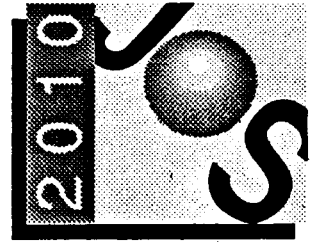


Chapter 11  
**Botanical and Wildlife Resources**



# Chapter 11. Botanical and Wildlife Resources

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## INTRODUCTION

This chapter describes the terrestrial botanical and wildlife resources in the JOS service area. Reconnaissance surveys of botanical and wildlife resources were conducted on January 19, February 8, and May 12, 1994, at the JWPCP and the Los Coyotes, San Jose Creek, and Whittier Narrows WRPs. The focus of the surveys was to identify natural habitats, special-status biological communities, potential habitat for special-status plant and wildlife species, and wetlands that could qualify for jurisdictional status under Section 404 of the CWA. Biological resources of the San Gabriel River tidal prism are described in Chapter 3, "Hydrology and Water Quality", and marine biological resources are described in Chapter 5, "Marine Environment".

As described in Chapter 1, "Introduction", this EIR provides project-specific review in compliance with CEQA for full secondary treatment and solids processing at the JWPCP. Other elements of the 2010 Plan are analyzed on a program level when site-specific information is unavailable or locations of sites are not identified.

### Special-Status Species

Special-status species are plants and animals that are legally protected under the state and federal Endangered Species Acts or other regulations and species that are considered sufficiently rare by the scientific community to qualify for such listing. Definitions of special-status species are provided in Appendix E, "Botanical and Wildlife Resources".

A records search of the DFG's Natural Diversity Data Base (NDDB) was conducted to identify known occurrences of rare plants, wildlife, and habitats in the JOS service area. The California Native Plant Society's (CNPS's) inventory of rare and endangered plants was consulted to identify special-status plant species known to exist or with the potential to exist in the JOS service area. USFWS provided the names of plant and wildlife species that are federally listed or proposed for listing as threatened or endangered and that have the potential to be affected by implementation of the 2010 Plan (Kobetich pers. comm.).

Special-status plant species with the potential to occur at one or more of the project plant sites are listed in Table 11-1. USFWS also identified the oval-leaved dudleya (*Dudleya cymosa* var. *ovitifolia*), also known as the Santa Monica Mountains dudleya, as a species potentially affected by implementation of the 2010 Plan (Kobetich pers. comm.). This species was not considered further because populations and suitable habitat are not found in the areas affected by the 2010 Plan.

Table 11-1. Special-Status Plant Species Potentially Occurring at JOS Facilities Proposed for Expansion

Species		Listing Status*			Habitat
Common Name	Scientific Name	Federal	State	CNPS	
Marsh sandwort	<i>Arenaria paludicola</i>	E	E	1B	Freshwater marsh
Nevin's barberry	<i>Berberis nevinii</i>	C1	E	1B	Riparian scrub, chaparral, coastal scrub, oak woodland
Scalloped moonwort	<i>Botrychium crenulatum</i>	C2	--	1B	Freshwater marsh, wet meadow, bog, conifer forest
Round-leaved boykinia	<i>Boykinia rotundifolia</i>	--	--	4	Riparian woodland, chaparral
Los Angeles sunflower	<i>Helianthus nuttallii</i> ssp. <i>parishii</i>	C1*	--	1A	Freshwater and salt marsh
Southern tarplant	<i>Hemizonia parryi</i> ssp. <i>australis</i>	--	--	1B	Wet meadow, vernal pool, salt marsh margin
Lemon lily	<i>Lilium parryi</i>	C2	--	1B	Riparian forest, wet meadows, conifer forest
Davidson's bush mallow	<i>Malacothamnus davidsonii</i>	C2	--	1B	Riparian woodland, chaparral, coastal scrub
Mud nama	<i>Nama stenocarpum</i>	--	--	2	Freshwater marsh
Fish's milkwort	<i>Polygala comuta</i> ssp. <i>fishiae</i>	--	--	4	Riparian woodland, chaparral, oak woodland
Parish's gooseberry	<i>Ribes divaricatum</i> ssp. <i>parishii</i>	C2	--	1B	Riparian woodland
Gambel watercress	<i>Rorippa gambellii</i>	E	T	1B	Freshwater and brackish marsh

Note: Potential occurrence based on known range and habitat preference. Habitats in the affected areas potentially supporting special-status plant species are freshwater marsh and riparian scrub, woodland, and forest.

\* Status explanations:

**Federal**

E = listed as endangered under the federal Endangered Species Act.

C1 = Category 1 candidate for federal listing. Category 1 includes species for which USFWS has on file enough substantial information on biological vulnerability and threat to support proposals to list them. Species that are possibly extinct are indicated with an asterisk (\*).

C2 = Category 2 candidate for federal listing. Category 2 includes species for which USFWS has some biological information indicating that listing may be appropriate but for which further biological research and field study are usually needed to clarify the most appropriate status. Category 2 species are not necessarily less rare, threatened, or endangered than Category 1 species or listed species; the distinction relates to the amount of data available and is therefore administrative, not biological.

