



**Biological Resource Assessment and  
Focused Studies Conducted For The  
Castaic Mesa Project  
Los Angeles County, California**

**Prepared for:**

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## INTRODUCTION

This report is intended to provide the project applicant and the County of Los Angeles with information regarding existing on-site biological conditions and the suitability of on-site habitats to support sensitive biological resources. The information contained in this section is based on general site evaluations as well as recent and previous focused special-status plant and wildlife surveys.

## METHODS

The following is a detailed discussion of the methodology used in preparation of this report. The tasks outlined provide a baseline from which conclusions are made regarding the actual and potential occurrence of special-status resources on site.

### Literature Review

In order to identify special-status plant and animal species (those species considered rare, threatened, endangered, or otherwise sensitive by various state and federal resource agencies) known to historically occur in the vicinity of the project site, the project biologists reviewed the June 2006 update of the California Natural Diversity Data Base (CNDDB) for the Newhall and Warm Springs Mountain, California USGS 7.5-minute quadrangle maps. Other data sources reviewed included: (1) the Federal Register listing package for each federally-listed endangered or threatened species potentially occurring on the project site or in the project vicinity; (2) literature pertaining to habitat requirements of special-status species potentially occurring on the project site; (3) documentation of previous biological studies completed on the subject property including Guthrie (2003), Ecological Sciences (2003), Compliance Biology (2003), Dudek (2004), Forde Biological Consultants (2006), Compliance Biology (2006a), Compliance Biology (2006b) and (4) plant and animal distribution data contained in Hall (1981); Holland (1986); Sawyer and Keeler-Wolf (1995), (Stebbins (1985); Skinner and Pavlik (1994); and Williams (1986).

Sources used to determine the sensitivity status of biological resources include: **Plants** - U.S. Fish and Wildlife Service (USFWS 1993 and 1996), California Department of Fish and Game (CDFG 2003), CNDDB (2006), **Wildlife** - USFWS (1994 and 1996), CDFG (2005), CNDDB (2006); and **Habitats** - CNDDB (2006).



## Field Surveys

A series of surveys were conducted on the project site by Compliance Biology in April and May 2006 in order to characterize on-site habitats and to evaluate their potential to support special-status species. Additional surveys conducted on the site include focused sensitive rare plant surveys by Dudek & Associates (2003), US Fish and Wildlife Service protocol arroyo toad surveys by Ecological Sciences, Inc. (2003), riparian bird surveys by Daniel Guthrie (2003), unarmored threespine stickleback surveys by Compliance Biology, Inc. (2003), US Fish and Wildlife Service protocol California gnatcatcher surveys by Compliance Biology, Inc. (2006a), US Fish and Wildlife Service protocol least Bell's vireo and willow flycatcher surveys by Forde Biological Consultants (2006), and focused western spadefoot toad surveys by Compliance Biology, Inc. (2006b).

During the initial site visit and subsequent focused surveys, direct observations of reptiles, birds, and mammal species were recorded, as were wildlife signs such as scat and tracks. In addition to species actually detected, expected use of the site by other wildlife was evaluated from habitat analysis, combined with known habitat preferences of locally occurring wildlife species. Plants and wildlife observed or expected to occur on the project site are discussed further below.

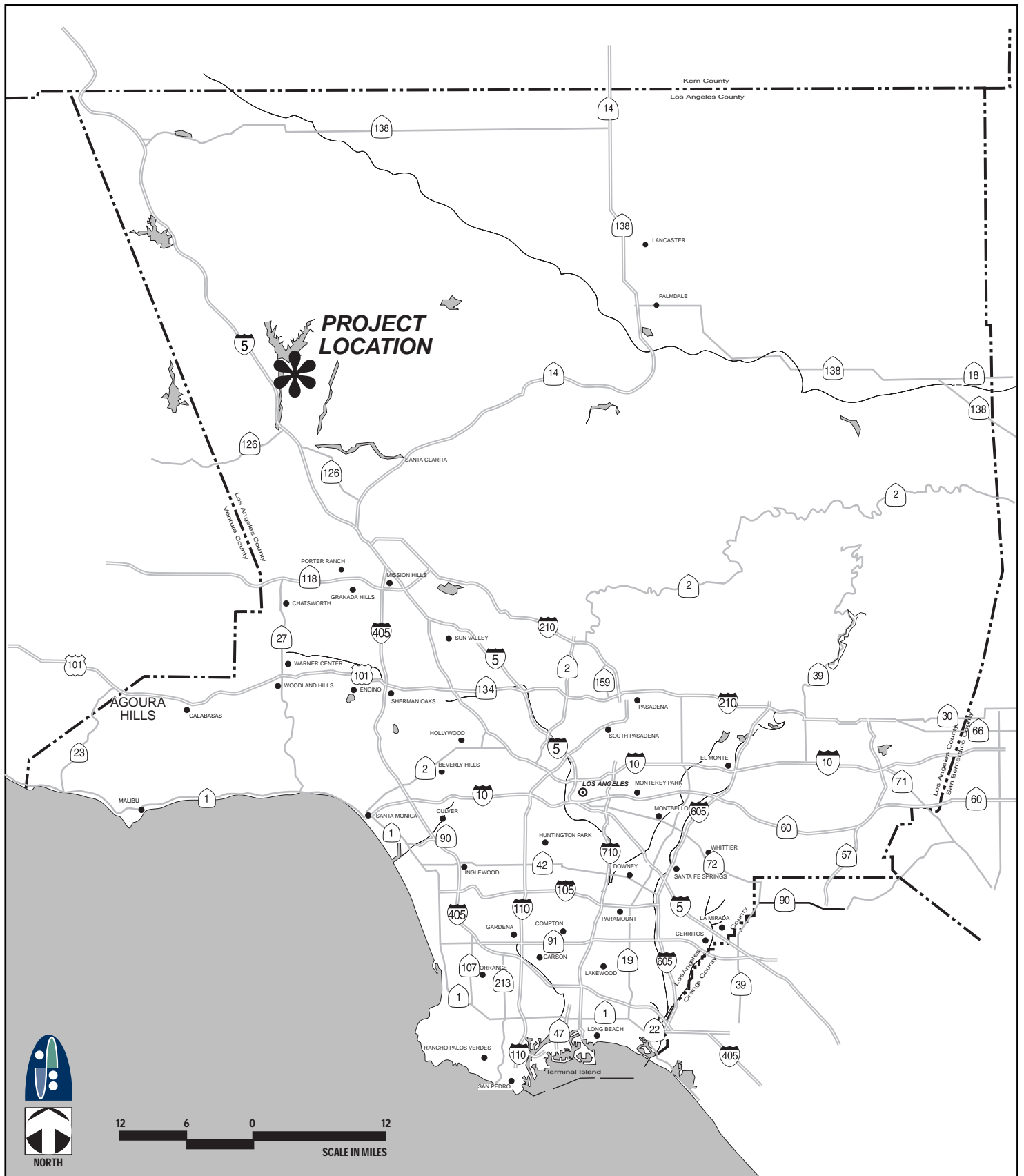
Names used to describe plant communities are based primarily on the nomenclature of Sawyer and Keeler-Wolf, *A Manual of California Vegetation* (1995) where applicable. Common plant names generally follow J.C. Hickman, *The Jepson Manual* (1993). References used for the nomenclature of wildlife include the following: M.R. Jennings, *An Annotated Checklist of the Amphibians and Reptiles of California in California Fish and Game, Vol. 69(3)*, 151-71 (1983); the American Ornithologists' Union (1983 and supplemental amendments) for birds; and J.K. Jones et al, *Revised Checklist of North American Mammals North of Mexico* (1982) for mammals.

## EXISTING CONDITIONS

The project site is located in northwestern Los Angeles County, south and southeast of Castaic Lake and east of Interstate 5 (**Exhibit 1**). The property lies within the Newhall and Warm Springs Mountain, CA USGS 7.5-minute Quadrangle maps with the northern portion occurring within R16W and T5N in Section 19 of the Warm Springs Mountain Quadrangle and the southern portions at R16W and T5N in Sections 19 and 30 and R17W and T5N in Section 25 of the Newhall Quadrangle (**Exhibit 2**). The project site excludes the water treatment plant in the north-central portion of the property.







