiaceae

<i>Croton setiger</i>	Turkey mullein
<i>Euphorbia spathulata</i>	Spatulate spurge

Fabaceae

<i>Acmispon americanus</i> var. <i>americanus</i>	Spanish-clover
<i>Acmispon brachycarpus</i>	Short podded lotus
<i>Acmispon wrangelianus</i>	Common trefoil
<i>Astragalus gambelianus</i>	Gambel's milkvetch
* <i>Lathyrus cicera</i>	Wild-pea
* <i>Lotus corniculatus</i>	Birdfoot trefoil
<i>Lupinus nanus</i>	Sky lupine
* <i>Medicago polymorpha</i>	California burclover
* <i>Melilotus indicus</i>	Annual yellow sweetclover
<i>Trifolium ciliolatum</i>	Foothill clover
<i>Trifolium depauperatum</i> var. <i>depauperatum</i>	Dwarf sack clover
* <i>Trifolium fragiferum</i>	Strawberry clover
<i>Trifolium fucatum</i>	Sour clover
<i>Trifolium variegatum</i>	White-tip clover
<i>Trifolium willdenovii</i>	Tomcat clover
* <i>Vicia benghalensis</i>	Purple vetch
* <i>Vicia sativa</i>	Common vetch

Table 1

Plants Observed at 7630 Butts Canyon Rd in October 2014 and March-July 2015

Fagaceae

<i>Quercus berberidifolia</i>	Scrub oak
<i>Quercus douglasii</i>	Blue oak
<i>Quercus lobata</i>	Valley oak

Gentianaceae

<i>Zeltnera muehlenbergii</i>	June centaury
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Geraniaceae

* <i>Erodium botrys</i>	Broad-leaf filaree
* <i>Erodium cicutarium</i>	Red-stem filaree
* <i>Geranium dissectum</i>	Cut-leaf geranium
* <i>Geranium molle</i>	Dove's-foot geranium

Lamiaceae

* <i>Lamium amplexicaule</i>	Deadnettle
* <i>Mentha spicata</i>	Spearmint
<i>Stachys ajugoides</i>	Bugle hedge-nettle
<i>Stachys albens</i>	White-stem hedge-nettle

Linaceae

<i>Hesperolinon bicarpellatum</i>	Two-carpellate western flax
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Lythraceae

* <i>Lythrum hyssopifolia</i>	Hyssop loosestrife
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Malvaceae

* <i>Malva parviflora</i>	Cheeseweed
* <i>Malva sylvestris</i>	Hight mallow
<i>Sidalcea diploscypha</i>	Firnged checker-mallow

Montiaceae

<i>Calandrinia ciliata</i>	Red maids
<i>Claytonia perfoliata</i>	Miner's lettuce

Myrsinaceae

* <i>Lysimachia arvensis</i>	Scarlet pimpernel
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Nymphaeaceae

<i>Nuphar polysepala</i>	Yellow pond-lily
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Oleaceae

* <i>Olea europaea</i>	Olive
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Onagraceae

<i>Epilobium brachycarpum</i>	Summer cottonweed
<i>Epilobium ciliatum</i>	Hairy willow-herb
<i>Epilobium torreyi</i>	Brook spike-primrose

Orobanchaceae

<i>Castilleja exserta</i>	Purple Owl's Clover
<i>Castilleja rubicundula subsp. lithospermoides</i>	Cream sacs
* <i>Parentucellia viscosa</i>	Yellow glandweed
<i>Triphysaria versicolor subsp. faucibarbata</i>	Triphysaria