-- = no designation.

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**State**

- E = listed as endangered under the California Endangered Species Act.
- T = listed as threatened under the California Endangered Species Act.
- = no designation.

**California Native Plant Society (CNPS)**

- 1A = List 1A species: presumed extinct in California.
- 1B = List 1B species: rare, threatened, or endangered in California and elsewhere.
- 2 = List 2 species: rare, threatened, or endangered in California but more common elsewhere.
- 4 = List 4 species: plants of limited distribution.

Because the Districts are applying for federal loan monies through the SRF program to bring the JWPCP to full secondary treatment, the SWRCB requires that the Districts coordinate with USFWS if species that are listed as endangered or threatened are present in areas proposed for modification.

Special-status wildlife species with the potential to occur in the JOS service area are listed in Table 11-2. Of the 27 special-status wildlife species recorded as having been observed in the JOS service area, only the least Bell's vireo was observed near a project facility (see discussion below under "Whittier Narrows WRP").

### **Special-Status Biological Communities**

Special-status biological communities are habitats that are considered important because of their high species diversity, high productivity, unusual nature, limited distribution, declining status, or a combination of these qualities. These habitats are recognized by local, state, and federal agencies as important. DFG's NDDB maintains a list of rare natural communities. USFWS considers certain habitats, such as wetland and riparian communities, as important to wildlife. The Corps and EPA consider wetland habitats to be important for water quality and wildlife. The habitats in the JOS service area that meet the criteria for special-status biological communities are riparian forest, riparian scrub, and freshwater marsh.

### **Jurisdictional Wetlands and Other Waters of the United States**

Federal and state agencies have jurisdiction over specific kinds of activities conducted in stream channels, wetlands, and other water bodies. The federal government supports a policy of minimizing "the destruction, loss, or degradation of wetlands" (Executive Order 11990, May 24, 1977). The Corps and EPA regulate the placement of dredged or fill material into "waters of the United States", including wetlands, under Section 404 of the CWA. Jurisdictional wetlands are defined for regulatory purposes as areas "inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3, 40 CFR 230.3). Sites qualifying for Corps regulatory jurisdiction as wetlands must meet criteria for three parameters: wetland hydrology, hydric soils, and hydrophytic vegetation.

Unvegetated stream channels, mud flats, and open water (such as ponds and lakes) are not considered wetlands, but also fall under Corps and EPA jurisdiction under Section 404 as "other waters of the United States". The jurisdictional limits of stream channels and lakes are delineated, in the absence of adjacent wetlands, at the ordinary high-water mark (33 CFR 328.4). The ordinary high-water mark is "indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas"

Table 11-2. Special-Status Wildlife Species Potentially Occurring at JOS Facilities Proposed for Expansion

Species		Listing Status*		Habitat	Occurrence at Project Facilities Proposed for Expansion
Common Name	Scientific Name	Federal	State		
<b>Birds</b>					
Least Bell's vireo	<i>Vireo bellii pusillus</i>	E	E	Riparian	Observed at Whittier Narrows Wildlife Sanctuary, less than 2 miles upstream of the Whittier Narrows WRP; however, no potential habitat exists in the proposed expansion area.
Light-footed clapper rail	<i>Rallus longirostris levipes</i>	E	E	Salt marsh	No records; no suitable habitat.
California least tern	<i>Sterna antillarum browni</i>	E	E	Coastal beaches, open water	No records; no suitable habitat.
California brown pelican	<i>Pelecanus occidentalis californicus</i>	E	E	Shallow, open water (brackish and salt)	No records; no suitable habitat.
American peregrine falcon	<i>Falco peregrinus anatum</i>	E	E	Freshwater and saltwater marsh, beaches for foraging; cliffs for nesting	No records; no suitable nesting habitat.
California black rail	<i>Laterallus jamaicensis coturniculus</i>	C2	E	Brackish and freshwater marsh	No records; no suitable habitat.
Western snowy plover	<i>Charadrius alexandrinus nivosus</i>	T	SSC	Beaches and mud flats	No records; no suitable habitat.
California gnatcatcher	<i>Poliopitila californica</i>	T	SSC	Coastal sage scrub, cactus scrub	No records; no suitable habitat.
Western yellow-billed cuckoo	<i>Coccyzus americanus occidentalis</i>	--	E	Riparian forests	One record in 1912, along San Gabriel River near Artesia. Extirpated from this region; no suitable habitat at project facilities.
Belding's savannah sparrow	<i>Passerculus sandwichensis beldingi</i>	C2	E	Coastal marshes	No records; no suitable habitat.
California horned lark	<i>Eremophila alpestris actia</i>	C2	SSC	Grasslands	No records; no suitable habitat.
Coastal cactus wren	<i>Campylorhynchus brunneicapillus</i>	C2	SSC	Cactus scrub	No records; no suitable habitat.
Loggerhead shrike	<i>Lanius ludovicianus</i>	C2	SSC	Grasslands and savannas	No records; no suitable habitat.
Elegant tern	<i>Sterna elegans</i>	C2	SSC	Beaches and open water	No records; no suitable habitat.
Tricolored blackbird	<i>Agelaius tricolor</i>	C2	SSC	Emergent wetlands, blackberry thickets along wetlands, and grasslands	No records; no suitable habitat.