*exhibit 1*  
**Regional Location**



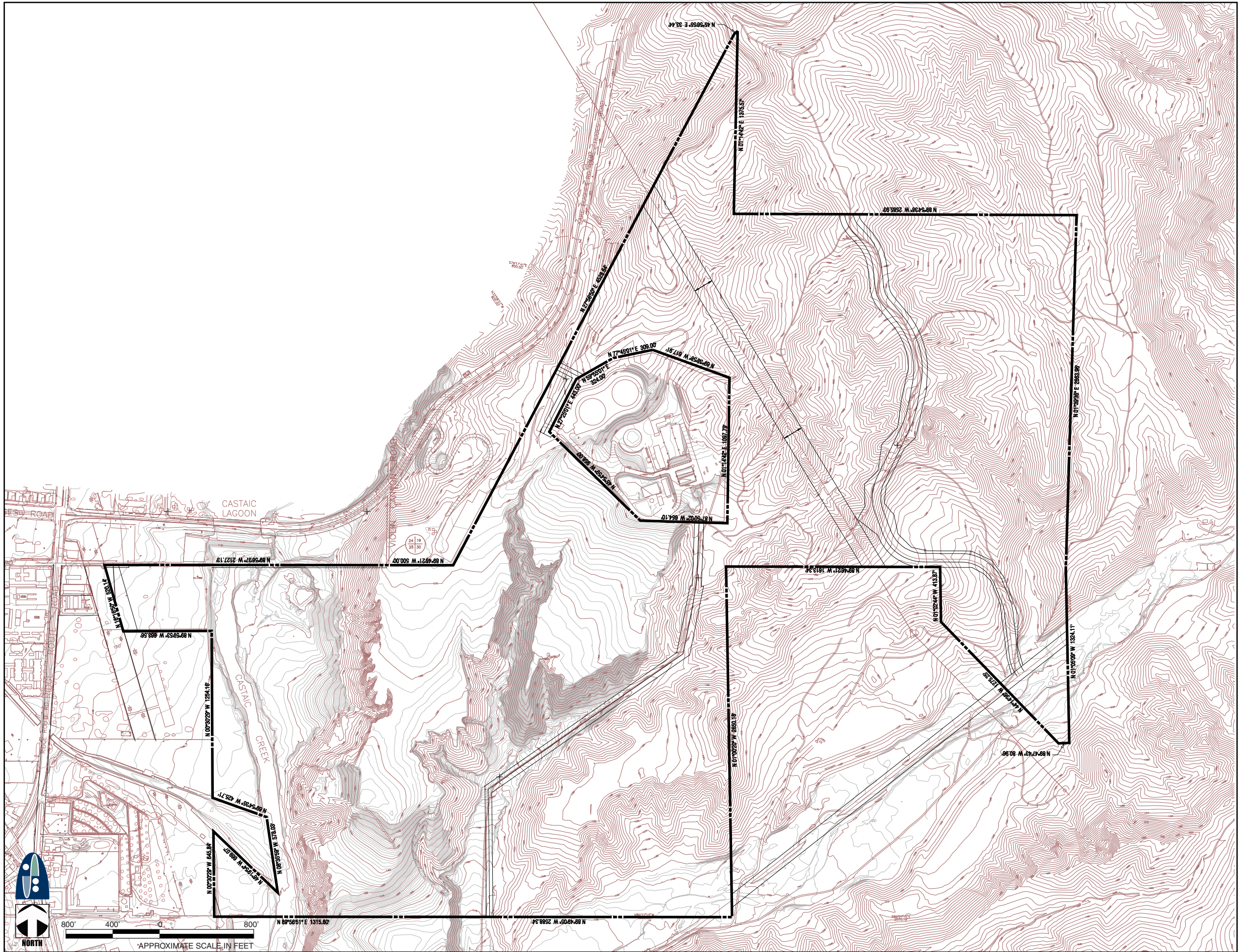


exhibit 2  
SITE TOPOGRAPHY



Existing commercial and rural residential development is situated to the west and southwest, Castaic Lake is to the northwest, and undeveloped open space occurs around the remainder of the property.

Topography on the Castaic Mesa site is highly variable. The western portion of the site in Castaic Creek occurs at approximately 1,150 feet above mean sea level. From there it slopes steeply upward to the east to a series of mesas that occur at approximately 1,400 feet. A series of canyons occur between the mesas that trend south toward Charlie Canyon Creek. A series of hills and valleys occur to the north and east with elevations reaching approximately 1,660 feet in the northern portion of the site. There is also a series of dirt roads and trails throughout the site.

Historic uses on the site include mixed grain production, bee farming and grazing (Dudek 2004). The mesa tops are still regularly disked, although it was not apparent at the time of the surveys if active agriculture is still underway. The resulting conditions on site include a mixture of non-native and native vegetation communities.

Where vegetation occurs on the mesas, it is dominated by annual weedy non-native species. Native vegetation primarily occurs in the canyons and on the hillsides to the north, east and south. Vegetation associations occurring on site include ruderal/disturbed, coastal sage scrub, freshwater marsh, riparian, holly-leaf cherry stands, and isolated trees and shrubs.

