

**APPENDIX B**  
**Biological Resources Technical Letter Report**



An Environmental Planning/Resource  
Management Corporation

January 9, 2004



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**VIA FACSIMILE, EMAIL, AND MAIL**  
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Subject: Biological Letter Report for the Los Angeles Department of Water and Power Hansen Area Water Reclamation Project (Tujunga Wash Alignment), City of Los Angeles, California



Dear Ms. Meyer:

On September 18 and September 30, 2003, BonTerra Consulting biologist Jeff Galizio conducted biological reconnaissance surveys within the proposed alignment of the Hansen Area Water Reclamation Project (HAWRP). The western terminus and majority of the proposed HAWRP alignment is located within a nearly completely urbanized portion of the City of Los Angeles (Exhibit 1). The eastern terminus of the HAWRP is a proposed one million gallon reservoir located at the Canyon Trails Golf Course. The alignment is located predominantly within the right-of-way of existing streets (Exhibit 2). Land uses within and proximal to the proposed alignment include open space within Tujunga Wash (designated Significant Ecological Area No. 24 by Los Angeles County), single- and multi-family residential, commercial/retail, office, industrial, schools, roadway, rail crossing, flood channel, electric conductor, golf course, and park. The project site is on the U.S. Geological Survey's San Fernando and Sun Valley 7.5-minute quadrangles.



#### **SURVEY METHODS**

Prior to the initiation of field surveys, BonTerra Consulting conducted a search of available literature to identify special status plants, wildlife, and habitats known to occur in the vicinity of the project site. The California Native Plant Society's (CNPS) Inventory of Rare and Endangered Vascular Plants of California (CNPS 2003) and a compendia of special status species published by the U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFG) were reviewed. In addition, CDFG's California Natural Diversity Database (CNDDB) was reviewed prior to the site visit (CDFG 2003).



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The biological reconnaissance surveys were conducted to describe the vegetation present within the proposed alignment and to evaluate the actual or potential for the habitats observed to support special status plant and wildlife species. The qualitative potential for the habitat or substrates identified to support special status plant and wildlife species was estimated based upon observations made on the site. All plant and wildlife species observed were noted. Plant species were identified in the field or collected for future identification. Plants were identified using keys in Hickman (1993), Munz (1974), and Abrams (1923, 1960). Taxonomy follows Hickman (1993) and current scientific data (e.g., scientific



## Regional Location

Hansen Area Water Reclamation Project

Exhibit 1



**Bonterra**  
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 Project Alignment

## Exhibit 2

### Local Vicinity Hansen Area Water Reclamation Project



journals) for scientific and common names. Roberts (1998) was used for common names when none were listed in Hickman (1993). The Sunset Western Garden Book (Brenzel, 1995) was used for ornamental species that were not included in the references listed above. The List of California Terrestrial Natural Communities Recognized by the Natural Diversity Data Base (CDFG 2003) was generally used to classify vegetation types.

Active searches for reptiles and amphibians included lifting, overturning, and carefully replacing rocks and debris, where appropriate. Birds were identified by visual and auditory recognition. Surveys for mammals were conducted during the day and included searching for and identifying diagnostic sign, including scat, footprints, scratch-outs, dust bowls, burrows, and trails. Taxonomy and nomenclature for wildlife generally follows Fisher and Case (1997) for amphibians and reptiles, American Ornithologists Union (1998) for birds, and Jones *et. al* (1992) for mammals.

## **SURVEY RESULTS**

Vegetation types, wildlife populations and movement patterns, special status vegetation types, and special status plant and wildlife species either known or potentially occurring within the proposed HAWRP alignment are discussed below.

### **Vegetation Types and Disturbed Areas**

Urbanization in the project area has impacted native vegetation types such that the majority of the vegetated area, with the exception of Tujung Wash upstream from Hansen Dam and some areas adjacent to Wentworth Street and the hillside near the eastern terminus, may be described as ruderal or developed land. Tujung Wash above Hansen Dam, in particular, has the potential to support or does support, native vegetation that includes Riversidean alluvial fan sage scrub, coastal sage scrub, non-native grassland, willow scrub, and mule fat scrub. The following section describes each of the vegetation types and disturbed areas observed during field reconnaissance.

#### **Riversidean Alluvial Fan Sage Scrub**

Riversidean alluvial sage scrub is a vegetation type primarily restricted to floodplain areas. This vegetation type is typically dominated by scalebroom (*Lepidospartum squamatum*), though common subdominant shrub species include California sagebrush (*Artemisia californica*), Mexican elderberry (*Sambucus mexicana*), and various coastal sage scrub and chaparral species. The open understory areas are typically dominated by herbaceous species (native and non-native) usually associated with grassland communities. Scattered riparian trees and shrubs often found in association with this vegetation type include sycamore (*Platanus racemosa*) and mule fat (*Baccharis salicifolia*). This high value vegetation type was observed within Tujung Wash.

#### **Coastal Sage Scrub**

Coastal sage scrub is a low to moderate shrub vegetation type that occurs at low elevations on the western slopes and plains of the coast ranges. The coastal sage scrub vegetation type observed consists of a mix of buckwheat (*Eriogonum fasciculatum*), California sagebrush, and Our Lord's candle (*Yucca whipplei*). Coastal sage scrub, which provide moderate to high habitat value, was observed in patches adjacent to Wentworth, in Tujung Wash, and on the hillside in the area of the eastern terminus.

### **Non-Native Grassland**

Non-native grassland consists primarily of annual grasses that are predominately Mediterranean in origin. Common grasses within this vegetation type include bromes (*Bromus* spp.), oats (*Avena* spp.), fescues (*Festuca* spp.), and barleys (*Hordeum* spp.). Many species of native forbs and bulbs, as well as naturalized annual forbs, may be found in annual grasslands but floristic richness is affected to a high degree by land use activity, such as intensity and duration of development and other disturbances. Common forbs encountered within non-native grasslands include filaree (*Erodium* spp.), mustard (*Brassica* spp.), peppergrasses (*Lepidium* spp.), and doveweed (*Eremocarpus setigerus*). Scattered elements of non-native grassland, which provide low to moderate habitat value, were observed in patches adjacent to Wentworth, in Tujunga Wash, and on the hillside in the area of the eastern terminus.

### **Southern Willow Scrub**

Southern willow scrub is characterized by willows (*Salix* sp.) with lower concentrations of mule fat. This high-value habitat was observed in the project area within Tujunga Wash.

### **Mule Fat Scrub**

Mule fat scrub consists of dense stands of mule fat with lower concentrations of willow. This high-value vegetation type occurs within Tujunga Wash.

### **Ruderal and Developed Areas**

Ruderal areas consist of early successional grassland with pioneering herbaceous plants that readily colonize disturbed ground and openings in hardscape development. Species frequently occurring within this vegetation type include Russian thistle (*Salsola tragus*), doveweed, tumbleweed (*Amaranthus albus*), and many of the forbs that also occur in non-native grassland. Ruderal vegetation occurs throughout the project area at any site that has been disturbed by either natural or human causes. These areas are considered to have a low biological value.

The developed areas consist of structures, paved areas, and utility, public works, and roadway right-of-way. Developed areas are typically devoid of native plants. Ornamental vegetation that may be present in the developed areas typically consist of introduced trees, shrubs, flowers, and turf grass. Developed areas, which provide low habitat value, were observed throughout the area along the proposed HAWRP alignment.

### **Common Wildlife**

The following discussion identifies wildlife species expected to occur within the project area. Potential for presence is based on known occurrences of these species in the project area or the presence of suitable habitat to support them within or proximal to the proposed HAWRP alignment.