* Indicates a non-native species

Table 1

Plants Observed at 7630 Butts Canyon Rd in October 2014 and March-July 2015

Papaveraceae

Eschscholzia californica California poppy

Phrymaceae

Mimulus guttatus Common monkeyflower

Plantaginaceae

**Kickxia elatine* Sharppoint fluellin

**Kickxia spuria* Round-leaved toadflax

Plantago erecta Plantain

**Plantago lanceolata* English plantain

Polemoniaceae

Gilia achilleifolia subsp. *achilleifolia* Gilia

Gilia tricolor subsp. *diffusa* Bird's eyes

Polygonaceae

Eriogonum nudum Naked wild buckwheat

Eriogonum nudum var. *nudum* Naked wild buckwheat

Eriogonum vimineum Wicker-stem wild buckwheat

**Polygonum aviculare* Common knotweed

**Rumex crispus* Curly dock

Ranunculaceae

Ranunculus occidentalis var. *occidentalis* Western buttercup

Rhamnaceae

Ceanothus jepsonii Muskbrush

Rosaceae

Adenostoma fasciculatum var. *fasciculatum* Chamise

Aphanes occidentalis Western lady's-mantle

Heteromeles arbutifolia Toyon

**Rubus armeniacus* Himalayan blackberry

Rubiaceae

Galium aparine Goose grass

**Galium parisiense* Wall bedstraw

Galium porrigens var. *porrigens* Climbing bedstraw

Salicaceae

**Salix babylonica* Weeping willow

Salix lasiandra var. *lasiandra* Pacific willow

Scrophulariaceae

**Verbascum thapsus* Woolly mullein

Solanaceae

Solanum parishii Nightshade

Vitaceae

**Vitis vinifera* Cultivated grape

Angiosperms -Monocots

* Indicates a non-native species

Table 1

Plants Observed at 7630 Butts Canyon Rd in October 2014 and March-July 2015

Agavaceae

<i>*Agave americana</i>	American century plant
<i>Chlorogalum pomeridianum var. pomeridianum</i>	Soap plant

Araceae

<i>*Zantedeschia aethiopica</i>	Calla-lily
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Cyperaceae

<i>Bolboschoenus maritimus subsp. paludosus</i>	Alkali bulrush
<i>Cyperus eragrostis</i>	Tall flatsedge
<i>Eleocharis macrostachya</i>	Creeping spikerush

Iridaceae

<i>Iris sp.</i>	Iris
<i>Sisyrinchium bellum</i>	Western blue-eyed grass

Juncaceae

<i>Juncus bufonius</i>	Toad rush
<i>Juncus phaeocephalus</i>	Brown-headed rush
<i>Juncus xiphioides</i>	Iris-leaved rush

Liliaceae

<i>Calochortus amabilis</i>	Diogenes' lantern
<i>Calochortus superbis</i>	Superb mariposa lily

Poaceae

<i>*Aegilops triuncialis</i>	Barbed goatgrass
<i>*Aira caryophylla</i>	Silver European hairgrass
<i>*Avena barbata</i>	Slender wild oat
<i>*Bromus diandrus</i>	Ripgut grass
<i>*Bromus hordeaceus</i>	Soft chess
<i>*Cynodon dactylon</i>	Bermudagrass
<i>*Echinochloa crus-galli</i>	Barnyard grass
<i>Elymus triticoides subsp. triticoides</i>	Creeping wildrye
<i>*Festuca bromoides</i>	Brome fescue
<i>*Festuca myuros</i>	Rattail sixweeks grass
<i>*Festuca perennis</i>	Italian ryegrass
<i>Hordeum brachyantherum</i>	Meadow barley
<i>*Hordeum marinum subsp. gussoneanum</i>	Mediterranean barley
<i>*Hordeum murinum subsp. leporinum</i>	Hare barley
<i>Melica imperfecta</i>	Small-flowered melic
<i>*Panicum miliaceum subsp. miliaceum</i>	Broom corn millet
<i>*Poa annua</i>	Annual bluegrass
<i>Poa secunda subsp. secunda</i>	Pacific bluegrass
<i>*Polypogon monspeliensis</i>	Annual beard grass
<i>*Stipa miliacea var. miliacea</i>	Smilo grass
<i>Stipa pulchra</i>	Purple needlegrass

Potamogetonaceae

<i>Potamogeton sp.</i>	Pondweed
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Table 1**Plants Observed at 7630 Butts Canyon Rd in October 2014 and March-July 2015****Themidaceae***Brodiaea elegans subsp. elegans*