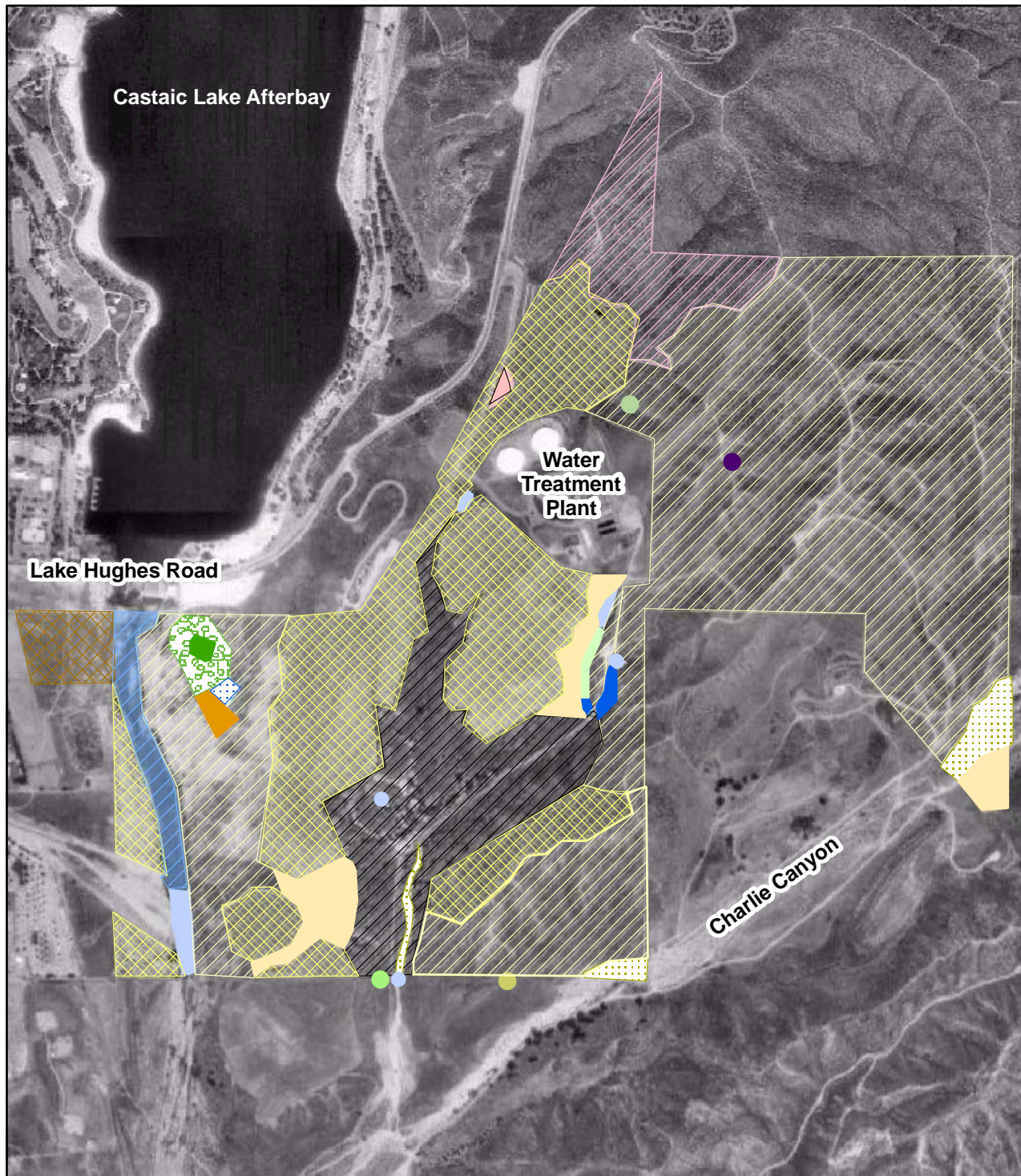
## **Plant Communities**

The following provides a more detailed description of each of the vegetation associations occurring on site. **Exhibit 3** illustrates the distribution of these associations as they occur on site.

### ***Ruderal/Disturbed***

In addition to numerous dirt roads and trails, the site has numerous areas that exhibit various levels of human disturbance, ranging from intense (recently cleared or disked) to infrequent, based on field observations of plant abundance and species composition. Most of the area in this category is either virtually devoid of vegetation (recently cleared or disked) or is covered by non-native annual grassland or remnant elements of coastal sage scrub.





- Coastal Sage Scrub, Alluvial: Sagebrush-Buckwheat
- Coastal Sage Scrub, Alluvial: Yerba Santa
- Coastal Sage Scrub, Purple Sage-Black Sage (Buckwheat, Yucca)
- Coastal Sage Scrub, Sagebrush-Buckwheat
- Coastal Sage Scrub, Sagebrush-Buckwheat (Annual Grasses and Forbs)
- Disturbed, Annual Grassland (Seasonally Cleared or Disked)
- Disturbed, Coastal Sage Scrub
- Disturbed, Engineered Slope
- Freshwater Marsh, Emergent
- Freshwater Marsh, Tamarisk (Willow, Cottonwood, Elderberry)
- Hollyleaf Cherry Stands (Scrub, Ann.Grasses & Forbs)
- Isolated Shrub, Hollyleaf Cherry
- Isolated Shrub, Toyon
- Isolated Tree, Interior Live Oak (on southwest survey boundary)
- Isolated Tree, Peruvian Pepper (on southwest survey boundary)
- Riparian, Cottonwood Stands
- Riparian, Cottonwood and Willow Woodland
- Riparian, Mulefat Scrub
- Riparian, Planted Cottonwood and Mulefat
- Riparian, Willow Scrub

### ***Coastal Sage Scrub***

Coastal sage scrub occurs in drainages (alluvial) and on slopes. There are two alluvial subtypes, consisting of the California sagebrush-California buckwheat series (*Artemisia californica* – *Eriogonum fasciculatum*) and a monotypic stand of yerba santa (*Eriodictyon crassifolium*). The alluvial sagebrush-buckwheat series occurs within ephemeral drainages, most abundantly across small parts of the site within Charlie Canyon and a narrow tributary that extends south from the site into Charlie Canyon. As is typical of ephemeral drainages, shrub cover is patchy and averages less than 50 percent. A solid stand of yerba santa occurs within the floodplain of Castaic Creek below the Castaic Lake Afterbay, but yerba santa also occurs as a less dominant member of the sagebrush-buckwheat series on slopes. On slopes above the drainages, the sagebrush-buckwheat series extends across most of the survey area, frequently co-dominated by yucca (*Yucca whipplei*). Non-native annual species (especially wild oat, *Avena* sp.) and forbs (e.g. yellow star thistle, *Centaurea solstitialis*), infest the sagebrush-buckwheat series along roads and areas of present or past human disturbance. In the northern part of the survey area, coastal sage scrub habitat is dominated by purple sage (*Salvia leucophylla*) and black sage (*Salvia mellifera*) rather than sagebrush and buckwheat.

### ***Freshwater Marsh***

A small area of emergent and woody marsh vegetation occurs below the Castaic Lake afterbay. The emergent subtype is dominated by rushes (*Juncus* sp., *Scirpus* sp.) and open water. The woody vegetation is heavily infested by invasive tamarisk or saltcedar (*Tamarix* sp.). Cottonwood (*Populus fremontii*), willow (*Salix* sp.), and elderberry (*Sambucus mexicana*) occur as scattered individuals within this community.

### ***Riparian***

Riparian vegetation occurs on the site as several subtypes, ranging from the relatively drought-tolerant mulefat (*Baccharis salicifolia*) – dominated stands to groundwater-dependent stands of cottonwood and/or willows (*Salix* spp.). Outside of Castaic Creek, willows occur as small isolated stands within otherwise ephemeral drainages. A small area of mixed cottonwood and mulefat occurs on an alluvial fan adjacent to the Freshwater Marsh. The regularity of plant spacing suggests this vegetation was planted.



### ***Hollyleaf Cherry Stands***

Hollyleaf cherry (*Prunus ilicifolia* ssp. *ilicifolia*) occurs primarily in the south-central part of the site, where it is associated with the sagebrush-buckwheat series, steep eroded slopes, and narrow ephemeral drainages.

### ***Isolated Shrubs and Trees***

Certain woody plant species occur as single, isolated individuals and do not fit within the other habitat classifications. One of these species is a non-native tree, Peruvian pepper (*Schinus molle*), which occurs near the southwest site boundary. The rest of the species are native. These species consist of toyon (*Heteromeles arbutifolia*), on top of a hill in the northern part of the site, hollyleaf cherry (northeast of the treatment plant), and interior live oak (*Quercus wislizenii*, near the southwest site boundary).

## **Common Wildlife**

Plant communities present on the project site provide habitat for a variety of locally common wildlife species (species not afforded protection by federal, state, or local regulatory authority). While a few species of wildlife are entirely dependent on a single vegetation community, most species require a mosaic of vegetation communities to provide the necessary shelter, water, food, and other life history needs.

Common wildlife species observed, detected, or having a high potential to occur within the project boundary and its vicinity are discussed in the following text. Special-status wildlife species known to occur, or with a high potential for occurrence within the project boundary, are discussed later in this section.

### ***Fish***

Focused fish surveys were not conducted as part of the general biological assessment for the site. However, previous surveys conducted by Compliance Biology (2003) documented only prickly sculpin (*Cottus asper*) within the survey reach. Several additional common and special-status fish species occur in the Santa Clara River, several miles downstream of the project site, but numerous natural and man-made





barriers likely preclude those species from moving upstream to the subject survey area. Additionally, several non-native species occurring in Castaic Lake and Castaic Lagoon have the potential to be released into waters within the subject survey area. Though not directly observed recently, species including mosquitofish (*Gambusia affinis*), largemouth bass (*Micropterus salmoides*), and various sunfish (*Lepomis* spp.) do still have some potential for occurrence.

### ***Amphibians and Reptiles***

Common amphibian species observed or potentially occurring on the project site include black-bellied slender salamander (*Batrachoseps nigriventris*), Pacific chorus frog (*Pseudacris regilla*), California chorus frog (*Pseudacris cadavarina*), American bullfrog (*Rana catesbeiana*), and western toad (*Bufo boreas*). Reptiles observed or otherwise expected to occur that are not afforded any protection status include western fence lizard (*Sceloporus occidentalis*), side-blotched lizard (*Uta stansburiana*), southern alligator lizard (*Gerrhonotus multicarinatus*), gopher snake (*Pituophis melanoleucus*), common kingsnake (*Lampropeltis getulus*), chaparral whipsnake (*Masticophis lateralis lateralis*), and southern pacific rattlesnake (*Crotalus viridis helleri*). The distribution of most amphibians occurring on site is expected to be limited to the areas in and adjacent to perennial water sources, though some species, including western toad, may venture several hundred meters from any water source.