### **Fish**

Freshwater fish were not observed during field reconnaissance, habitat observed within Tujunga Wash proximal to the eastern terminus has the potential to support these species. Camm Swift collected representatives of 3 special status fish species: Santa Ana speckled dace (*Rhinichtys osculus*), Santa Ana sucker (*Catostomus santaanae*), and arroyo chub (*Gila orcutti*) proximal to the eastern terminus south of the Canyon Trails Golf Course within Tujunga Wash at its

confluence with Haines Canyon Creek in May 2002 (Natural History Museum of Los Angeles County, 2004).

## **Amphibians**

Though no amphibians were observed during the field reconnaissance, habitat observed within Tujunga Wash has the potential to support these species. Common native amphibian species expected to occur in the project area include the western toad (*Bufo boreas*) and Pacific treefrog (*Hyla regilla*). Non-native amphibian species expected to occur in the project area include the bullfrog (*Rana catesbeiana*).

## **Reptiles**

Several of the common reptile species observed or expected to occur within the project area include the side-blotched lizard (*Uta stansburiana*), western fence lizard (*Sceloporus occidentalis*), southern alligator lizard (*Elgaria multicarinatus*), western whiptail (*Cnemidophorus tigris*), coachwhip (*Masticophis flagellum*), common kingsnake (*Lampropeltis getulus*), and western rattlesnake (*Crotalus viridis*). Habitats within the project area that have potential to support these species occur within Tujunga Wash and the hillside near the eastern terminus.

## **Birds**

Several of the resident bird species observed or expected to occur in the project area include the turkey vulture (*Cathartes aura*), mallard (*Anas platyrhynchos*), red-tailed hawk (*Buteo jamaicensis*), American kestrel (*Falco sparverius*), killdeer (*Charadrius vociferous*), barn owl (*Tyto alba*), Anna's hummingbird (*Calypte anna*), black phoebe (*Sayornis nigricans*), western scrub-jay (*Aphelocoma californica*), American crow (*Corvus brachyrhynchos*), common raven (*Corvus corax*), bushtit (*Psaltiriparus minimus*), house wren (*Troglodytes aedon*), northern mockingbird (*Mimus polyglottos*), Brewer's blackbird (*Euphagus cyanocephalus*), brown-headed cowbird (*Molothrus ater*), and house finch (*Carpodacus mexicanus*). Habitats within the project area that have potential to provide nesting, foraging, or roosting habitat for these species occur within Tujunga Wash and the hillside near the eastern terminus.

## **Mammals**

Several of the common small mammal species observed or expected to occur in the project area include the desert cottontail (*Sylvilagus audubonii*), California ground squirrel (*Spermophilus beecheyi*), Botta's pocket gopher (*Thomomys bottae*), California vole (*Microtus californicus*), house mouse (*Mus musculus*), California mouse (*Peromyscus californicus*), deer mouse (*Peromyscus maniculatus*), and black rat (*Rattus rattus*). Larger mammal species expected to occur in the watershed include the Virginia opossum (*Didalphis virginiana*), coyote (*Canis latrans*), common raccoon (*Procyon lotor*), and striped skunk (*Mephitis mephitis*). Habitats within the project area that have potential to support these species occur within Tujunga Wash and the hillside near the eastern terminus.

Common bat species expected to occur in the project area include the big brown bat (*Eptesicus fuscus*), hoary bat (*Lasiurus cinereus*), California myotis (*Myotis californicus*), western pipistrelle (*Pipistrellus hesperus*), and Brazilian free-tailed bat (*Tadarida brasiliensis*). The surface water behind Hansen Dam and within Tujunga Wash has potential to support insects that would provide forage for these various bat species.

## **Wildlife Movement**

Wildlife corridors link areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of open space areas by urbanization creates isolated "islands" of wildlife habitat. In the absence of habitat linkages that allow movement to adjoining open space areas, various studies have concluded that some wildlife species, especially the larger and more mobile mammals, will not likely persist over time in fragmented or isolated habitat areas because they prohibit the infusion of new individuals and genetic information (MacArthur and Wilson 1967; Soule 1987; Harris and Gallagher 1989; Bennett 1990).

Corridors mitigate the effects of this fragmentation by: (1) allowing animals to move between remaining vegetation types, thereby permitting depleted populations to be replenished and promotes genetic exchange; (2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk that catastrophic events (such as fire or disease) will result in population or local species extinction; and (3) serving as travel routes for individual animals as they move in their home ranges in search of food, water, mates, and other needs (Noss 1983; Farhig and Merriam 1985; Simberloff and Cox 1987; Harris and Gallagher 1989).

Wildlife movement activities usually fall into one of three movement categories: (1) dispersal (e.g., juvenile animals from natal areas, or individuals extending range distributions); (2) seasonal migration; and (3) movements related to home range activities (foraging for food or water, defending territories, searching for mates, breeding areas, or cover). A number of terms have been used in various wildlife movement studies, such as "wildlife corridor," "travel route," "habitat linkage," and "wildlife crossing" to refer to areas in which wildlife move from one area to another. To clarify the meaning of these terms and facilitate the discussion on wildlife movement in this analysis, these terms are defined as follows:

*Travel Route*—a landscape feature (such as a ridgeline, drainage, canyon, or riparian strip) within a larger natural habitat area that is used frequently by animals to facilitate movement and provide access to necessary resources (e.g., water, food, cover, den sites). The travel route is generally preferred because it provides the least amount of topographic resistance in moving from one area to another. It contains adequate food, water, and/or cover while moving between habitat areas and provides a relatively direct link between target habitat areas.

*Wildlife Corridor*—a piece of habitat, usually linear in nature, that connects two or more habitat patches that would otherwise be fragmented or isolated from one another. Wildlife corridors are usually bound by urban land areas or other areas unsuitable for wildlife. The corridor generally contains suitable cover, food, and/or water to support species and facilitate movement while in the corridor. Larger, landscape-level corridors (often referred to as "habitat or landscape linkages") can provide both transitory and resident habitat for a variety of species.

*Wildlife Crossing*—a small, narrow area, relatively short in length and generally constricted in nature, that allows wildlife to pass under or through an obstacle or barrier that otherwise hinders or prevents movement. Crossings typically are manmade and include culverts, underpasses, drainage pipes, and tunnels to provide access across or under roads, highways, pipelines, or other physical obstacles. These often represent "choke points" along a movement corridor.

It is important to note that, in a large open space area in which there are few or no man-made or naturally occurring physical constraints to wildlife movement, wildlife corridors as defined above may not yet exist. Given an open space area that is both large enough to maintain viable populations of species and provide a variety of travel routes (canyons, ridgelines, trails,



riverbeds, and others), wildlife will use these "local" routes while searching for food, water, shelter, and mates, and will not need to cross into other large open space areas. Based on their size, location, vegetative composition, and availability of food, some of these movement areas (e.g., large drainages and canyons) are used for longer lengths of time and serve as source areas for food, water, and cover, particularly for small- and medium-sized animals. This is especially true if the travel route is within a larger open space area. However, once open space areas become constrained and/or fragmented as a result of urban development or construction of physical obstacles such as roads and highways, the remaining landscape features or travel routes that connect the larger open space areas can "become" corridors as long as they provide adequate space, cover, food, and water, and do not contain obstacles or distractions (e.g., man-made noise, lighting) that would generally hinder wildlife movement.