Harvest brodiaea

Dichelostemma capitatum subsp. capitatum

Blue dicks

Triteleia hyacinthina

White brodiaea

Triteleia laxa

Ithuriel's spear

Typhaceae*Typha angustifolia*

Narrow-leaved cattail

Table 2**Wildlife Observed at 7630 Butts Canyon Road in October 2014 and March-July 2015**

Fish	
Catfish	<i>Ictalurus sp.</i>
Smallmouth bass	<i>Micropterus dolomieu</i>
Green sunfish	<i>Lepomis cyanellus</i>
Amphibians	
Bullfrog	<i>Rana catesbeiana</i>
Reptiles	
Western aquatic garter snake	<i>Thamnophis couchii</i>
Western rattlesnake	<i>Crotalus viridis</i>
Birds	
Canada goose	<i>Branta canadensis</i>
Hooded merganser	<i>Lophodytes cucullatus</i>
Red-tailed hawk	<i>Buteo jamaicensis</i>
Acorn woodpecker	<i>Melanerpes formicivorus</i>
Northern flicker	<i>Colaptes auratus</i>
Black phoebe	<i>Sayornis nigricans</i>
Western scrub jay	<i>Apelocoma californica</i>
Oak titmouse	<i>Baeolophus inornatus</i>
Marsh wren	<i>Cistothorus palustris</i>
Western bluebird	<i>Sialia mexicana</i>
Northern mockingbird	<i>Mimus polyglottos</i>
California towhee	<i>Pipilo crissalis</i>
Savannah sparrow	<i>Passerculus sandwichensis</i>
Song sparrow	<i>Melospiza melodia</i>
Golden-crowned sparrow	<i>Zonotrichia atricapilla</i>
Red-winged blackbird	<i>Agelaius phoeniceus</i>
Brewer's blackbird	<i>Euphagus cyanocephalus</i>
House finch	<i>Carpodacus mexicanus</i>
Mammals	
California meadow vole	<i>Microtus californicus</i>
Raccoon	<i>Procyon lotor</i>

Table 3

Special-Status Plants Known to Occur Within 5 Miles of the 7630 Butts Canyon Road Project Site

Family Taxon Common Name	Status*	Flowering Period	Habitat	Area Locations	Probability on Project Site
Asteraceae					
<i>Centromadia parryi parryi</i> Pappose tarplant	Fed: - State: - CNPS: Rank 1B.2	May-November	Coastal prairie; meadows and seeps; marshes and swamps; vernal wet grassland (sometimes alkaline).	Closest known occurrence is approximately 1.9 miles east of the project site (CNDDDB Occurrence No. 17).	None. Was not observed during appropriately timed surveys conducted in 2015. No impact expected.
<i>Harmonia hallii</i> Hall's harmonia	Fed: - State: - CNPS: Rank 1B	April-May	Chaparral (serpentinite).	Closest known occurrence is approximately 3.0 miles west of the project site (CNDDDB Occurrence No. 2).	None. Was not observed during appropriately timed surveys conducted in 2015. Chaparral will be unaffected by project. No impact expected.
<i>Layia septentrionalis</i> 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 north of the project site (CNDDDB Occurrence No. 36).	None. Was not observed during appropriately timed surveys conducted in 2015. No impact expected.
Boraginaceae					
<i>Amsinckia lunaris</i> 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 0.2 mile west of the project site (CNDDDB Occurrence No. 19).	None. Was not observed during appropriately timed surveys conducted in 2015. No impact expected.
<i>Plagiobothrys strictus</i> 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 4.6 miles southwest of the project site (CNDDDB Occurrence No. 3).	None. No alkaline areas near thermal springs on site. Was not observed during surveys. No impact expected.
Brassicaceae					
<i>Streptanthus hesperidis</i> Jewelflower	Fed: State: CNPS: Rank 1B.2	May-July	serpentinite, rocky	Closest known occurrence is approximately 0.5 mile north of the project site (CNDDDB Occurrence No. 18).	None. Was not observed during appropriately timed surveys conducted in 2015. No impact expected.