### ***Birds***

Over 50 avian species were observed on site during focused and general surveys. Representative common species include red-tailed hawk (*Buteo jamaicensis*), California quail (*Callipepla californica*), morning dove (*Zenaida macroura*), Anna's hummingbird (*Calypte anna*), acorn woodpecker (*Melanerpes formicivorus*), common raven (*Corvus corax*), northern mockingbird (*Mimus polyglottos*), Say's phoebe (*Sayornis saya*), violet-green swallow (*Tachycineta thalassina*), bushtit (*Psaltiriparus minimus*), savannah sparrow (*Passerculus sandwichensis*), spotted towhee (*Pipilo erythrophthalmus*), and house finch (*Carpodacus mexicanus*).

Despite the disturbance history on site, the variety of on-site vegetation associations provides suitable nesting for many avian species that nest in the project region.



Because of the presence of large agricultural areas, open fields, the nearby lake and open space areas in the vicinity, in addition to riparian woodland habitat on site, a number of raptor (birds-of-prey) species occur in the project vicinity. Common species expected to forage over the open grassland and scrub habitat on the site, include turkey vulture (*Cathartes aura*), red-tailed hawk (*Buteo jamaicensis*), and American kestrel (*Falco sparverius*). Additional raptor species potentially foraging over the site include red-shouldered hawk (*Buteo lineatus*), great horned owl (*Bubo virginianus*), and barn owl (*Tyto alba*). Any one of these species has a potential to nest on site.

Additional special-status bird species known to occur or potentially occur on the site are discussed more thoroughly in the Special-Status Wildlife section of this report.

### ***Mammals***

A variety of mammal species occur in the area. Coyote (*Canis latrans*) and bobcat (*Lynx rufus*) were observed during field surveys on the project site. The common gray fox (*Urocyon cinereoargenteus*) and mountain lion (*Felis concolor*) also may periodically occur on site. Other common mammals either directly observed or for which diagnostic sign was detected during surveys of the project site include California ground squirrel (*Spermophilus beecheyi*), desert cottontail (*Sylvilagus auduboni*), brush rabbit (*S. bachmani*), Botta's pocket gopher (*Thomomys bottae*) and mule deer (*Odocoileus hemionus*). Additional mammals that are expected to occur include western harvest mouse (*Reithrodontomys megalotis*), deer mouse (*Peromyscus maniculatus*), California mouse (*Peromyscus californicus*), brush mouse (*Peromyscus boylii*), California vole (*Microtus californicus*), house mouse (*Mus musculus*), striped skunk (*Mephitis mephitis*), and raccoon (*Procyon lotor*). Common bat species with a potential to forage and temporarily roost on site include big brown bat (*Eptesicus fuscus*) and California myotis (*Myotis californicus*).

## **Special-Status Biological Resources**

The following discussion describes plant and wildlife species present or potentially occurring within the project boundary that have been afforded special recognition by federal, state, and/or local resource agencies or jurisdictions, or recognized resource conservation organizations. Special-status habitats (habitats or plant communities considered rare or unique or that support special-status species) and wildlife movement corridors are also discussed. In spring 2003, Dudek & Associates (2004) completed a



focused rare plant survey on the subject property. As conditions on site had not changed substantially, additional rare plant surveys were not conducted as part of the 2006 biological assessment of the site. The results of the 2003 surveys are summarized in the following text.

### ***Special-Status Plant Species***

Plant species that are classified as state or federally endangered or threatened, proposed for listing as endangered or threatened, are candidate species for listing, or are considered federal species of concern are considered to be of special status. In addition, plants included on Lists 1 and 2 of the California Native Plant Society (CNPS) inventory are also considered to be of special status. A total of 37 plant species meeting these criteria were included in the list of species considered to be potentially occurring in the project region.

Two special-status plant species were identified on the subject property. Numerous **Slender mariposa lily** and **Round-leaved filaree** were documented throughout the site. The following provides information regarding each.

**Slender Mariposa Lily** (*Calochortus clavatus* var. *gracilis*); **CNPS List 1B**. This species is typically found in chaparral, coastal sage scrub, and grasslands, commonly in clay or rocky soils. An estimate of 27,000 individual flowering lilies within a total of 31 polygons on the subject property were recorded. The slender mariposa lilies observed most commonly occurred on north-facing slopes and ridges throughout the site.

**Round-leaved filaree** (*Erodium macrophyllum*); **CNPS List 2**. Round-leave filaree is typically restricted to open cismontane woodland and valley and foothill grassland habitats on friable clay soils between 15 and 2,000 meters elevation. This small flower blooms from March through May. Approximately 1,000 individuals were recorded within a half-acre area, on a northeast-facing gentle to moderately sloping area. The plants observed occurred within a clay lens and were growing among native and non-native annual grasses and forbs.

Four additional plant species were observed that are not afforded any special-status, but are included on the CNPS watch list. These species include Pierson's morning-glory (*Calystegia peirsonii*), *Gnaphalium nova* (no common name), Palmer's grappling hook (*Harponagella palmeri*), and southwestern spiny rush (*Juncus acutus* var. *leopoldii*).



## ***Special-Status Wildlife Species***

Special-status wildlife includes those species that are state- or federally-listed as Threatened or Endangered, have been proposed or are candidates for listing as Threatened or Endangered, or are considered state Species of Special Concern, CDFG Special Animals, and/or California Fully Protected Species. The potential for special-status wildlife species to occur on the project site is based on an evaluation of on-site habitats, occurrence records of species in the project vicinity, and known species geographic distribution. All species occurring or potentially occurring, or for which focused survey efforts were conducted on the site are provided in **Attachment A**. Those species observed or with a high potential of occurring, and those species for which focused surveys were conducted, are discussed in more detail below.

### **Special-Status Wildlife Species Observed or With a High Potential to Occur On Site**

#### ***Reptiles***

**Coastal whiptail** (*Cnemidophorus tigris multiscutatus*); **California Special Animal**. This lizard is active in arid to semiarid habitats where there are open areas for running. They prey on insects, spiders, scorpions, and small lizards. At least three individual coastal whiptails were observed during site surveys.

**Coast horned lizard** (*Phrynosoma coronatum*); **California Species of Special Concern; California Protected Species**. Two subspecies of coast horned lizard are known from the region and both are afforded the same status. Their documented distributional range overlaps in the project area. As such, either could occur on site and they are, therefore, addressed together here. Coast horned lizards feed almost exclusively on native harvester ants and occur in a variety of habitats including scrub, grassland, sandy washes and woodland; typically where there are sands or other fine loose soils where they can bury themselves. This species was not detected during the site surveys. However, patches of suitable habitat exist in the scrub and drainage habitats on the subject project site. As some suitable habitat is present, and native harvester ants were present, horned lizards are considered to have a moderate to high potential of occurring on site.



**Silvery legless lizard** (*Anniella pulchra pulchra*); *California Species of Special Concern*. Legless lizards occur primarily in areas with sandy or loose loamy soils under the sparse vegetation of beaches chaparral, or woodlands; often along stream terraces. Soil moisture is essential for this live-bearing lizard. Silvery legless lizard is considered to have a high potential to occur in leaf litter along and near the drainage courses on site.

## ***Birds***

**Great blue heron** (*Ardea herodias*); and **Great egret** (*Casmerodius albus*) *California special animal*. A great blue heron was observed during two separate surveys in 2006 and by Guthrie in 2003. During each occurrence, the herons were observed foraging in the grasslands on the western-most mesa. Guthrie also observed a couple of migrating great egrets during 2003 surveys. These species are not afforded any specific protection under the Endangered Species Act. The California Department of Fish and Game is primarily interested in tracking rookery (communal nesting) areas. Individual birds are not considered sensitive. However, because they are included on the special animals list, impacts to the focus of the concern (i.e. rookeries) must be considered during CEQA review. Rookeries were not observed, nor are they expected to occur on or adjacent to the project site.