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Species		Listing Status <sup>a</sup>		Habitat	Occurrence at Project Facilities Proposed for Expansion
Common Name	Scientific Name	Federal	State		
Wandering skipper	<i>Pseudocopaodes eunus eunus</i>	C2	--	Areas with saltgrass	No records; no suitable habitat.
Saltmarsh skipper	<i>Panoquina errans</i>	C2	--	Salt marshes, including saltgrass habitats	No records; no suitable habitat.
<b>Mammals</b>					
Pacific pocket mouse	<i>Perognathus longimembris pacificus</i>	E	SSC	Grassland and scrublands with fine alluvial soils near the ocean; sometimes dry, rocky, and gravelly sites	No records; no suitable habitat.
Los Angeles pocket mouse	<i>Perognathus longimembris brevinasus</i>	C2	SSC	Lower elevation grasslands and coastal sage scrub with sandy soils	No records; no suitable habitat.
Burrowing owl	<i>Speotyto cunicularia</i>	--	SSC	Grasslands, agricultural fields	No records; no suitable habitat.
<b>Insects</b>					
Palos Verdes blue	<i>Glaucopsyche lygdamus palosverdesensis</i>	E	--	Seaward side of Palos Verdes Hills; loco weed is a host plant	No records; no suitable habitat.
Sandy beach tiger beetle	<i>Cicindela hirticollis grvida</i>	C2	--	Areas adjacent to nonbrackish water	No records; no suitable habitat.
Tiger beetle	<i>Cicindela gabbii</i>	--	--	Estuaries and mud flats along the coast	No records; no suitable habitat.
Frost's tiger beetle	<i>Cicindela senilis frosti</i>	--	--	Marine shoreline and salt marsh	No records; no suitable habitat.
<b>Reptiles</b>					
Southwestern pond turtle	<i>Clemmys marmorata pallida</i>	C1	SSC	Freshwater ponds and streams and adjacent land	No records; no suitable habitat.
San Diego horned lizard	<i>Phrynosoma coronatum blainvillei</i>	C2	SSC	Open scrub and grassland	No records; no suitable habitat.
Coastal rosy boa	<i>Lichanura trivirgata rosafusca</i>	C2	--	Rocky scrub	No records; no suitable habitat.

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## \* Status explanations:

**Federal**

- E = listed as endangered under the federal Endangered Species Act.
- T = listed as threatened under the federal Endangered Species Act.
- C1 = Category 1 candidate for federal listing. Category 1 includes species for which USFWS has on file enough substantial information on biological vulnerability and threat to support proposals to list them.
- C2 = Category 2 candidate for federal listing. Category 2 includes species for which USFWS has some biological information indicating that listing may be appropriate but for which further biological research and field study are usually needed to clarify the most appropriate status. Category 2 species are not necessarily less rare, threatened, or endangered than Category 1 species or listed species; the distinction relates to the amount of data available and is therefore administrative, not biological.
- = no designation.

**State**

- E = listed as endangered under the California Endangered Species Act.
- SSC = species of special concern.
- = no designation.



(33 CFR 328.3). The territorial seas and all tidal areas up to the mean high tide line are jurisdictional waters of the United States.

Formal delineations of jurisdictional waters of the United States have not been conducted in the JOS service area. Wetland delineation data were collected at the Districts marsh at the JWPCP and the riparian habitat at the Whittier Narrows WRP. All types of wetland habitats (e.g., freshwater marsh) are considered special-status biological communities.

### **Jurisdictional Streams and Lakes Regulated under Section 1601 of the California Fish and Game Code**

DFG 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. These activities conducted by state and local agencies and public utilities that are project proponents are regulated under Section 1601 of the California Fish and Game Code. DFG may take jurisdiction over any stream or water body in which wildlife live or from which wildlife receive benefit. DFG includes under its jurisdiction the riparian habitat associated with the perennial and intermittent streams that would be altered by a project. If streams would be affected by implementation of the 2010 Plan, a streambed alteration agreement between DFG and the Districts would be required before flow, bed, or bank modifications could proceed.

## **SETTING**

### **Regional Setting**

The JOS facilities (i.e., JWPCP, WRPs, and sewers) are situated in a heavily altered regional landscape dominated by structures, pavement, artificial plantings, and lawns. Natural habitats in the JOS service area are mostly restricted to steep hills, including the Puente Hills, San Jose Hills, Palos Verdes Hills, and the foothills of the San Gabriel Mountains (Figure 11-1). The San Jose Creek WRP is adjacent to San Jose Creek, a tributary of the San Gabriel River, and the Whittier Narrows WRP is in the floodplain of the Rio Hondo, a major tributary of the Los Angeles River. Riparian vegetation in these river systems is greatly restricted by channelization and channel lining. Much of the remaining riparian habitat is characterized by aggressive non-native plant species. The relatively large area of riparian habitat in the Whittier Narrows Recreation Area, which surrounds the Whittier Narrows WRP, supports riparian habitats dominated by both native and non-native species.