Table 3

Special-Status Plants Known to Occur Within 5 Miles of the 7630 Butts Canyon Road Project Site

Family Taxon Common Name	Status*	Flowering Period	Habitat	Area Locations	Probability on Project Site
<i>Streptanthus morrisonii elatus</i> Three Peaks jewelflower	Fed: FC State: - CNPS: Rank 1B	June-September	Chaparral (serpentine).	Closest known occurrence is approximately 1.2 miles north of the project site (CNDDDB Occurrence No. 3).	None. Was not observed during appropriately timed surveys conducted in 2015. Chaparral habitat outside use area. No impact expected.
Fabaceae					
<i>Amorpha californica napensis</i> 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 identified during appropriately timed surveys. Also chaparral will be unaffected by project. No impact expected.
<i>Astragalus rattanii jepsonianus</i> Jepson's milkvetch	Fed: - State: - CNPS: Rank 1B	April-June	Cismontane woodland; valley and foothill grassland [often serpentine].	On CNPS inventory.	None. Was not observed during appropriately timed surveys conducted in 2015. No impact expected.
<i>Lupinus sericatus</i> Cobb Mountain lupine	Fed: - State: - CNPS: Rank 1B	March-June	Chaparral; cismontane woodland; lower coniferous forest.	Closest known occurrence is approximately 2.4 miles west of the project site (CNDDDB Occurrence No. 19).	None. Was not observed during appropriately timed surveys conducted in 2015. No impact expected.
Liliaceae					
<i>Fritillaria pluriflora</i> Adobe-lily	Fed: - State: - CNPS: Rank 1B	February-April	Chaparral; cismontane woodland; valley and foothill grassland; [often adobe].	Closest known occurrence is approximately 1.9 miles north of the project site (CNDDDB Occurrence No. 102).	None. Was not observed during appropriately timed surveys conducted in 2015. No impact expected.
Linaceae					
<i>Hesperolinon bicarpellatum</i> Two-carpellate western flax	Fed: - State: - CNPS: Rank 1B.2	May-July	Chaparral (serpentine).	Closest known occurrence is approximately 0.3 mile north of the project site (CNDDDB Occurrence No. 6).	High. Was identified onsite in 2015; however, population is in the chaparral, well outside the use areas. No impact expected. See text.

Table 3

Special-Status Plants Known to Occur Within 5 Miles of the 7630 Butts Canyon Road Project Site

Family Taxon Common Name	Status*	Flowering Period	Habitat	Area Locations	Probability on Project Site
<i>Hesperolinon sharsmithiae</i> Sharsmith's western flax	Fed: State: CNPS: Rank 1B.2	May-July	serpentine.	Closest known occurrence is approximately 0.3 mile north of the project site (CNDDDB Occurrence No. 10).	None. Was not observed during appropriately timed surveys conducted in 2015. No impact expected.
Malvaceae					
<i>Sidalcea oregana hydrophila</i> 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 (CNDDDB Occurrence No. 1).	None. No meadows or riparian forest on site. Was not observed onsite. No impact expected.
Plantaginaceae					
<i>Penstemon newberryi sonomensis</i> Sonoma beardtongue	Fed: - State: - CNPS: Rank 1B	May-July	Chaparral (rocky).	Closest known occurrence is approximately 3.1 miles west of the project site (CNDDDB Occurrence No. 7).	None. Was not observed during appropriately timed surveys conducted in 2015. Chaparral outside use area. No impact expected.
Polemoniaceae					
<i>Leptosiphon jepsonii</i> Jepson's leptosiphon	Fed: - State: - CNPS: Rank 1B.2	March-May	Chaparral; cismontane woodland (usually volcanic).	Closest known occurrence is approximately 1.2 miles south of the project site (CNDDDB Occurrence No. 29).	None. Was not observed during appropriately timed surveys conducted in 2015. Plus chaparral is well outside use area. No impact expected.
<i>Navarretia leucocephala bakeri</i> 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 2.9 miles south of the project site (CNDDDB Occurrence No. 25).	None. Was not observed during appropriately timed surveys conducted in 2015. No impact expected.
<i>Navarretia rosulata</i> Marin County navarretia	Fed: - State: - CNPS: Rank 1B	June-July	Closed-cone coniferous forest; chaparral; [serpentine].	Closest known occurrence is approximately 2.8 miles west of the project site (CNDDDB Occurrence No. 13).	None. Was not observed during appropriately timed surveys conducted in 2015. No impact expected.