In general, the project area has been nearly completely urbanized and/or developed for decades; therefore, virtually all of the viable wildlife movement that historically occurred through the area has been constrained by existing land uses and development. While land uses such as residential and commercial/retail have virtually eliminated the potential for wildlife movement to occur, land uses such as commercial/recreational (e.g., golf courses and parks) and industrial (e.g., gravel pits and utility/public works easements) may contain conditions or vegetation types with the potential support wildlife movement in the project area. Any such conditions could become more viable with enhancement or restoration of the habitat. Portions of Tujunga Wash and the City of Los Angeles Department of Water and Power (LADWP) powerline easements have the potential to provide wildlife travel routes or corridors into or through the project area.

### **Regulatory Framework — Sensitive Species and Habitats**

Biological resources within the project area are governed by several regulatory agencies and applicable statutes and guidelines for which they are responsible, including but not limited to: the USFWS and the Federal Endangered Species Act (FESA); the CDFG and the California Endangered Species Act (CESA) and Fish and Game Code Section 1601; Regional Water Quality Control Board (RWQCB); and the U.S. Army Corps of Engineers (ACOE) and Section 401 and 404 of the Federal Clean Water Act. These agencies can provide input into the CEQA process regarding compliance with the FESA and CESA. The CNPS is a private organization that has developed and maintains an inventory of California's special status plant species that provides a summary of the distribution, rarity, and endangerment of California's vascular plants. Information from this inventory also provides input into the CEQA process. Local jurisdictions may designate areas with potentially sensitive natural resources, typically through zoning or ordinance, in order to preserve biological diversity. Significant Ecological Areas (SEAs) were established in 1976 by Los Angeles County for this purpose. The applicable agencies, regulations, and terminology associated with biological resource protection and management are described below.

### **Federal Status**

A federally-listed Endangered species is a species facing extinction throughout all or a significant portion of its geographic range. A federally-listed Threatened species is a species likely to become Endangered within the foreseeable future throughout all or a significant portion of its range. The presence of any federally Threatened or Endangered species on an area proposed for development may lead to a CEQA finding of "significance" and requires coordination with the USFWS, particularly if development would result in "take" of the species.

Proposed Threatened and proposed Endangered species are those officially proposed by the USFWS for addition to the federal Threatened and Endangered species list. Because proposed

species may become listed as Threatened or Endangered prior to or during implementation of a proposed project, they are treated here as though they are listed species.

Federal Species of Concern is an informal designation by the USFWS for those species that the USFWS has determined might be declining or are in need of concentrated conservation actions to prevent decline.

#### Federal Endangered Species Act

The FESA of 1973 protects plants and animals that are listed by the federal government as Endangered or Threatened. The FESA is implemented by enforcement of Sections 7 and 9 of the FESA. A federally-listed species is protected from unauthorized "take" pursuant to Section 9 of the FESA. "Take," as defined by the FESA, means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or to attempt to engage in any such conduct. All "persons" are presently prohibited from taking a federally-listed species unless and until: 1) the appropriate Section 10a permit has been issued by the USFWS; or 2) an incidental take statement is obtained as a result of formal consultation between a federal agency and the USFWS pursuant to Section 7 of the FESA and implementing regulations pertaining thereto (50 CFR 402). "Person" is defined in the FESA as an individual, corporation, partnership, trust, association, or any private entity; or any officer, employee, agent, department or instrumental of the federal government, or any state, municipality or political subdivision of the state, or any other entity subject to the jurisdiction of the United States.

Section 7 of the FESA applies to federal agency actions (permits/funding, etc.) for private activities, such as Section 404 permits issued by the ACOE for construction work in waters or wetlands. Specifically, Section 7 imposes an affirmative duty on federal agencies to ensure that their actions (including permitting) are not likely to jeopardize the continued existence of a listed species (plant or animal) or result in the destruction or modification of critical habitat (50 C.F.R. § 402.01[a]). Both Sections 7 and 9 of the FESA allow or authorize "incidental" takes in accordance with the provisions of the FESA as described below, but only with a permit which may be obtained through consultation with the USFWS.

"Take" may be permitted pursuant to Section 10(a) of the FESA if a Habitat Conservation Plan (HCP), which is prepared pursuant to regulations at 50 CFR 17.22(b)(2) and 50 CFR 17.32(b)(2), is approved by the USFWS. These regulations require, in part, that the "take" can be permitted only when the taking is incidental to, but not the purpose of, an otherwise lawful activity and that the permit applicant shall, to the maximum extent practicable, minimize and mitigate the impacts of such taking.

#### Clean Water Act – Section 404

Section 404 of the Clean Water Act (CWA) regulates the placement of dredged and fill material into waters of the United States, including wetlands. Discharges of dredged and fill material are commonly associated with activities such as channel construction and maintenance, fills to create development sites, transportation improvements, and water resource projects (such as dams, jetties, and levees). Excavation activities (e.g., mechanized land clearing, ditching, channelization, runoff from disposal areas, and others) also result in at least some discharge of dredged materials, and are thus regulated. The CWA authorizes the issuance of permits for such discharges as long as the proposed activity complies with environmental requirements specified in Section 404(b)(1) of the CWA. Section 404 is the primary federal program regulating activities in wetlands. The Section 404 program is administered by both the ACOE and the U.S. Environmental Protection Agency (USEPA), while the USFWS, National Marine Fisheries Service (NMFS), and several state agencies play important advisory roles.

The ACOE has primary responsibility for the permit program and is authorized, after notice and opportunity for a public hearing, to issue Section 404 permits. In evaluating individual Section 404 permit applications, the ACOE determines compliance with Section 404(b)(1) guidelines and carries out a public-interest review. This review involves balancing such public-interest factors as conservation, economics, aesthetics, wetlands protection, cultural values, navigation, fish and wildlife values, water supply, and water quality. The ACOE also considers comments received from the USEPA, USFWS, NMFS, and state resource agencies. The ACOE is obligated to permit the "least environmentally damaging practicable alternative," provided one exists. Also, the ACOE may not issue a permit before the local RWCQB has issued a water quality "certification" or "waiver" of compliance with Section 401 of the federal CWA.

### **State Status**

The State of California defines an Endangered species as a species whose prospects of survival and reproduction are in immediate jeopardy. A Threatened species is a species in such small numbers throughout its range that it is likely to become an Endangered species in the near future in the absence of special protection or management. A Rare species is one present in such small numbers throughout its range that it may become Endangered if its present environment worsens. Rare status applies to California native plants listed prior to the CESA. State Threatened and Endangered species are protected against take unless an incidental take permit is obtained from the CDFG.

California Species of Special Concern is an informal designation used by the CDFG for some declining wildlife species that are not state candidates. This designation does not provide legal protection, but signifies that these species are recognized as special status by the CDFG.

Species that are California Fully Protected may not be taken or possessed at any time.

The California Natural Diversity Data Base (CNDDDB) provides an inventory of special status plant and animal species that occur in the state. The CNDDDB also provides an inventory of vegetation types that are considered special status by the state and federal resource agencies, academic institutions, and various conservation groups.

A species that is considered a Special Animal is a species that is tracked by the CNDDDB. Species of Local Concern are those that have no official status with the resource agencies, but are being watched by local conservation organizations because either there is a unique population in the region or the species is declining in the region.

### California Endangered Species Act

The CESA (Fish and Game Code Sections 2050 to 2097) is administered by the CDFG and prohibits the take of plant and animal species designated by the Fish and Game Commission as either Threatened or Endangered in the state of California. "Take" in the context of the CESA means to hunt, pursue, kill, or capture a listed species, as well as any other actions that may result in adverse impacts when attempting to take individuals of a listed species.