## Joint Water Pollution Control Plant

### Vegetation

The JWPCP site and surrounding buffer lands consist mostly of developed land with little natural vegetation. The land cover includes structures, paved surface, horticultural plantings and lawns, and commercial plant nurseries.

The only area of natural vegetation at the JWPCP site is the Districts marsh east of the Wilmington Drain concrete channel (parallel to the Harbor Freeway), north of the Atchison, Topeka, and Santa Fe railroad and west of the nurseries along Figueroa Street and Sepulveda Boulevard. The marsh area supports freshwater marsh, riparian forest and scrub, annual grassland, and ruderal vegetation, which are described below and shown in Figure 11-2. Common and scientific names of plant species mentioned in the text are listed in Table E-1 in Appendix E, "Botanical and Wildlife Resources".

The Wilmington Drain connects the JWPCP marsh with the Lomita Marsh on the west side of the Harbor Freeway and north of Lomita Boulevard. The Lomita Marsh supports riparian forest and scrub with an overstory of native arroyo willow and Gooddings willow and non-native giant reed and castor bean.

**Freshwater Marsh.** The freshwater marsh vegetation is dominated by bulrush. Other common species in the marsh are mulefat, cocklebur, yellow nut-sedge, alkali heath, and arroyo willow. Freshwater marsh is a special-status biological community.

**Riparian Forest and Scrub.** Riparian forest and scrub vegetation is found on the banks above the east and north edges of the marsh. Forested areas of the riparian habitat support an overstory of non-native Peruvian peppertree, red gum and other eucalyptus species, and native arroyo willow and Gooddings willow. The forest understory and riparian scrub vegetation are dominated by dense thickets of mulefat, coyote brush, California sagebrush, horehound, and fennel. Although a detailed wetland delineation has not been conducted for the marsh, portions of the riparian forest and scrub habitat in low areas adjacent to the marsh that are frequently flooded and remain flooded or saturated for more than 18 consecutive days per year meet Corps criteria for jurisdictional wetland status. All riparian forest and scrub habitat is a special-status biological community.

**Annual Grasslands.** The grassland vegetation is dominated by ripgut brome and soft chess. Other common species are wild radish, poison hemlock, wild mustard, and cheeseweed.

**Ruderal Vegetation.** A sparse cover of ruderal vegetation is found northwest of the marsh, on the slope above the riparian forest. Common plants here include wild mustard, fennel, and cheeseweed. Non-native castor bean and fan palm are present along the embankment of the Atchison, Topeka, and Santa Fe railroad.

## **Wildlife**

The developed portion of the JWPCP site supports wildlife species adapted to human disturbance and landscaped vegetation. These wildlife species include the rock dove (domestic pigeon), northern mockingbird, Brewer's blackbird, house finch, house sparrow, and American robin. The area on JWPCP land that is leased to Kellogg Supply, Inc., attracts large numbers of gulls that feed on the composted biosolids.

The marsh habitat area provides high-quality foraging, breeding, and roosting habitat for many wildlife species. Wetland and riparian wildlife species observed during the field survey include the song sparrow, marsh wren, black phoebe, and bushtit. Other wildlife observed in the marsh include the house finch, mourning dove, northern mockingbird, American kestrel, Anna's hummingbird, Bottae's pocket gopher, and black-tailed hare. Three common aquatic species are expected to be present in the marsh: Pacific treefrog, bullfrog, and mosquitofish. The marsh habitat lacks many wetland and riparian wildlife species because the habitat is small and is surrounded by urban development.

## **Special-Status Species**

No records of special-status plant or wildlife occurrences at the JWPCP site were found in a search of the NDDB (1994). No special-status plant or wildlife species were observed at the JWPCP; however, floristic surveys and surveys for special-status wildlife species were not conducted for the marsh and riparian habitats. No special-status wildlife species are expected to be found at the JWPCP site or in the marsh and riparian habitat (Table 11-2). Marsh and riparian habitats at the JWPCP are suitable for special-status plant species, however (Table 11-1), although the potential for one or more of these species to be found at this site is minimal.

## **Jurisdictional Wetlands**

On February 8, 1994, the central portions of the JWPCP marsh supported ponded water and the soil at the marsh edge was saturated to the surface. Heavy rain had fallen the night before the survey day. Soils in the marsh are dark brown and have a chroma indicative of hydric soil (10YR3/1 to 10YR4/1 wet colors in Kollmorgen 1975). Dominant plant species in the marsh meet Corps criteria for hydrophytic vegetation. The marsh meets Corps criteria for jurisdictional wetland status.