**White-tailed kite** (*Elanus leucurus*); *California Fully Protected Species*. White-tailed kite utilizes a variety of habitats, but is generally associated with riparian woodlands situated near open grassland and/or agricultural fields. This species is a year-long resident in coastal and valley lowlands. White-tailed kites are known to occur in the vicinity of the project area. The riparian habitat and the open fields provide suitable nesting and foraging habitat for this species. A single white-tailed kite was observed by Guthrie during his 2003 surveys. None was observed during the 2006 surveys. However, this species is still considered to have a high potential to occur on site.

**Northern harrier** (*Circus cyaneus*), *California Species of Special Concern*. This raptor species was observed on two survey dates soaring low over open scrub and disturbed areas. As it was only observed on two occasions, it is possible that it resides nearby and utilizes the site for foraging.

**Cooper's hawk** (*Accipiter cooperii*), *California Species of Special Concern*. This species is a common winter migrant and occasional summer resident in southern California. It breeds in oak woodland habitats and southern cottonwood-willow riparian woodland. Food items include small birds, reptiles



and amphibians, and mammals. A single Cooper's hawk was observed flying over and perching in trees on site during three of the six surveys. No obvious nests were observed during the gnatcatcher survey efforts, but suitable nesting habitat does occur on site in larger trees in and adjacent to drainages.

**Sharp-shinned hawk** (*Accipiter striatus*); *California Species of Special Concern*. This species typically nests in woodlands and forages for smaller birds over dense chaparral and other scrublands. None was observed during site surveys so it likely does not reside on site at this time. However, as suitable nesting and foraging habitat occurs on site, this species has a moderate to high potential for occurrence.

**Swainson's hawk** Two Swainson's hawks (*Buteo swainsonii*) were observed soaring over the site and perching on fenceposts during one of the site survey dates. This species more commonly occurs in northern California-Sacramento area and the central valley. However, Swainson's hawks are considered neotropical migrants as they migrate annually between northern California and South America. Because this species was only observed once on site, it is reasonable to deduce that the pair was migrating through the area at the time.

**Southern California rufous-crowned sparrow** (*Aimophila ruficeps canescens*); *California Species of Special Concern*. This species was observed during nearly all of the surveys. As such it is a likely resident on the subject parcel. No nests were observed, but two individuals were seen carrying nesting materials as they flew by on one occasion. Suitable nesting habitat occurs in scrub habitats scattered across the site.

**Bell's sage sparrow** (*Amphispiza belli belli*); *California Species of Special Concern*. A few individual Bell's sage sparrows were observed during three of the focused gnatcatcher surveys. This implies that they are either residents on site, or on an adjacent site and they are utilizing habitat on site for foraging. No nests or nesting behaviors were observed, but suitable nesting habitat does occur on site in association with scrub habitats.

**Costa's hummingbird** (*Calypte costae*); *California special animal*. Costa's hummingbird was observed during five of the six surveys indicating that it is a likely resident. This species appears to be relatively abundant in the area this year (personal observation). This species is not afforded any specific protection under the Endangered Species Act. The California Department of Fish and Game is primarily interested in tracking nesting locations. Individual birds are not considered sensitive.



**Pacific-slope flycatcher** (*Empidonax difficilis*); *California special animal*. One individual Pacific-slope flycatcher was observed during one site survey. As such, it is likely that this individual was a migrant passing through the area and is not expected to be nesting on site. This species is not afforded any specific protection under the Endangered Species Act. The California Department of Fish and Game is primarily interested in tracking nesting locations. Individual birds are not considered sensitive.

**California thrasher** (*Toxostoma redivivum*); *California special animal*. This species is relatively common in the region and was observed in scrub habitats on site during all of the surveys. Recently, regulatory agencies have become interested in tracking nesting locations. This species is not afforded any specific protection under the Endangered Species Act, but CDFG is interested in keeping track of nesting locations. Though nests were not directly observed, this species is expected to nest on site.

**Lark sparrow** (*Chondestes grammacus*); *California special animal*. Lark sparrows were observed during five of the six site surveys, indicating they are likely site residents. Suitable nesting habitat is present on site in the more open areas. This species is not afforded any specific protection under the Endangered Species Act. The California Department of Fish and Game is primarily interested in tracking nesting locations. Individual birds are not considered sensitive.

**Lawrence's goldfinch** (*Carduelis lawrencei*); *California special animal*. This species was observed on two occasions in 2006 and on multiple occasions by Guthrie in 2003. It is more closely associated with riparian habitats and was, in fact, observed in scrub habitat occurring adjacent to Castaic Creek. Lawrence's goldfinch can occur as a migrant or a resident in the project area. This species is not afforded any specific protection under the Endangered Species Act. The California Department of Fish and Game is primarily interested in tracking nesting locations. Individual birds are not considered sensitive.

**Southern California rufus-crowned sparrow** (*Aimophila ruficeps canescens*); *Federal Species of Concern, California Species of Special Concern*. This species most commonly nests and forages in mixed chaparral and coastal sage scrub habitats that occur on relatively steep, often rocky hillsides. Several rufus-crowned sparrows were observed in scrub habitat during the 1998 focused coastal California gnatcatcher surveys. No nests were observed; however, suitable nesting habitat does exist on some of the steeper slopes in the southern portion of the site, outside the development envelope. Locations where rufus-crowned sparrows were observed are provided in **Figure 4.4-2**.

**Yellow warbler** (*Dendroica petechia brewsteri*); *California Species of Special Concern*. This small songbird is most commonly associated with riparian woodlands and thickets. Small numbers of yellow warblers were observed by Guthrie during the 2003 surveys and he stated they likely nest in the area. None was observed or detected by Forde Biological Consultants during the 2006 riparian bird surveys. However, they are still considered to have a high potential for occurrence.

**Yellow-breasted chat** (*Icteria virens*); *California Species of Special Concern*. This larger songbird occurs in riparian thickets and riparian woodlands with a dense understory. A couple of individual chats were observed by Guthrie in 2003. However, none was observed or detected during the 2006 riparian bird surveys. However, as suitable habitat still occurs on site in association with the Castaic Creek riparian corridor, this species is still considered to have a high potential for occurrence on site.

**California horned lark** (*Eremophila alpestris actia*). *California Species of Special Concern*. This bird species occurs in large fields, grasslands, and other open areas. The horned lark is a ground nester and, as such, disturbances such as mowing and agriculture limit the habitat available. This species has a high potential to forage on the site, particularly during the winter months. However, because of the disturbed nature of the open areas of the site (i.e., agriculture), suitable nesting habitat is considered marginal and the species is not expected to nest on site.

### *Mammals*

**Yuma myotis** (*Myotis yumanensis*); *California Species of Special Concern*. This small bat is found in a variety of habitats. Optimal habitats include open forests and woodlands with sources of water over which to feed. Focused bat surveys have not been conducted on site. However, suitable foraging and roosting habitat is present in association with the Castaic Creek riparian corridor and nearby Castaic Lake. Therefore, this species is considered to have a high potential for occurrence on site.

**San Diego desert woodrat** (*Neotoma lepida intermedia*); *California Species of Special Concern*. This woodrat species is considered to be declining in California. However, it is still quite prolific in southern California scrub habitats. Direct sign indicating the presence of this species was not observed on site during site surveys. However, due to their relative abundance in scrub habitats in the area, it is expected that at least a few reside in the hillside scrub patches occurring on the eastern parcel.