CESA allows for take that is incidental to otherwise lawful development projects. CESA emphasizes early consultation to avoid potential impacts on rare, Endangered, and Threatened species and to develop appropriate mitigation planning to offset project induced losses of listed species populations and their essential habitats.

Through permits or memorandums of understanding, the CDFG may authorize individuals, public agencies, or educational institutions, to import, export, take, or possess any Endangered species, Threatened species, or candidate species of plants and animals. Take is authorized only after it has been demonstrated by the applicant that the impacts of a project shall be minimized and fully mitigated. The measures required to meet this obligation are roughly proportional in extent to the impact of the authorized taking on the species and must be capable of successful implementation.

#### California Fish and Game Code Section 1601

The CDFG has jurisdictional authority over riparian resources associated with rivers, streams, and lakes under California Fish and Game Code Sections 1600-1607. Activities of state and local agencies and public utilities that are project proponents are regulated by the CDFG under Section 1601 of the code and regulates work that will: substantially divert, obstruct, or change the natural flow of a river, stream, or lake; substantially change the bed, channel, or bank of a river, stream, or lake; or use material from a streambed. CDFG enters into a Streambed Alteration Permit with a project proponent and can impose conditions on the agreement to ensure no net loss of riparian values or acreage.

Due to the fact that the CDFG includes under its jurisdiction streamside habitats that under the federal definition may not qualify as jurisdictional waters and/or wetlands of the U.S. on a particular project site, CDFG jurisdiction may be broader than that of the ACOE. As an example, riparian forests in California often lie outside the plain of ordinary high water regulated under Section 404 of the CWA, and often do not have all three parameters (wetland hydrology, hydrophytic vegetation, and hydric soils) sufficiently present to be regulated as a wetland. However, riparian forests are frequently within CDFG regulatory jurisdiction under Section 1601.

#### CNPS

The CNPS is a private organization that has developed an inventory of California's special status plant species (CNPS 2003). This inventory summarizes the distribution, rarity, and endangerment of California's vascular plants. This rare plant inventory is comprised of four lists. CNPS presumes that List 1A plant species are extinct in California because they have not been seen in the wild for many years. CNPS considers List 1B plants as Rare, Threatened, or Endangered throughout their range. List 2 plant species are considered Rare, Threatened, or Endangered in California but more common elsewhere. Plant species for which CNPS needs additional information are included on List 3. List 4 plant species are those of limited distribution in California, but whose susceptibility to threat appears low at this time.

#### Significant Ecological Areas

Significant Ecological Areas (SEAs) were established in 1976 by Los Angeles County to designate areas with sensitive environmental conditions and/or resources to preserve biological diversity. The County recently re-evaluated the biological conditions of these SEAs in 2000; however, revisions were never adopted and the SEAs established in 1976 are the only ones currently recognized. SEA boundaries are general in nature, and broadly outline the biological resources of concern. The Los Angeles County General Plan allows development in SEAs as long as development is "highly compatible" with the identified resources. Los Angeles County established Tujunga Wash upstream from Hansen Dam as SEA No. 24 in 1976.

## Sensitive Species in the Project Area

### **Special Status Plant Species**

Fourteen (14) special status plant species have been previously identified in the project region, or have some potential to occur within the project area. Brief descriptions of these species are discussed below and summarized in Table 1, alphabetically, according to their scientific name.

#### Greata's Aster (*Aster greatae*)

Greata's aster, a CNPS 1B plant, is a perennial species known from the southern slopes of the San Gabriel Mountains. One of the two known occurrences is located in Gold Canyon within the Angeles National Forest. The species is found in damp places within foothill and lower montane conifer habitats. This species is not expected to occur due to lack of appropriate supporting habitat.

#### Braunton's Milk-vetch (*Astragalus brauntonii*)

Braunton's milk-vetch is a federal and state-listed Endangered, and a CNPS 1B, plant species endemic to foothill habitats in the Santa Ana, San Gabriel, and Santa Monica mountains. The species is found on small limestone outcrops in gaps or disturbed places within chaparral, coastal sage scrub, and closed-cone conifer forest. This species is known from the Simi and Chino hills, Santa Ynez Canyon (Santa Monica Mountains), and Coal and Gypsum canyons (Santa Ana Mountains), with other occurrences documented in the San Gabriel Mountains on private lands adjacent to the Angeles National Forest. This species is short-lived (two to three years) and appears to require significant surface disturbance for reproduction; consequently, this species may appear only once in 20 to 50 or more years, depending on the interval between significant disturbances. This species is not expected to occur due to lack of appropriate substrate.

#### Parish's Brittle-scale (*Atriplex parishii*)

Parish's brittle-scale is a CNPS 1B species that is typically found on drying soils in alkali meadows, vernal pools, playas, and in chenopod scrub at low elevations within desert habitats (though some locations are reported up to 4,700 feet). The CNDDDB contains records for 11 occurrences. Most of the recent collections are from the San Jacinto Valley in Riverside County, though historic occurrences exist for Los Angeles, San Bernardino, and Orange counties. This species is not expected to occur due to lack of appropriate habitat and substrate.

#### Nevin's Barberry (*Berberis nevinii*)

Nevin's barberry is a federal- and state-listed Endangered and CNPS 1B species known from Riverside, San Bernardino, and Los Angeles counties. Its current range extends from the foothills of the San Gabriel Mountains to near the foothills of the Santa Ana Mountains. Plants have been observed in discrete, localized occurrences in two types of habitat: sandy and gravelly places along the margins of dry washes, and on coarse soils in chaparral. This species is known historically from fewer than 30 scattered occurrences, with several known to have been extirpated as a result of urban development. This species appears to be restricted to chaparral or coastal sage scrub communities in areas with alluvial or sedimentary-based substrates. This species has a limited potential to occur at the eastern terminus and is not expected to occur in other areas along the alignment due to lack of habitat and/or substrate.

**TABLE 1  
 SPECIAL STATUS PLANT SPECIES WITH POTENTIAL  
 TO OCCUR WITHIN HAWRP AREA**

Species	Status		Sites with Potential Occurrence
	Federal/ State	CNPS	
Greata's aster <i>Aster greatea</i>	-/-	1B	Species is not expected to occur due to lack of habitat and/or substrate.
Braunton's milk vetch <i>Astragalus brauntonii</i>	FE/CE	1B	Species is not expected to occur due to lack of habitat and/or substrate.
Parish's brittlescale <i>Atriplex parishii</i>	-/-	1B	Species is not expected to occur due to lack of habitat and/or substrate.
Nevin's barberry <i>Berberis nevinii</i>	FE/CE	1B	Species has a limited potential to occur at the eastern terminus and is not expected to occur in other areas along the proposed alignment due to lack of habitat and/or substrate.
Plummer's mariposa lily <i>Calochortus plummerae</i>	-/-	1B	Species has a limited potential to occur at the eastern terminus and is not expected to occur in other areas along the proposed alignment due to lack of habitat and/or substrate.
Southern tarplant <i>Centromadia parryi</i> ssp. <i>australis</i>	-/-	1B	Species is not expected to occur due to lack of habitat and/or substrate.
San Fernando Valley spineflower <i>Chorizanthe parryi</i> var. <i>Fernandina</i>	FC/CE	1B	Species is not expected to occur due to lack of habitat and/or substrate.
slender-horned spineflower <i>Dodecahema leptocerus</i>	FE/CE	1B	Species is not expected to occur due to lack of habitat and/or substrate.
many-stemmed dudleya <i>Dudleya multicaulis</i>	-/-	1B	Species is not expected to occur due to lack of habitat and/or substrate.
Los Angeles sunflower <i>Helianthus nuttallii</i> ssp. <i>parishii</i>	-/SC	1B	Species is not expected to occur due to lack of habitat and/or substrate.
mesa horkelia <i>Horkelia cuneata</i> ssp. <i>puberula</i>	-/-	1B	Species has a limited potential to occur at the eastern terminus and is not expected to occur in other areas along the proposed alignment due to lack of habitat and/or substrate.
San Gabriel linanthus <i>Linanthus concinnus</i>	-/-	1B	Species is not expected to occur due to lack of habitat and/or substrate.