## **Los Coyotes Water Reclamation Plant**

### **Vegetation**

The Los Coyotes WRP site supports no natural vegetation. Vegetation present includes non-native horticultural trees and manicured lawn. The facility is surrounded by freeways and a golf course.

## **Wildlife**

The landscaped areas support wildlife species commonly found in urban habitats. These include the mourning dove, northern mockingbird, Brewer's blackbird, house finch, and American robin. No habitat for native aquatic vertebrates exists at the Los Coyotes WRP.

## **Special-Status Species**

No records of special-status plant or wildlife occurrences at the Los Coyotes WRP site were found in a search of the NDDB (1994). No special-status plant or wildlife species were observed and no suitable habitat exists for special-status species.

## **San Jose Creek Water Reclamation Plant**

### **Vegetation**

Vegetation at the San Jose Creek WRP consists of manicured lawn and non-native horticultural trees. San Jose Creek borders the north side of the San Jose Creek WRP site. San Jose Creek supports narrow strips of dense riparian scrub between the toes of the bare, cobble side slopes and the open water of the central channel. The riparian habitat is dominated by two non-native aggressive weeds, giant reed and castor bean.

### **Wildlife**

The landscaped areas support wildlife species commonly found in urban habitats. San Jose Creek supports low- to moderate-quality wildlife habitat. Wetland wildlife species commonly found along San Jose Creek include the great egret, mallards, killdeer, American coot, and black phoebe. Because this reach is cement lined, the only aquatic vertebrates that could be found here regularly are bullfrog and mosquitofish.

### **Special-Status Species**

No records of special-status plant or wildlife occurrences at the San Jose Creek WRP site were found in a search of the NDDB (1994). No special-status plant or wildlife species were observed and no suitable habitat exists for special-status species.

## **Whittier Narrows Water Reclamation Plant**

### **Vegetation**

The eastern portion of the Whittier Narrows WRP site supports dense screening vegetation: planted non-native horticultural trees and shrubs and a nursery of horticultural

trees in box planters. Natural vegetation is present west and south of the facility in four vegetation types: riparian scrub, ruderal vegetation, annual grassland, and freshwater marsh (Figure 11-3).

Riparian scrub vegetation is found on the western and southern portions of the Whittier Narrows WRP site. The riparian scrub habitat is a dense thicket of shrubs and vines with few trees. The dominant shrubs are mulefat and California blackberry. California wildgrape is draped over most of the vegetation, and young arroyo willow is abundant throughout the riparian scrub. Other woody species in the riparian scrub include castor bean, fig, tree tobacco, myoporum, elderberry, and coyote brush. Herbaceous cover in openings supports horseweed, stinging nettle, and poison hemlock.

Ruderal vegetation occurs at sites cleared of riparian scrub. Areas of ruderal vegetation have sparse vegetative cover with much bare ground exposed. Common herbaceous species present are horehound, wild mustard, nightshade, poison hemlock, stinging nettle, and sowthistle. Regenerating mulefat, arroyo willow, and tree tobacco are common in the ruderal vegetation. Given enough time, the ruderal vegetation will probably mature into riparian scrub vegetation. Some areas of ruderal vegetation have recently been intensely disturbed and support little vegetative cover.

Annual grassland is present in the western portion of the Whittier Narrows WRP site. The grassland is dominated by non-native annual grasses and forbs. The grassland is maintained by mowing and is disturbed by heavy recreational use. Adjacent vegetation indicates that this site historically supported riparian forest habitat.

A narrow strip of freshwater marsh vegetation exists between riparian scrub and open water habitats in Mission Creek, a channel located between the Whittier Narrows WRP and the Rio Hondo. Dominant plant species in the freshwater marsh are smartweed, yellow monkeyflower, cattail, yellow flag, and yellow nut-sedge. Freshwater marsh is a special-status biological community and meets the Corps criteria for jurisdictional wetlands.

## **Wildlife**

The eastern portion of the Whittier Narrows WRP site supports wildlife species typical of landscaped areas in an urban environment. These species include rock dove, mourning dove, northern mockingbird, American robin, house finch, house sparrow, and Brewer's blackbird.

The dense riparian scrub along the floodplain of the Rio Hondo supports high-quality foraging, breeding, and roosting habitat for wildlife. The riparian scrub vegetation supports wildlife species dependent on riparian habitats or other scrub habitats, such as the song sparrow, bushtit, California towhee, white-crowned sparrow, rufous-sided towhee, and blue-gray gnatcatcher. Other wildlife species observed in the riparian scrub habitat include coyote, California ground squirrel, black phoebe, red-shouldered hawk, Bewick's wren, lesser goldfinch, and western fence lizard.

Mission Creek could support habitat for several aquatic vertebrates, such as Pacific treefrog, bullfrog, mosquitofish, sunfish, bluegill, and largemouth bass.

### **Special-Status Species**

No records of special-status plant or wildlife occurrences at the Whittier Narrows WRP site were found in a search of the NDDDB (1994). No special-status plant or wildlife species were observed at the Whittier Narrows WRP.