### **Special-Status Species For Which Focused Surveys Were Conducted**

**Unarmored three-spine stickleback** (*Gasterosteus aculeatus williamsoni*); *Federally-Listed Endangered Species, State-Listed Endangered Species*. Distribution of this subspecies of the more common armored three-spine stickleback (*G.a. aculeatus*) is limited to the Santa Clara River watershed east of the Ventura-Los Angeles County line and a stream in Santa Barbara County. Castaic Creek is a tributary of the Santa Clara River and its confluence occurs in Los Angeles County; within the distributional range of this species. Focused UTS surveys were not conducted within the boundaries of the subject project site during recent years. However, Compliance Biology, Inc. conducted focused surveys for this and other special-status fish species downstream in Castaic Creek between State Route 126 and Interstate 5 in 2003. No UTS or other special-status fish species were observed in that portion of the creek and it was concluded that natural and man-made barriers in the creek likely preclude any small fish species occurring in the Santa Clara River from migrating upstream into or beyond the survey area. Therefore, UTS or other special-status fish species are not expected to occur within the Castaic Mesa project boundaries.

**Arroyo toad** (*Bufo californicus*); *Federally-Listed Endangered Species, California Species of Special Concern*. Arroyo toads are restricted to rivers that have shallow, gravelly pools adjacent to sandy terraces that have a nearly complete closure of cottonwoods, oaks, or willows, and almost no herbaceous cover. They require shallow pools with minimal current, little to no emergent vegetation, and a sand or pea gravel substrate overlain with flocculent silt for egg deposition. Because some suitable habitat occurs in the Castaic Creek corridor within and adjacent to the Castaic Mesa project site, and because this species has been identified north of Castaic Lake and south in the Santa Clara River, focused surveys following USFWS protocol were conducted. Ecological Sciences, Inc. Conducted the protocol surveys in spring and summer of 2003. No arroyo toads were observed or detected during the focused surveys.

**Coastal California gnatcatcher** (*Poliophtila californica californica*); *Federally-Listed Threatened Species*. Because the gnatcatcher is an obligate resident of coastal sage scrub vegetation. The preferred plant structure in gnatcatcher territories is described as low growing with moderate gaps in the shrub canopy. The California gnatcatcher generally avoids dense or high stands of sage scrub habitat and areas with steep slopes. Because potentially suitable sage scrub habitat is present at the project site, focused USFWS protocol surveys were conducted by Compliance Biology, Inc. during spring of 2006. No California gnatcatchers were detected during the focused surveys. Therefore, they are considered absent from the site.





**Least Bell's vireo** (*Vireo bellii pusillus*); *Federally-Listed Endangered Species, State-Listed Endangered Species*. Least Bell's vireos are most frequently located in riparian vegetation with significant tree cover in conjunction with a well-developed shrub understory. Common understory shrubs and young trees in occupied habitats include narrow-leafed willow (*Salix exigua*), mule fat, and young arroyo willow. The quality of the riparian scrub on site associated with Castaic Creek is considered suitable. Therefore, focused surveys following USFWS protocol were conducted by Dr. Daniel Guthrie in 2003 and again by Forde Biological Consultants during spring and early summer 2006. Results of both surveys efforts were negative and, as such, Least Bell's vireos are not expected to be present on site.

**Southwestern willow flycatcher** (*Empidonax traillii extimus*), *Federally-Listed Endangered Species, State-Listed Endangered Species*. Willow flycatchers typically occur in willow thickets within riparian habitats, usually where water is present. Suitable habitat for this species occurs in association with the riparian woodlands along Castaic Creek in the eastern portion of the site. Therefore, focused surveys following USFWS protocol were conducted by Dr. Daniel Guthrie in 2003 and again by Forde Biological Consultants during spring and early summer 2006.

Willow flycatcher was observed during two of the five protocol surveys during the 2003 and the 2006 survey efforts. With all observation events, no nests or nesting behavior were observed. Therefore, the individuals observed were considered to be migrants. As such, southwestern willow flycatcher is expected to occur on site as a seasonal migrant.

**Western spadefoot** (*Scaphiopus hammondi*); *Federal Species of Concern, California Species of Special Concern*. Scattered records of this toad range from Shasta County southward into Baja California, Mexico. During recent years, several populations have been discovered in Los Angeles County. This toad species tends to occur in open areas in lowland grasslands, chaparral, and pine-oak woodlands and rarely stray more than several hundred feet from their natal pools. Western spadefoot requires vernal or temporary rain pools for breeding that lack predators and last at least three weeks. They are typically only detectable during and immediately after rain events.

Because some suitable habitat is present on the Castaic Mesa site, Compliance Biology, Inc. conducted a series of focused surveys from February through April, during and immediately following rain events. No western spadefoot were observed or detected during the surveys. Therefore, they are considered to be absent from the site.





## ***Special-Status Plant Communities***

Plant communities that are considered special-status include habitats that support rare, threatened, or endangered plant or wildlife species or are locally diminishing (of special concern). In particular, the California Department of Fish and Game (CDFG) have ranked a number of natural communities of California according to priority for preservation. Those communities that have limited relict distribution are of highest priority. Communities, which the California Natural Diversity Database (CNDDDB) has assigned the “very threatened and threatened” designation, are also considered special-status habitats. Generally, formal procedures or requirements for preservation of these communities have not been implemented.

**Venturan coastal sage scrub.** *CDFG Very Threatened (S3.1).* Venturan coastal sage scrub is ranked by the CDFG as S3.1 (very threatened in habitats with less than 50,000 acres remaining), and is of high priority for preservation. Most forms of coastal sage scrub in southern California are of high priority for preservation due to the encroachment of development and the large number of special-status species that occur within the community. Approximately 40 percent of the Castaic Mesa site (refer to Exhibit 3) supports some form of coastal sage scrub. All of the sage scrub associations on site are not necessarily considered the Venturan series, but all are considered sensitive by CDFG. Most of the sage scrub habitat occurs in the eastern half of the site.

## **Jurisdictional Resources**

Direct and indirect impacts on wetland and riparian areas may be subject to the jurisdiction of several state and federal agencies, including the U.S. Army Corps of Engineers (ACOE), the California Department of Fish and Game (CDFG), and the Los Angeles Regional Water Quality Control Board (RWQCB). A jurisdictional delineation of wetlands and waters was not completed on the project site. However, there are features on site expected to lie within the jurisdiction of regulatory agencies.

Castaic Creek and the adjacent freshwater marsh do meet the jurisdictional criteria. There are also ephemeral drainage features in Charlie Canyon and in the central portion of the site that may meet the jurisdictional criteria. Prior to design of specific development plans, a detailed delineation following ACOE protocol should be completed.



## Wildlife Movement Corridors

Wildlife movement corridors link together areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, by human disturbance, or by the encroachment of urban development. Movement corridors are important as the combination of topography and other natural factors, in addition to urbanization, has fragmented or separated large open space areas. The fragmentation of natural habitat creates isolated 'islands' of vegetation that may not provide sufficient area to accommodate sustainable populations and can adversely impact genetic and species diversity. Corridors mitigate the effects of this fragmentation by (1) allowing animals to move between remaining habitats, which allows depleted populations to be replenished and promotes genetic exchange with separate population; (2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk that catastrophic events (such as fire, flood, or disease) will result in population or species extinction; and (3) serving as travel paths for individual animals as they wander about or disperse from their home ranges in search of food, water, mates, and other needs.

The project site is situated east and southeast of Castaic Lake and existing development. Most of the area north, east and south of the site is relatively undeveloped open space. Topographic features within the main portion of the site don't necessarily provide specific corridors for regional movement. However, the Castaic Creek riparian corridor on the western portion of the site and Charlie Canyon to the south, likely serve as primary corridors for wildlife movement between open spaces to the north, south and east.