**TABLE 1 (Continued)  
 SPECIAL STATUS PLANT SPECIES WITH POTENTIAL  
 TO OCCUR WITHIN HAWRP AREA**

Species	Status		Sites with Potential Occurrence
	Federal/ State	CNPS	
Davidson's bush mallow <i>Malacothamnus davidsonii</i>	-/-	1B	Species has a low potential to occur at the eastern terminus and is not expected to occur in other areas along the proposed alignment due to lack of habitat and/or substrate.
California orcutt grass <i>Ocuttia californica</i>	FE/CE	1B	Species is not expected to occur due to lack of habitat and/or substrate.
<b>LEGEND</b>			
<b>Federal (USFWS)</b>		<b>State (CDFG)</b>	
FE	Endangered	CE	Endangered
FT	Threatened	CT	Threatened
PE	Proposed Endangered	PE	Proposed Endangered
PT	Proposed Threatened	PT	Proposed Threatened
SOC	Species of Concern <sup>1</sup>	SSC	Species of Special Concern <sup>1</sup>
FC	Federal Candidate	SC	State Candidate
<b>California Native Plant Society (CNPS)</b>			
1A Plants Presume Extinct in California			
1B Plants Rare, Threatened, or Endangered in California and Elsewhere			
2 Plants Rare, Threatened, or Endangered in California but More Common Elsewhere			
3 Plants About Which We Need More Information – A Review List			
4 Plants of Limited Distribution – A Watch List			
<sup>1</sup> Note – This designation, although not an active term, has been reinstated for informational purposes only.			

Plummer's Mariposa Lily (*Calochortus plummerae*)

Plummer's mariposa lily is a CNPS 1B plant found in the San Gabriel, San Bernardino, San Jacinto, Santa Ana, and Santa Monica mountains. The CNDDDB lists 58 occurrences, many of which are located on private lands planned for development. This species is found in chaparral habitat as well as alluvial fan sage scrub, grasslands, and lower montane conifer forests below 5,500 feet. The species is vulnerable to development projects, trail construction and maintenance, fire suppression, habitat conversion, grazing, trampling, and sand and gravel mining. This species has a limited potential to occur at the eastern terminus and is not expected to occur in other areas along the alignment due to lack of habitat and/or substrate.

Southern Tarplant (*Centromadia parryi* ssp. *australis*)

Southern tarplant is a CNPS 1B plant that occurs within San Diego, Orange, Ventura, Los Angeles, and Santa Barbara counties. This species prefers the margins of marshes, swamps, seasonal wetlands (such as vernal pools), and valley and foothill grasslands. This species is not expected to occur due to lack of habitat and/or substrate.

San Fernando Valley Spineflower (*Chorizanthe parryi* var. *fernandina*)

The San Fernando Valley spineflower is a federal candidate, state-listed Endangered, and CNPS List 1B plant species. This species is a small, decumbent plant with white flowers. It is

distinguished from the Parry's spineflower in having straight, rather than hooked, involucre teeth. Historically it was thought that the habitat for this species was in sandy washes. However, a locality discovered in 1999 found the species in non-native grassland and grassland-coastal sage scrub ecotonal habitats. These plants were found on mineral soils with reduced annual cover and well developed crytogamic crusts. This species was historically known from valleys of Los Angeles and Orange counties, including the following locations: a sandy wash in Castaic, Elizabeth Lake, the mouth of Little Tujunga Wash, the Chatsworth area, Santa Ana, Ballona Creek, and the area near the lower San Fernando Dam. This species was thought to be extinct, until the discovery in 1999 of a population on Laskey Mesa in the Simi Hills. This species was also verified in the Newhall area in 1999. This species is not expected to occur due to lack of habitat and/or substrate.

Slender-horned Spineflower (*Dodecahema leptoceras*)

Slender-horned spineflower is a federally- and state-listed Endangered and CNPS 1B species found along sandy stream terraces. This species prefers alluvial fan scrub habitat, which has been declining in Los Angeles, San Bernardino, and Riverside counties as a result of urban and agricultural development, sand and gravel mining, and flood control measures. Plants are typically found in areas with no exotic species or obvious ground disturbance. This species is not expected to occur due to lack of habitat and/or substrate.

Many-stemmed Dudleya (*Dudleya multicaulis*)

Many-stemmed dudleya is a CNPS 1B species distributed in coastal and foothill areas of Los Angeles, Orange, western Riverside, and San Diego counties. This species typically prefers clay soils in chaparral, coastal sage scrub, and grassland habitats. The species forms vegetative parts and inflorescences above ground each year and then dies back in late spring leaving just the underground corm. This species is not expected to occur due to lack of habitat and/or substrate.

Los Angeles Sunflower (*Helianthus nuttallii* ssp. *parishii*)

The Los Angeles sunflower is a state candidate and a CNPS 1B plant. Until the summer of 2002 when it was rediscovered in the Newhall area of Los Angeles County, this species had been considered extinct because it had not been observed since 1937. Los Angeles sunflower is a wetland indicator species that typically prefers marshes and swamps (coastal salt and freshwater), though potential habitat may include the margins of linear drainages that mimic marsh habitat as well. This sunflower is a perennial plant that is expected to bloom between August and October. This species is not expected to occur due to lack of habitat and/or substrate.

Mesa Horkelia (*Horkelia cuneata* ssp. *puberula*)

Mesa horkelia is a CNPS List 1B plant endemic to southern California, though many historical occurrences have been extirpated. This species is a perennial herb that prefers sandy or gravelly substrates in chaparral, cismontane woodland, and coastal sage scrub habitat. This species has a limited potential to occur at the eastern terminus and is not expected to occur in other areas along the proposed alignment due to lack of habitat and/or substrate.



San Gabriel Linanthus (*Linanthus concinnus*)

San Gabriel linanthus is a CNPS 1B plant species. This is an annual species typically observed on dry, rocky soils in montane coniferous forests. This species is not expected to occur due to lack of appropriate habitat and substrate.

Davidson's Bushmallow (*Malacothamnus davidsonii*)

Davidson's bushmallow is a CNPS 1B shrub species known to occur at low elevations in Los Angeles County. Occurrences of this species are known from the San Fernando Valley and the western end of the San Gabriel Mountains. In the mountains, this species has been recorded in Little Tujunga Canyon, Lopez Canyon, upper Haines Canyon, Loop Canyon, Big Tujunga Wash, and Pacoima Canyon. The species is typically found in sandy washes and in openings of coastal sage scrub or chaparral. This species has a low potential to occur at the eastern terminus and is not expected to occur in other areas along the proposed alignment due to lack of habitat and/or substrate.

California Orcutt Grass (*Orcuttia californica*)

California Orcutt grass is a federal and state Endangered and a CNPS List 1B species. California Orcutt grass tends to grow in wetter portions of the vernal pool basins, but this annual does not show much growth until the basins become somewhat desiccated. This species is not expected to occur due to lack of appropriate habitat and substrate.

**Special Status Wildlife Species**

Fourteen (14) special status wildlife species have been recorded as having occurred within the HAWRP area. A brief description of these special status wildlife species and their potential to occur is provided below and summarized in Table 2.