Individual specimens of Parish's gooseberry (federal Category 2 candidate and CNPS List 1B) have been found at the Whittier Narrows Nature Center east of the Whittier Narrows WRP (Natural Diversity Data Base 1994). The Whittier Narrows WRP supports suitable riparian habitat for Parish's gooseberry, but no plants of this species were observed during site visits.

In 1986, a least Bell's vireo was observed at the Whittier Narrows Nature Center (Natural Diversity Data Base 1994). The riparian habitat at the Whittier Narrows WRP is considered potential breeding habitat for the least Bell's vireo (Table 11-2). The riparian scrub habitats do not appear to be suitable for the Los Angeles pocket mouse or Pacific pocket mouse (Table 11-2). No special-status wildlife species are expected to be found in the developed or landscaped portions of the Whittier Narrows WRP site because no suitable habitat exists there for these species.

### **Jurisdictional Wetlands**

The riparian scrub vegetation at the Whittier Narrows WRP is in the flood storage area of the Whittier Narrows Dam. The soil in the riparian scrub area was not saturated on the survey days of January 19, February 8, or May 12, 1994, although heavy rain fell the night of February 7. Based on field indicators of flood and contacts with Corps staff, there is no indication that this site floods frequently or remains flooded for long duration (Bass pers. comm.). Soils are sands, silt loams, and clay loams. The soils are brown (10YR3/2 and 10YR4/3) and exhibit weak indicators of occasional soil saturation. Dominant vegetation meets the Corps criterion for wetland vegetation, but the hydrology and soils criteria are not met. The riparian scrub does not meet the Corps criteria for jurisdictional wetland status.

The channel of Mission Creek is designated as a jurisdictional wetland. During the May 12 survey, Mission Creek was observed to support flowing water and saturated soils. Dominant vegetation in the stream channel meets Corps criteria for hydrophytic vegetation. Hydric soils and wetland hydrology are present.

## **IMPACTS AND MITIGATION MEASURES OF THE 2010 PLAN ALTERNATIVES**

### **Methodology and Assumptions for Impact Analysis**

Impacts on botanical and wildlife resources were assessed based on the relationship between the distribution of species and habitats and the locations of sites for proposed construction and operations under each alternative. Construction and operation actions can result in direct and indirect impacts on botanical and wildlife resources. Direct impacts include the removal of plants, animals, and habitat resulting from ground disturbance or vegetation clearing for construction of new facilities and conversion of habitat resulting from the addition of reclaimed wastewater into characteristically arid natural communities. Indirect impacts include the loss of plants, animals, or habitats and the degradation of habitat resulting from increased deposition of sediments into natural habitats, increased erosion of material from natural habitats, draining of wetlands and streams, and wildlife disturbance from adjacent land uses.

### **Criteria for Determining Significance**

Standards for determining thresholds of significance were established based on the State CEQA Guidelines. Impacts on vegetation and wildlife were considered significant if the project would result in the following:

- permanent loss of substantial amounts of wildlife or plant habitat or diversity;
- disturbance, degradation, filling, or removal of a special-status biological community;
- substantial long-term interference with the movement of resident wildlife species;
- direct mortality, permanent habitat loss, or temporary habitat loss leading to increased mortality or lowered reproductive success for:
  - federally listed threatened or endangered plant or wildlife species,
  - state-listed threatened or endangered plant or wildlife species,
  - plant or wildlife species proposed for federal listing as threatened or endangered, or
  - candidate plant or wildlife species proposed for state listing as threatened or endangered; or

- temporary or permanent loss of substantial amounts of habitat or loss of substantial portions of populations of plant or wildlife species that are candidates for federal listing, state wildlife species of special concern, state fully protected wildlife species, or plant species on CNPS List 1 or 2.

### Comparison of Alternatives

As shown in Table 11-3 at the end of this chapter, the impacts associated with Alternatives 2, 3, and 4 are similar to those associated with Alternative 1, with some variations. These variations in impacts are described below for each alternative.

#### Alternative 1: Upgrade JWPCP/Expand Los Coyotes WRP/San Jose Creek WRP

#### Construction Impacts

**Impact: Degradation of Riparian and Marsh Habitats Resulting from Construction at the JWPCP.** Construction of digesters immediately east of the JWPCP marsh could result in increased deposition of material into the riparian and marsh habitats. Increased deposition of material into the marsh would occur during construction when ground disturbance at the digester construction site exposes the soil to erosion and this material is transported to the marsh. Marsh and riparian habitats are tolerant to some degree of material deposition. However, if material deposition is excessive, vegetation will be buried and bottom elevations modified, possibly adversely affecting wetland hydrology. Deposition of material into a wetland could be considered a discharge of fill material and would be regulated by the Corps under Section 404 of the CWA. This impact is considered significant because it would result in the loss of a portion of a special-status biological community that is of high value to wildlife.

**Mitigation.** Implementation of the following mitigation measure would be required to reduce this impact to a less-than-significant level:

- **Mitigation Measure 3-1. Prepare and implement a stormwater pollution prevention plan.**

This mitigation measure is described in Chapter 3, "Hydrology and Water Quality".