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**ATTACHMENT A**  
**Special-Status Wildlife Species Recorded From**  
**or Otherwise Known to Occur in the Project Vicinity**

**Attachment A**  
**Special-Status Wildlife Species Recorded From or Otherwise Known from the Project Vicinity**

Common Name  Scientific Name	Status		Habitat Requirements	Potential Occurrence on the Project Site
	Federal	State		
FISHES				
Arroyo chub <i>Gila orcutti</i>	--	CSC	Slow-moving or backwater sections of warm to cool streams with mud or sand substrates.	Low potential; past fish surveys conducted in Castaic Creek in this area did not reveal the presence of this species in or adjacent to the project boundaries.
Santa Ana sucker <i>Catostomus santaanae</i>	FT	CSC	Occupies small-to medium-sized perennial streams with water ranging in depth from a few centimeters to a meter or more.	Low potential; past fish surveys conducted in Castaic Creek in this area did not reveal the presence of this species in or adjacent to the project boundaries. The sucker population occurring in the Santa Clara River were excluded from the Federal Threatened status.
Unarmored threespine stickleback <i>Gasterosteus aculeatus williamsoni</i>	FE	CE, CFP	Slow-moving and backwater areas	Low potential; past fish surveys conducted in Castaic Creek in this area did not reveal the presence of this species in or adjacent to the project boundaries.
AMPHIBIANS				
Western spadefoot <i>Scaphiopus hammondi</i>	--	CSC	Open areas in lowland grasslands, chaparral, and pine-oak woodlands; require temporary rainpools that last approximately three weeks and lack exotic predators.	Low potential; focused surveys for this species were conducted on the subject property during the active breeding season. No evidence of spadefoot observed.

**Attachment A** (continued)  
**Special-Status Wildlife Species Recorded From or Otherwise Known from the Project Vicinity**

Common Name	Status		Habitat Requirements	Potential Occurrence on the Project Site
Scientific Name	Federal	State		
Arroyo toad <i>Bufo californicus</i>	FE	CSC	Restricted to rivers that have shallow, gravely pools adjacent to sandy terraces that have a nearly complete closure of cottonwoods, oaks, or willows, and almost no herbaceous cover; require shallow pools with minimal current, little to no emergent vegetation, and a sand or pea gravel substrate overlain with flocculent silt for egg deposition.	Not expected; focused USFWS protocol surveys conducted on site determined species is not present.
California red-legged frog <i>Rana aurora draytonii</i>	FT	CSC	Permanent water sources such as ponds, lakes, reservoirs, streams, and adjacent riparian woodlands.	Low potential; none observed or detected during past aquatic and general wildlife surveys conducted on site. Presence of bullfrogs on site may preclude the occurrence of this species.
<b>REPTILES</b>				
Southwestern pond turtle <i>Clemmys marmorata pallida</i>	--	CSC, CP	Streams, ponds, freshwater marshes, and lakes with growth of aquatic vegetation.	Low potential; none observed or detected during past aquatic and general wildlife surveys conducted on site.
San Diego horned lizard <i>Phrynosoma coronatum blainvillii</i>	--	CSC, CP	Relatively open grasslands, scrublands, and woodlands with fine, loose soil.	Moderate <b>to High potential</b> ; suitable habitat and forage for this species occur on site. However, none observed during site surveys.

**Attachment A** (continued)  
**Special-Status Wildlife Species Recorded From or Otherwise Known from the Project Vicinity**

Common Name  Scientific Name	Status		Habitat Requirements	Potential Occurrence on the Project Site
	Federal	State		
California horned lizard <i>Phrynosoma coronatum frontale</i>	--	CSC	Exposed gravelly-sandy soils with minimal shrubs, riparian woodland clearings, dry chamise chaparral, and annual grasslands with scattered seepweed or saltbush.	Moderate <b>to High potential</b> ; suitable habitat and forage for this species occur on site. However, none observed during site surveys.
Coastal whiptail <i>Cnemidophorus tigris multiscutatus</i>	--	◆	Open areas in semiarid grasslands, scrublands, and woodlands.	<b>Present</b> ; several individuals observed in sage scrub on hills in northern portion of site.
Silvery legless lizard <i>Anniella pulchra pulchra</i>	--	CSC	Stabilized dunes, beaches, dry washes, pine, oak, and riparian woodlands, and chaparral; associated with sparse vegetation with sandy or loose, loamy soils.	Moderate to <b>High potential</b> ; suitable habitat occurs on site and species known to occur in region.
Coast patch-nosed snake <i>Salvadora hexalepis virgultea</i>	--	CSC	Shrublands with low structure and minimum density. Generally occurs with whiptails (primary prey item)	Moderate potential; suitable habitat and forage for this species occur on site.
Two-striped garter snake <i>Thamnophis hammondi</i>	--	CSC	Perennial and intermittent streams having rocky or sandy beds and artificially-created aquatic habitats (man-made lakes and stock ponds); requires dense riparian vegetation.	Moderate potential; suitable habitat occurs on site and species known to occur in region, but none observed during surveys conducted on site.



**Attachment A** (continued)  
**Special-Status Wildlife Species Recorded From or Otherwise Known from the Project Vicinity**

Common Name		Status		Habitat Requirements	Potential Occurrence on the Project Site
Scientific Name		Federal	State		
BIRDS					
Great blue heron <i>Ardea herodias</i>	(rookery)	--	◆ (rookery)	Shallow, open water and open fields; nests in secluded groves of tall trees.	Species <b>observed</b> foraging on site in 2003 and 2006. However, nesting (rookeries) were not observed on site and are not expected to occur.
Great egret <i>Casmerodius albus</i>	(rookery)	--	◆ (rookery)	Shallow water and along shores of estuaries, lakes, ditches, and slow-moving streams, in salt ponds and mudflats, and in irrigated croplands and pastures; requires groves of trees that are relatively isolated from human activities for nesting and roosting.	Species likely occurs as periodic forager and was <b>observed</b> on a few occasions by Guthrie in 2003. However, nesting (rookeries) have not been observed on site and are not expected to occur.
Snowy egret <i>Egretta thula</i>	(rookery)	--	◆ (rookery)	Shallow water or shores of wetlands or aquatic habitats; requires dense emergent wetland or trees near water for roosting.	Species may occur as periodic forager. However, nesting (rookeries) were not observed on site and are not expected to occur.
Black-crowned night heron <i>Nycticorax nycticorax</i>	(rookery)	--	◆	Forages in freshwater and saltwater marsh habitats, margins of lakes, and mud-bordered bays. Roosts in dense groves of trees, usually near water.	Species may occur as infrequent forager. However, nesting (rookeries) were not observed on site and are not expected to occur.

**Attachment A** (continued)  
**Special-Status Wildlife Species Recorded From or Otherwise Known from the Project Vicinity**

Common Name  Scientific Name		Status		Habitat Requirements	Potential Occurrence on the Project Site
		Federal	State		
White-tailed kite (nesting) <i>Elanus leucurus</i>		--	CFP	Open vegetation and uses dense woodlands for cover.	Moderate to <b>High potential</b> ; this species is known from the area and suitable foraging and nesting habitat occurs on site. A single individual was observed by Guthrie in 2003, but one was observed during recent wildlife or focused bird surveys.
Northern harrier (nesting) <i>Circus cyaneus</i>		--	CSC	Coastal salt marsh, freshwater marsh, grasslands, and agricultural fields.	Species <b>observed</b> foraging over site during site surveys. However, there is a low potential for nesting on site as this species rarely nests in the project region.
Sharp-shinned hawk (nesting) <i>Accipiter striatus</i>		--	CSC	Woodlands and forages over dense chaparral and scrublands.	Moderate to <b>High potential</b> ; this species is known from the area and suitable foraging and nesting habitat occurs on site. None observed during recent wildlife or focused bird surveys.
Cooper's hawk (nesting) <i>Accipiter cooperi</i>		--	CSC	Dense stands of live oaks and riparian woodlands.	Species <b>observed</b> foraging on site during site surveys and suitable nesting habitat occurs on site.
Swainson's hawk (nesting) <i>Buteo swainsoni</i>		--	CT	Open riparian habitat, in scattered trees or small groves in sparsely vegetated flatlands; typical habitat is open desert, grassland, or cropland.	This species is very uncommon in the project area. However, two individuals were <b>observed</b> on site during one of the focused CAGN surveys. The single occurrence on site indicates these two individuals were likely passing through during annual migration.
Ferruginous hawk (wintering) <i>Buteo regalis</i>		--	CSC	Grasslands, agricultural fields, and open scrublands.	Moderate potential; suitable wintering habitat occurs on site, though this species is rarely observed in the project area.
Golden eagle (nesting & wintering) <i>Aquila chrysaetos</i>		--	CSC, CFP	Mountains, deserts, and open country.	Moderate potential; this species may occur as periodic forager. Suitable nesting habitat on site is very limited. None observed during recent wildlife or focused bird surveys.