Santa Ana Speckled Dace (*Rhinichthys osculus*)

The Santa Ana speckled dace is a California Species of Special Concern. Its historic range includes low elevation streams in the Los Angeles, San Gabriel, and Santa Ana river systems. The largest known remaining population is within the Angeles National Forest on the lower reaches of the east, north, and west forks of the San Gabriel River. Other reported occurrences include Pacoima Creek, Little Tujunga Creek, and Big Tujunga Creek (confirmed in May 2002 in Tujunga Wash proximal to the eastern terminus south of the Canyon Trails Golf Course at the confluence with Haines Canyon Creek (Natural History Museum of Los Angeles County 2004)). The Santa Ana speckled dace requires permanent flowing streams with shallow cobble and gravel riffles. This species is not expected to occur along the proposed alignment due to lack of potentially supporting habitat.

**TABLE 2  
 SPECIAL STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR  
 WITHIN THE HAWRP AREA**

Species	Status		Sites with Potential Occurrence
	Federal	State	
<b>Fish</b>			
Santa Ana speckled dace <i>Rhinichthys osulus ssp 3</i>	None	SSC	Species is known to occur in Tujunga Wash near the eastern terminus south of the Canyon Trails Golf Course, but is not expected to occur in the proposed alignment due to lack of potentially supporting habitat.
Santa Ana sucker <i>Catostomus santaanae</i>	FT	SSC	Species is known to occur in Tujunga Wash near the eastern terminus south of the Canyon Trails Golf Course, but is not expected to occur in the proposed alignment due to lack of potentially supporting habitat.
arroyo chub <i>Gila orcutti</i>	None	SSC	Species is known to occur in Tujunga Wash near the eastern terminus south of the Canyon Trails Golf Course, but is not expected to occur in the proposed alignment due to lack of potentially supporting habitat.
<b>Amphibians</b>			
arroyo toad <i>Bufo californicus</i>	FE	SSC	Species is not expected to occur due to lack of potentially supporting habitat.
Western spadefoot toad <i>Scaphiopus hammondi</i>	SOC	SSC	Species is not expected to occur due to lack of potentially supporting habitat.
mountain yellow-legged frog <i>Rana muscosa</i>	FE (Southern California populations only)	SSC	Species is not expected to occur due to lack of potentially supporting habitat.
<b>Reptiles</b>			
silvery legless lizard <i>Anniella pulchra pulchra</i>	SOC	SSC	Species is not expected to occur due to lack of potentially supporting habitat.
orange-throated whiptail <i>Cnemidophorus hyperythrus beldingi</i>	None	SSC	Species has a limited potential to occur at eastern terminus and is not expected to occur in other areas along the proposed alignment due to lack of potentially supporting habitat.
San Diego coast horned lizard <i>Phrynosoma coronatum blainvillei</i>	SOC	SSC	Species has a limited potential to occur at eastern terminus and is not expected to occur in other areas along the proposed alignment due to lack of potentially supporting habitat.
Western pond turtle <i>Clemmys marmorata</i>	SOC	SSC	Species is not expected to occur due to lack of potentially supporting habitat.
<b>Birds</b>			
yellow-billed cuckoo <i>Coccyzus americanus occidentalis</i>	None	SE	Species is not expected to occur due to lack of potentially supporting habitat.

**TABLE 2 (Continued)  
 SPECIAL STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR  
 WITHIN THE HAWRP AREA**

Species	Status		Sites with Potential Occurrence
	Federal	State	
coastal California gnatcatcher <i>Polioptila californica californica</i>	FT	SSC	Species has a limited potential to occur at eastern terminus and is not expected to occur in other areas along the proposed alignment due to lack of potentially supporting habitat.
least Bell's vireo <i>Vireo bellii pusillus</i>	FE	SE	Species is not expected to occur due to lack of potentially supporting habitat.
<b>Mammals</b>			
San Diego black-tailed jackrabbit <i>Lepus californicus bennettii</i>	None	SSC	Species has a limited potential to occur at eastern terminus and is not expected to occur in other areas along the proposed alignment due to lack of potentially supporting habitat.
<b>LEGEND</b>			
<b>Federal (USFWS)</b>		<b>State (CDFG)</b>	
FE	Endangered	SE	Endangered
FT	Threatened	ST	Threatened
PE	Proposed Endangered	PE	Proposed Endangered
PT	Proposed Threatened	PT	Proposed Threatened
C	Candidate Species	SSC	Species of Special Concern
SOC	Species of Concern <sup>1</sup>	FP	Fully Protected
<sup>1</sup> Note – This designation, although not an active term, has been reinstated for informational purposes only.			

Santa Ana Sucker (*Catostomus santaanae*)

The Santa Ana sucker is a federally-listed Threatened species and a California Species of Special Concern. The historic range of this species includes low-elevation streams in the Los Angeles, San Gabriel, and Santa Ana river systems. Extant native populations appear to be concentrated within the east, north, and west forks of the San Gabriel River (including Cattle Canyon and Bear Creek), and Big Tujunga Creek (confirmed in May 2002 in Tujunga Wash proximal to the eastern terminus south of the Canyon Trails Golf Course at the confluence with Haines Canyon Creek (Natural History Museum of Los Angeles County 2004)). Introduced populations of the Santa Ana sucker are present in the Santa Clara River, Sespe Creek, Piru Creek, and San Francisquito Creek. Santa Ana suckers are native to many of the same streams as the speckled dace and have similar habitat requirements. Preferred substrates for this species are coarse gravels and boulders. This species is not expected to occur along the proposed alignment due to lack of potentially supporting habitat.

Arroyo Chub (*Gila orcutti*)

This species is a federal Species of Concern. The arroyo chub feeds on algae and prefers warm water temperatures and pool habitats with sand and mud bottoms. The chub is adapted to survive in widely fluctuating water temperatures and dissolved oxygen levels. The Natural History Museum of Los Angeles County (2004) contains a specimen collected in May 2002 from the Tujunga Wash proximal to the eastern terminus south of the Canyon Trails Golf Course at

the confluence with Haines Canyon Creek. This species is not expected to occur along the proposed alignment due to lack of potentially supporting habitat.

Arroyo Toad (*Bufo californicus*)

The arroyo toad species is a federally-listed Endangered species and California Species of Special Concern. The arroyo toad, a subspecies of the southwestern toad, is restricted to rivers with shallow, gravelly pools adjacent to sandy terraces. This species forages on sandy terraces, where adults may also excavate shallow burrows where they shelter during the day and during the dry season. This species historically occurred from San Luis Obispo to San Diego counties along most major rivers and drainages. This species is not expected to occur along the proposed alignment due to lack of potentially supporting habitat.

Western Spadefoot Toad (*Scaphiopus hammondi*)

The western spadefoot is a federal Species of Concern and a California Species of Special Concern. The California range of this toad is the Central Valley and adjacent foothills, and the Coast Ranges from Point Conception, Santa Barbara County south to San Diego County. This is typically a lowland species that is found in washes, river flood plains, alluvial fans, playas, and alkali flats and is not a vernal pool obligate as previously reported. This species may occur at higher elevations in southern California, and has been documented at elevations above 4,000 feet in the Chihuahua Valley and Boulevard areas of San Diego County (Jeff Galizio, personal observation). It primarily inhabits grasslands, but does occur in other sparsely vegetated habitats. This species breeds in vernal pools and other seemingly ephemeral water bodies or floodplains. This species is not expected to occur along the proposed alignment due to lack of potentially supporting habitat.