**Impact: Removal of Horticultural Plantings and Lawn Resulting from Construction at the Los Coyotes and San Jose Creek WRPs.** Construction at the Los Coyotes and San Jose Creek WRPs will result in the removal of horticultural plantings and lawn. This impact is considered less than significant because the wildlife species that would be displaced or



eliminated from the Los Coyotes and San Jose Creek WRP sites are locally and regionally common.

**Mitigation.** No mitigation is required.

### **Impacts of Treatment Plant Operations**

**Impact: Degradation of Riparian and Marsh Habitats Resulting from Increased Runoff at the JWPCP.** Constructing digesters east of the JWPCP marsh could result in increased runoff into the riparian and marsh habitats. Runoff from paved surfaces surrounding the digesters could result in erosion in the riparian and marsh habitats. Erosion could undermine plant root systems and modify wetland hydrology. This impact is considered significant because it would result in the loss of a portion of a special-status biological community that is of high value to wildlife.

**Mitigation.** Implementation of the following mitigation measures would be required to reduce this impact to a less-than-significant level:

- **Mitigation Measure 3-1. Prepare and implement a stormwater pollution prevention plan.**

This mitigation measure is described in Chapter 3, "Hydrology and Water Quality".

- **Mitigation Measure 11-1. Install energy dissipaters in drainages into the marsh.**

The Districts propose to install energy dissipaters at all drainages that drain runoff to the marsh. These dissipaters will be designed and constructed in a manner sufficient to slow runoff such that erosion of substrate in riparian and marsh habitats is avoided. The dissipaters may consist of rock or other appropriate material. The dissipaters would be placed outside riparian and marsh habitat. No riparian or marsh habitat would be removed for installation of dissipaters. Dissipaters will be installed prior to completion of storm drains into the marsh.

- **Mitigation Measure 11-2. Prepare and implement a marshland management plan.**

In cooperation with the Los Angeles County Department of Public Works, the Districts propose to prepare a marshland management plan to improve irrigation to the marsh and to maintain the marsh. The plan would be implemented by 2004.

**Impact: Potential Disturbance of Wildlife at the Riparian and Marsh Habitats Resulting from Increased Human Activity Associated with Modification of the JWPCP.** Constructing the digesters adjacent to the riparian and marsh wildlife habitats could increase human activity near these habitats. A significant increase in human disturbance of wildlife in the habitat areas could result in displacement of wildlife. However, it is unlikely that the increase in human disturbance would displace wildlife from the marsh because the area is already surrounded by urban activity (specifically, a shopping mall, commercial nurseries, the Harbor Freeway, and Sepulveda Boulevard). Wildlife species occupying this habitat are already acclimated to human disturbance and the presence of the digesters would not increase the existing human activity surrounding the marsh; therefore, this impact is considered less than significant.

**Mitigation.** No mitigation is required.

### **Impacts of Biosolids Disposal and Reuse**

**Impact: Minimal Potential for Degradation of Sensitive Biological Communities or Disturbance of Special-Status Species Resulting from Biosolids Disposal and Reuse.** Implementation of the biosolids management plan would substantially increase the amount of biosolids treated by the Districts, which would increase composting, land application, and landfilling activities. These activities could result in the removal of sensitive biological communities and possibly the disturbance of wildlife if new grading is required. However, bioaccumulation is unlikely because of the high quality of the biosolids. This impact is considered less than significant because the Districts would require contractors to demonstrate that wildlife and wildlife habitat have been avoided or that impacts have been reduced to less-than-significant levels through either preparation of site-specific environmental documents or compliance with other federal, state, and local regulations.

**Mitigation.** No mitigation is required.

### **Alternative 2: Upgrade JWPCP/Expand Los Coyotes WRP**

Under Alternative 2, impacts at the JWPCP and the Los Coyotes WRP would be the same as under Alternative 1. No impacts would occur at the San Jose Creek WRP. Construction of sewer lines would result in an additional impact, which is described below.

**Impact: Minimal Potential for Disturbance of Natural Habitat Resulting from Sewer Construction.** Proposed alignments for new sewers would parallel existing sewer alignment segments that currently run through built-out areas (primarily public streets) that do not support natural habitats. This impact is considered less than significant because installing new sewers would not result in the loss of sensitive biological communities.

**Mitigation.** No mitigation is required.

### **Alternative 3: Upgrade JWPCP/Expand Whittier Narrows WRP**

Under Alternative 3, impacts associated with the JWPCP would be the same as under Alternative 1. No impacts would occur at the Los Coyotes or San Jose Creek WRPs. Impacts at the Whittier Narrows WRP are described below.

**Impact: Loss of Riparian Scrub Habitat Resulting from Construction at the Whittier Narrows WRP.** Construction of additional facilities at the Whittier Narrows WRP would result in the removal of 1-1.5 acres of riparian scrub habitat. Construction of the proposed primary sediment tanks, wet well, pump station, and fill roadway would require the removal of most or all of the patch of riparian scrub south of the existing facility (Figure 11-3). The loss of riparian scrub habitat is considered a significant impact.