Table 3

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Family Taxon Common Name	Status*	Flowering Period	Habitat	Area Locations	Probability on Project Site
Rhamnaceae					
<i>Ceanothus confusus</i> 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 3.9 miles northwest of the project site (CNDDDB Occurrence No. 13).	None. Was not observed during appropriately timed surveys conducted in 2015. No impact expected.
<i>Ceanothus sonomensis</i> Sonoma ceanothus	Fed: - State: - CNPS: Rank 1B.2	February-April	Chaparral (sandy, serpentinite, or volcanic).	Closest known occurrence is approximately 5.0 miles west of the project site (CNDDDB Occurrence No. 22).	None. Was not observed during appropriately timed surveys conducted in 2015. No impact expected.
Themidaceae					
<i>Brodiaea leptandra</i> 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 2.0 miles south of the project site (CNDDDB Occurrence No. 12).	None. Was not observed during appropriately timed surveys conducted in 2015. No impact expected.

Table 3

Special-Status Plants Known to Occur Within 5 Miles of the 7630 Butts Canyon Road Project Site

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

Table 4
Special-Status Wildlife Known to Occur Within 5 Miles of the 7630 Butts Canyon Road Project Site

Species	*Status	Habitat	Closest Locations	Probability on Project Site
Insects				
Serpentine cypress long-horned beetle <i>Vandykea tuberculata</i>	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 is 1.0 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 <i>Rana draytonii</i>	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 3.9 miles south of the project site (Occurrence No. 738)	None. Man-made pond only potential habitat. No red-legged frogs seen during nocturnal and diurnal surveys. No impact expected. See text.
Foothill yellow-legged frog <i>Rana boylei</i>	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 2.0 miles north of the project site (Occurrence No. 246)	None. Seasonal wetlands and man-made pond do not provide suitable habitat. Not observed during surveys. No impact expected.
Reptiles				
Western pond turtle <i>Emys marmorata</i>	Fed: FPT 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 3.3 miles southeast of the project site (Occurrence No. 642)	None. Not observed during multiple diurnal and nocturnal surveys. No impact expected.

Table 4
Special-Status Wildlife Known to Occur Within 5 Miles of the 7630 Butts Canyon Road Project Site

Species	*Status	Habitat	Closest Locations	Probability on Project Site
Birds				
American peregrine falcon <i>Falco peregrinus anatum</i>	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 site; no habitat. No impact expected.
Purple martin <i>Progne subis</i>	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 4.7 miles southwest of the project site (Occurrence No. 12)	Low. Marginal habitat onsite. Preconstruction surveys necessary. See text.
Tricolored blackbird <i>Agelaius tricolor</i>	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 1.4 miles southeast of the project site (Occurrence No. 407)	Low. Cattails surrounding man-made pond provide habitat; surveys will be conducted. See text.
Mammals				
Townsend's big-eared bat <i>Corynorhinus townsendii townsendii</i>	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 2.2 miles west of the project site (Occurrence No. 127)	Low. Buildings provide potential roosting habitat. Surveys necessary. See text.
Pallid bat <i>Antrozous pallidus</i>	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 3.1 miles south of the project site (Occurrence No. 224)	Low. Buildings onsite provide marginal habitat. Surveys will be conducted. See text.

Table 4
Special-Status Wildlife Known to Occur Within 5 Miles of the 7630 Butts Canyon Road Project Site

Species	*Status	Habitat	Closest Locations	Probability on Project Site
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***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 |