Mountain Yellow-legged Frog (*Rana muscosa*)

The mountain yellow-legged frog is a California Species of Special Concern and Southern California populations are federally-listed as Endangered. In southern California, these frogs are found in the San Gabriel, San Bernardino, and San Jacinto mountains and at least historically on Palomar Mountain. Mountain yellow-legged frogs inhabit high-elevation streams usually above 4,000 feet. However, in the San Gabriel Mountains, and perhaps other areas where the characteristics of mountain streams (i.e., steep, rocky canyons) extend to lower elevations, these frogs were believed to have occurred historically at elevations down to 2,000 feet. This species is not expected to occur due to lack of potentially supporting habitat.

Silvery Legless Lizard (*Anniella pulchra pulchra*)

The silvery legless lizard is a federal Species of Concern and a California Species of Special Concern. It is a small, secretive lizard that spends most of its life beneath the soil, under stones, logs, debris, or in leaf litter associated with sandy or loose loamy soils under the sparse vegetation of beaches, chaparral, pine-oak woodland, or under sycamores, cottonwoods, or oaks growing on stream terraces. Soil moisture is essential for them and legless lizards die if they are unable to reach a moist substrate. Its reported elevation range extends from sea level to approximately 5,700 feet in the Sierra Nevada foothills, but most historic localities along the central and southern California coast are below 3,500 feet. The silvery legless lizard is a burrowing species. This species is not expected to occur along the proposed alignment due to lack of potentially supporting habitat.

Orange-throated Whiptail (*Cnemidophorus hyperythrus beldingi*)

The orange-throated whiptail is a California Species of Special Concern that occurs in coastal sage scrub and, to a lesser extent, chaparral, floodplains, and streamside terraces. Its geographic range extends from the southern edge of San Bernardino County south to around Loreto in Baja California, Mexico. This species is usually observed on the western slopes of the coast ranges at an elevation range from near sea level to about 3,400 feet. This species has a limited potential to occur at the eastern terminus and is not expected to occur in other areas along the proposed alignment due to lack of potentially supporting habitat.

San Diego Horned Lizard (*Phrynosoma coronatum blainvillei*)

The San Diego horned lizard is a federal Species of Concern and a California Species of Special Concern. This species may be found in a variety of habitats but are most common in communities with loose, fine soils with a high sand component; an abundance of native ants; open areas with limited overstory for basking; and areas with low, dense shrubs for refuge. Three factors have contributed to its decline: loss of habitat, over collecting, and the introduction of exotic ants. In some places, especially adjacent to urban areas, the introduced ants have displaced the native species upon which the lizard feeds. This species has a limited potential to occur at the eastern terminus and is not expected to occur in other areas along the proposed alignment due to lack of potentially supporting habitat.

Western Pond Turtle (*Clemmys marmorata*)

The Western pond turtle is a federal Species of Concern and a California Species of Special Concern. This species occurs primarily in freshwater rivers, streams, lakes and ponds that also support basking sites such as logs, banks, or other suitable areas above water level. There is one large pond turtle population on the West Fork of the San Gabriel River below Cogswell Reservoir with smaller populations on upper Castaic Creek, Aliso Canyon, Pacoima Creek, Little Tujunga Creek, Big Tujunga Creek (east of the project alignment), the East Fork of the San Gabriel River, and possibly Big Dalton Creek. The primary reason for pond turtle declines has been loss of suitable habitat from the construction of dams, diversions, and stream channelization that have greatly reduced the availability of persistent, pooled water along low-elevation streams. Other threats to this species include introduced predatory fish, bullfrogs, and illegal collecting. This species is not expected to occur along the proposed alignment due to lack of potentially supporting habitat.

Yellow-billed Cuckoo (*Coccyzus americanus occidentalis*)

The yellow-billed cuckoo is listed as Endangered by the state of California. Formerly a rare summer resident, this species is now extirpated from much of southern California. Breeding yellow-billed cuckoos are restricted to extensive deciduous riparian thickets or forest with dense, low-level or understory foliage that occurs along slow-moving watercourses, backwaters, or seeps. Willows are almost always a dominant component of western yellow-billed cuckoo nesting habitat. This species is not expected to occur due to lack of potentially supporting habitat.

Coastal California Gnatcatcher (*Polioptila californica californica*)

The coastal California gnatcatcher is a federally-listed Threatened species and California Species of Special Concern. This species is a non-migratory resident of coastal sage scrub habitats of southern California. This species may occur at elevations up to 3,000 feet on the western side of the coastal mountain ranges, though population densities decline substantially

at elevations above approximately 900 feet and at increasing distances from the coast. This species tends to be most abundant in mature stands of coastal sage scrub, where shrub canopy cover is typically greater than 50 percent. This species is known to occur in the project area on the hillside south of Wentworth Avenue, which is located south of the eastern terminus on the far side of Tujunga Wash. This species has a limited potential to occur at the eastern terminus and is not expected to occur in other areas along the proposed alignment due to lack of potentially supporting habitat.

#### Least Bell's Vireo (*Vireo bellii pusillus*)

The least Bell's vireo is a federally- and state-listed Endangered species. This species is a neotropical migrant that breeds in low-elevation riparian habitats, particularly broad cottonwood-willow woodlands and mule fat scrub and is a rare and local summer resident in southern California. While destruction of lowland riparian habitats has played a large role in reducing the population of this species, brood parasitism by brown-headed cowbirds is likely the most important factor in its decline. There have been sporadic sightings of this species during the breeding season in Big Tujunga Creek, behind Hansen Dam as well a record of an observation in riparian scrub vegetation that had developed within the inundated bottom of a gravel pit in the San Gabriel Valley. This species is not expected to occur along the proposed alignment due to lack of potentially supporting habitat.

#### San Diego Black-tailed Jackrabbit (*Lepus californicus bennettii*)

The San Diego black-tailed jackrabbit is a California Species of Special Concern. The San Diego subspecies of the widespread black-tailed jackrabbit is restricted to the western slope of the coastal mountain ranges from Santa Barbara County to northwestern Baja California. This nocturnal species prefers relatively open areas with sparse shrub cover. This species has a limited potential to occur at the eastern terminus and is not expected to occur in other areas along the proposed alignment due to lack of potentially supporting habitat.

### **Special Status Vegetation Types**

In addition to providing an inventory of special status plant and wildlife species, the CNDDDB also provides an inventory of vegetation types that are considered special status by the state and federal resource agencies, academic institutions, and various conservation groups (such as CNPS). Determination of the level of sensitivity is based on the Nature Conservancy Heritage Program Status Ranks that rank both species and vegetation types on a global and statewide basis according to the number and size of remaining occurrences as well as recognized threats (e.g., proposed developments, habitat degradation, and invasion by non-native species). Special status vegetation types that are present in the project area are discussed below.

Riversidean alluvial fan sage scrub is an open to moderately dense scrub vegetation type and is primarily restricted to floodplain habitats that only occasionally flood (e.g., every five to ten years). As a result of the occasional flooding, many upland species may become established in this vegetation type. The occasional flooding and sediment reworking, however, is the driving force that maintains this vegetation type. It is typically dominated by scalebroom, though common subdominant shrub species include California sagebrush, Mexican elderberry, and various coastal sage scrub and chaparral species. Open understory areas are typically dominated by native and non-native herbaceous species usually associated with grassland communities, though some ruderal species may also occur. Scattered riparian trees and shrubs may also occur in association with this vegetation type, and include sycamore, mule fat, and sometimes Fremont cottonwood. This vegetation type was observed within Tujunga Wash, proximal to the eastern terminus south of the Canyon Trails Golf Course.