**Mitigation.** Implementation of the following mitigation measure would be required to reduce impacts on riparian scrub habitat at Whittier Narrows WRP to a less-than-significant level:

■ **Mitigation Measure 11-3. Restore riparian scrub and forest habitat.**

The Districts propose to restore riparian scrub and forest habitat at sites on Districts land west of the existing Whittier Narrows WRP facility that presently support ruderal and grassland vegetation (Figure 11-3). At least 2 acres of riparian scrub habitat would be restored for each acre removed (2:1 ratio is the DFG/USFWS standard). A specific riparian habitat restoration plan would be prepared and implemented that includes the following elements:

- planting locally native riparian trees and shrubs collected from local genetic stock;
- implementing necessary irrigation, weed control, herbivore control, and other cultivation measures for tree and shrub plantings;
- establishing habitat restoration success criteria based on achieving native vegetative cover and diversity and wildlife habitat value equal to or greater than that of habitat that is removed;
- initiating vegetation restoration and monitoring prior to removal of vegetation;
- monitoring the success of habitat restoration for at least 10 years;
- conducting a long-term maintenance program; and
- establishing funding sources for long-term maintenance and monitoring.

**Impact: Removal of Horticultural Plantings and Nursery Stock for Construction at the Whittier Narrows WRP.** Expansion of the Whittier Narrows WRP would require the removal of horticultural plantings and boxed trees at the leased nursery site between the treatment facility and Rosemead Boulevard. Potential habitat for least Bell's vireo would not be affected by removal of horticultural plantings and nursery trees. This impact is considered less than significant because the wildlife species that would be displaced or eliminated at the Whittier Narrows WRP site are locally and regionally common.

**Mitigation.** No mitigation is required.

**Alternative 4: Upgrade Los Coyotes WRP/Expand San Jose Creek WRP/Whittier Narrows WRP**

Under Alternative 4, impacts at the JWPCP and the Los Coyotes and San Jose Creek WRPs would be the same as under Alternative 1, impacts on sewers would be the same as under Alternative 2, and impacts at the Whittier Narrows WRP would be the same as under Alternative 3. No additional impacts would occur under this alternative.

**No-Project Alternative**

Under the No-Project Alternative, no adverse impacts on terrestrial botanical or wildlife resources would occur. Effects of the No-Project Alternative on marine flora and fauna are described in Chapter 5, "Marine Environment".

Table 11-3. Comparison of Botanical and Wildlife Resources Impacts by Alternative

Impacts and Mitigation Measures	Alternative 1			Alternative 2			Alternative 3		Alternative 4				
	JWPCP	LC	SJC	JWPCP	LC	Sewers	JWPCP	WN	JWPCP	LC	SJC	WN	Sewers
<b>Construction Impacts</b>													
Impact: Degradation of riparian and marsh habitats resulting from construction at the JWPCP (S) Mitigation Measure 3-1. Prepare and implement a stormwater pollution prevention plan	✓			✓			✓		✓				
Impact: Removal of horticultural plantings and lawn resulting from construction at the Los Coyotes and San Jose Creek WRPs (LT) No mitigation is required		✓	✓		✓					✓	✓		
Impact: Minimal potential for disturbance of natural habitat resulting from sewer construction (LT) No mitigation is required						✓							✓
Impact: Loss of riparian scrub habitat resulting from construction at the Whittier Narrows WRP (S) Mitigation Measure 11-3. Restore riparian scrub and forest habitat								✓				✓	
Impact: Removal of horticultural plantings and nursery stock for construction at the Whittier Narrows WRP (LT) No mitigation is required								✓				✓	

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LT = less than significant. S = significant.

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Impacts and Mitigation Measures	Alternative 1			Alternative 2			Alternative 3		Alternative 4				
	JWPCP	LC	SIC	JWPCP	LC	Sewers	JWPCP	WN	JWPCP	LC	SIC	WN	Sewers
<b>Impacts of Treatment Plant Operations</b> Impact: Degradation of riparian and marsh habitats resulting from increased runoff at the JWPCP (S) Mitigation Measure 3-1. Prepare and implement a stormwater pollution prevention plan Mitigation Measure 11-1. Install energy dissipaters in drainages into the marsh Mitigation Measure 11-2. Prepare and implement a marshland management plan	✓			✓			✓		✓				
Impact: Potential disturbance of wildlife at the riparian and marsh habitats resulting from increased human activity associated with modification of the JWPCP (LT) No mitigation is required No mitigation is required	✓			✓			✓		✓				
<b>Impacts of Biosolids Disposal and Reuse</b> Impact: Minimal potential for degradation of sensitive biological communities or disturbance of special-status species resulting from biosolids disposal and reuse (LT) No mitigation is required	✓			✓			✓		✓				

No significant and unavoidable impacts on botanical and wildlife resources would occur.

LT = less than significant. S = significant.