**Attachment A** (continued)  
**Special-Status Wildlife Species Recorded From or Otherwise Known from the Project Vicinity**

Common Name  Scientific Name	Status		Habitat Requirements	Potential Occurrence on the Project Site
	Federal	State		
Western yellow-billed cuckoo (nesting) <i>Coccyzus americanus occidentalis</i>	FC	CE	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, with understory of blackberry, nettles, or wild grape.	Low potential; very rare visitant to the area. Some suitable habitat occurs on site associated with Castaic Creek riparian woodlands. However, none observed or detected during recent focused special-status riparian bird surveys.
Western burrowing owl (burrow sites) <i>Athene cunicularia hypugea</i>	--	CSC	Grasslands and open scrub.	Low potential; species may occur as infrequent migrant, but no burrowing owls or suitable burrows were observed during site surveys.
Long-eared owl (nesting) <i>Asio otus</i>	--	CSC	Dense, riparian and live oak thickets near meadow edges, and nearby woodland and forest habitats. Also found in dense conifer stands at higher elevations.	Moderate potential; this species known from a few occurrences in the area and suitable foraging and nesting habitat is present on site. None observed or detected during surveys conducted on site.
Costa's hummingbird (nesting) <i>Calypte costae</i>	--	◆		Species <b>observed</b> foraging on site during site surveys and suitable nesting habitat occurs on site.
Rufous hummingbird (nesting) <i>Selasphorus rufus</i>	--	◆		Moderate potential; the project site occurs in this species' documented range and some suitable habitat is present on site. However, none was observed despite numerous avian surveys conducted on site.

**Attachment A** (continued)  
**Special-Status Wildlife Species Recorded From or Otherwise Known from the Project Vicinity**

Common Name  Scientific Name	Status		Habitat Requirements	Potential Occurrence on the Project Site
	Federal	State		
Southwestern willow flycatcher (nesting) <i>Empidonax traillii extimus</i>	FE	CE	Riparian woodlands that contain water and low willow thickets.	This species was <b>detected on site</b> in the Castaic Creek riparian habitat during two of the five required protocol surveys in 2003 and 2006. The surveyors determined that the individual(s) observed were not nesting on site.
California horned lark <i>Eremophila alpestris actia</i>	--	CSC	Grasslands, disturbed areas, agriculture fields, and beach areas.	Moderate to <b>High potential</b> ; this species was not observed during site surveys, but it likely occurs as periodic visitant to site as suitable habitat is present.
California gnatcatcher <i>Poliophtila californica</i>	FT	CSC	Coastal sage scrub in areas of flat or gently sloping terrain.	Not expected; recent focused surveys following USFWS protocol determined this species was not present on site.
Loggerhead shrike <i>Lanius ludovicianus</i>	--	CSC	Grasslands with scattered shrubs, trees, fences or other perches.	Low to Moderate potential; suitable foraging and nesting habitat occurs on site for this species but no recent documented occurrences in the area and none observed during on-site surveys.
Least Bell's vireo (nesting) <i>Vireo bellii pusillus</i>	FE	CE	Riparian vegetation with extensive willows below 2,000 ft.	Not expected; focused USFWS protocol surveys conducted on site in 2003 and 2006 determined species is not present.
California thrasher <i>Toxostoma redivivum</i>	--	◆	Coastal sage scrub and chaparral	<b>Present</b> ; this species was observed on several occasions on site during surveys.
Yellow warbler (nesting) <i>Dendroica petechia brewsteri</i>	--	CSC	Riparian thickets and woodlands.	<b>High potential</b> ; this species is periodically observed in the project region and suitable habitat is present on site. Individuals were observed during Guthrie's 2003 surveys, but none was observed during 2006 survey efforts.

**Attachment A** (continued)  
**Special-Status Wildlife Species Recorded From or Otherwise Known from the Project Vicinity**

Common Name  Scientific Name	Status		Habitat Requirements	Potential Occurrence on the Project Site
	Federal	State		
Yellow-breasted chat (nesting) <i>Icteria virens</i>	--	CSC	Riparian thickets and riparian woodlands with a dense understory.	<b>High potential</b> ; this species is periodically observed in the project region, and a couple individuals were observed on site by Guthrie in 2003. None was observed during focused special-status riparian bird surveys.
S. California rufous-crowned sparrow <i>Aimophila ruficeps canescens</i>	--	CSC	Coastal sage scrub.	<b>Present</b> ; this species was observed on several occasions on site during surveys.
Bell's sage sparrow (nesting) <i>Amphispiza belli belli</i>	--	CSC	Coastal sage scrub and chamise chaparral.	<b>Present</b> ; this species was observed on three occasions on site during surveys, indicating it is either a resident on, or nearby the site.
Lawrence's goldfinch (nesting ) <i>Carduelis lawrencei</i>	--	◆	Brushy areas along riparian corridors	<b>Present</b> ; this species was observed on two occasions on site during surveys, indicating it may be a resident on, or nearby the site.
<b>MAMMALS</b>				
Yuma myotis <i>Myotis yumanensis</i>	--	CSC	Found in a variety of habitats; optimal habitats are open forests and woodlands with sources of water over which to feed.	Moderate to <b>High potential</b> ; species known from the area and suitable forage and some limited roosting habitat present on and adjacent to site.
Spotted bat <i>Euderma maculata</i>	--	CSC	Deserts, scrublands, chaparral, and coniferous woodlands.	Low potential; species extremely rare in N. America and only limited habitat present on site.
Pale big-eared bat <i>Corynorhinus townsendii pallescens</i>	--	CSC	Utilizes a variety of communities, including conifer and oak woodlands and forests, arid grasslands and deserts, and high-elevation forests and meadows.	Low to Moderate potential; limited suitable habitat present on site. No recent documented occurrences in vicinity.

**Attachment A** (continued)  
**Special-Status Wildlife Species Recorded From or Otherwise Known from the Project Vicinity**

Common Name  Scientific Name	Status		Habitat Requirements	Potential Occurrence on the Project Site
	Federal	State		
Pallid bat <i>Antrozous pallidus</i>	--	CSC	Arid habitats, including grasslands, shrublands, woodlands, and forests; prefers rocky outcrops, cliffs, and crevices with access to open habitats for foraging.	Moderate potential; limited suitable habitat present on site.
Ringtail <i>Bassariscus astutus</i>	--	CFP	Prefers a mixture of forest and shrubland habitats in close association with rocky areas or riparian habitats.	Low to Moderate potential; moderately suitable habitat on site. None observed or detected, but this species is very secretive and difficult to detect.
American badger <i>Taxidea taxus</i>	--	◆	Drier open stages of shrub, forest, and herbaceous habitats with friable soils.	Low potential; few documented occurrences in the area, and no suitable burrows observed on site during site surveys.
San Diego black-tailed jackrabbit <i>Lepus californicus bennettii</i>	--	CSC	Chaparral and coastal sage scrub.	Low potential; none observed during site surveys.
San Diego desert woodrat <i>Neotoma lepida intermedia</i>	--	CSC	Chaparral and coastal sage scrub.	<b>High potential;</b> suitable habitat present in upland scrub habitats on site and species known to be relatively common in area.

**KEY:**

Status:

Federal -- U.S. Fish and Wildlife Service

FE: Federally Endangered

FT: Federally Threatened

FC: Federal Candidate for listing as threatened or endangered

State -- California Department of Fish and Game

CE: California Endangered

CT: California Threatened

CFP: California Fully Protected

CP: California Protected

CSC: California Species of Special Concern

◆ : California Special Animal (species with no official federal or state status, but are included on CDFG's Special Animals list)

(nesting) = For most taxa the CNDDDB is interested in sightings for the presence of resident populations. For some species (primarily birds), the CNDDDB only tracks certain parts of the species range or life history (e.g., nesting locations). The area or life stage is indicated in parenthesis after the common name.