## PROJECT IMPACTS

The following section analyzes impacts associated with construction, operation, and maintenance of the project. The direct (both permanent and temporary) impacts to biological resources related to the construction of the project is described in this section.

### Significance Criteria

The potential significance of environmental impacts on biological resources has been assessed using impact significance criteria that mirror the policy contained in CEQA, Section 21001(c) of the California Public Resources Code. Accordingly, the State Legislature has established it to be the policy of the state to:

*“Prevent the elimination of fish or wildlife species due to man’s activities, ensure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities...”*

Determining whether a project may have a significant effect, or impact, plays a critical role in the CEQA process. According to CEQA, Section 15064.7—Thresholds of Significance, each public agency is encouraged to develop and adopt (by ordinance, resolution, rule, or regulation) thresholds of significance that the agency uses in the determination of the significance of environmental effects. A significance threshold is a quantitative, qualitative, or performance level of a particular environmental effect, that would normally be determined to be significant by the agency if the threshold is exceeded.

In the development of thresholds of significance for impacts on biological resources, CEQA provides guidance primarily in Section 15065—Mandatory Findings of Significance, and the CEQA Guidelines, Appendix G, Environmental Checklist Form. Section 15065(a) states that a project may have a significant effect where:

*“The project has the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or wildlife community, reduce the number or restrict the range of an Endangered, rare, or Threatened species...”*

Appendix G of the CEQA Guidelines is more specific in addressing biological resources and encompasses a broader range of resources to be considered, including: candidate, sensitive, or special status species; riparian habitat or other sensitive natural communities; federally protected wetlands; fish and wildlife movement corridors; local policies or ordinances protecting biological resources; and adopted habitat conservation plans. These factors are considered through the checklist of questions answered during the Initial Study process that is used to determine the appropriate type of environmental documentation for a project (Negative Declaration [ND], Mitigated Negative Declaration [MND], or Environmental Impact Report [EIR]). Because these questions are derived from standards in other laws, regulations, and other commonly used thresholds, these standards have been used as the basis for defining significance thresholds in this MND. For each of the thresholds identified below, the section of CEQA upon which the threshold was derived has been provided. For the purpose of this analysis, impacts on biological resources are considered significant (before considering offsetting mitigation measures) if one or more of the following conditions would result from implementation of the proposed project:

- *If the project has the potential to substantially degrade the quality of the environment (15065[a]),*
- *If the project has the potential to substantially reduce the habitat of a fish or wildlife species (15065[a]),*
- *If the project will cause a fish or wildlife populations to drop below self-sustaining levels (15065[a]),*
- *If the project will threaten to eliminate a plant or animal community (15065[a]),*
- *If the project will reduce the number or restrict the range of an Endangered, Rare, or Threatened species<sup>1</sup> (15065[a]),*
- *If the project has 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 CDFG or USFWS (CEQA Guidelines, Appendix G, IV [a]),*
- *If the project has a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFG or USFWS (CEQA Guidelines, Appendix G, IV [b]),*
- *If the project has 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 (CEQA Guidelines, Appendix G, IV [c]),*
- *If the project interferes substantially with the movement of any native or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impedes the use of native wildlife nursery sites (CEQA Guidelines, Appendix G, IV [d]),*
- *If the project conflicts with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (CEQA Guidelines, Appendix G, IV [e]),*
- *If the project conflicts with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan (CEQA Guidelines, Appendix G, IV. [f]).*

An evaluation of whether an impact on biological resources would result in a “substantial adverse effect” must consider both the resource itself and how that resource fits into a regional context. For the proposed project, the regional setting of the project includes the following USGS quads that were queried in the records search: Burbank, San Fernando, Sunland, and Van Nuys.

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<sup>1</sup> Endangered and threatened species referenced in this threshold are those listed by the USFWS and/or CDFG as Threatened or Endangered. Section 15380 of CEQA indicates that a lead agency can consider a non-listed species (e.g., CNPS List 1B plants) to be Endangered, Rare, or Threatened for the purposes of CEQA if the species can be shown to meet the criteria in the definition of rare or Endangered. For the purposes of this discussion, the current scientific knowledge on the population size and distribution for each special status species was considered in determining if a non-listed species met the definitions for Rare and Endangered according to Section 15380 of CEQA.



For the purposes of this impact analysis, "substantial adverse effect" is defined as the loss or harm of a magnitude which, based on current scientific data and knowledge, would: 1) substantially diminish population numbers of a species or distribution of a habitat type within the region; or 2) eliminate the functions and values of a biological resource in the region.

## **Construction Impacts**

### **General Habitat and Wildlife Loss**

It is anticipated that construction activities would be limited to low-value and/or disturbed habitats (e.g., ruderal and developed) that support wildlife that have adapted to an environment modified by human activity and development. The removal or alteration of these habitats would result in a less than significant impact.

### **Wildlife Movement and Habitat Fragmentation**

Tujung Wash currently provides a functional connection between two or more habitat patches that would otherwise be fragmented or isolated from one another. Tujung Wash occurs outside of the proposed project footprint; therefore, construction impacts to wildlife movement would not occur.

### **Special Status Plant Impacts**

Special status plant species are not expected to occur, within the portions of the alignment where historic modification and development has eliminated habitat or substrate with the potential to support these species. Coastal sage scrub habitat occurs proximal to the eastern terminus and maintains some potential to support the Nevin's barberry, Plummer's mariposa lily, mesa horkelia, and Davidson's bush mallow. The proposed project footprint would avoid the areas with potential to support these species, therefore, no impact would occur.

### **Special Status Wildlife Impacts**

Special status wildlife species are not expected to occur, because historic habitat modification and development has eliminated habitat with the potential to support these species. Coastal sage habitat, however, occurs proximal to the eastern terminus and maintains some potential to support orange-throated whiptail, San Diego horned lizard, coastal California gnatcatcher, and San Diego black-tailed jackrabbit. The proposed project footprint would avoid habitat with the potential to support these species, therefore, no impact would occur.

### **Special Status Vegetation Types Impacts**

Historic habitat modification and development has eliminated nearly all native vegetation types from the proposed alignment. Coastal sage scrub, however, was observed proximal to the eastern terminus. The proposed project footprint would avoid areas covered by coastal sage scrub, therefore, no adverse impact is expected to occur.

## **Operational Impacts**

Though construction-related activities would be the initial project-related impacts, operation and maintenance activities may be required on an ongoing basis in the project area to ensure the function of project components. Anticipated operation and maintenance activities components include landscaping maintenance, operation of the pumps, maintenance of the pumps, cleaning,

and total system inspection. Operation and maintenance activities implemented consistent with the requirements of project approvals or permits would result in a less than significant impact.

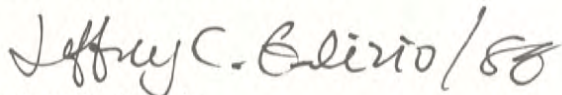
## MITIGATION MEASURES

No substantial adverse direct or indirect effects from construction, operation and/or maintenance of the proposed project are expected and no mitigation is required; however, it is recommended that a qualified biologist determine the extent of habitat and flag the boundaries of areas to be avoided during construction. Operation and maintenance requirements and implementation protocols shall be developed for inclusion within the project description of permits, or other entitlement applications. To this end, operation and maintenance activities shall be implemented in a manner consistent with the terms and conditions of necessary project approvals and/or permits.

Please contact me at (714) 444-9199 if you have any questions or comments.

Sincerely,

BONTERRA CONSULTING



Jeffrey C. Galizio  
Senior Project Manager, Biological Services

Attachments: Exhibits 1 and 2

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