3.4 Biological Resources

This section describes the existing regulatory setting, the biological resources in the PWIMP Planning Area(s), and evaluates how construction and operation of the components of the PWIMP would impact biological resources. This evaluation of biological resources was based on an initial review of existing reports and literature from the City of Oxnard. The City's PWIMP Planning Area contains a variety of biological communities, which provide habitat for both rare and common species. This section describes key biological resources, including sensitive natural communities and special status species. The results of this assessment may be used in planning and management decisions that may affect biological resources in the PWIMP Planning Area.

3.4.1 Introduction

This evaluation of biological resources includes a review of vegetation and wildlife habitat, special-status species, and jurisdictional "waters of the United States" that occur or potentially occur at or in the vicinity of the Planning Area. The results of this assessment are based upon field reconnaissance of the Planning Area, literature searches, and database queries. The sources of reference data reviewed include the following:

- U.S. Fish and Wildlife Service (USFWS) Species List for Ventura County;
- California Natural Diversity Database (CNDDB), Rarefind 3 computer program for the Plan Area and a 5-mile radius beyond the Plan Area;
- California Native Plant Society (CNPS), Electronic Inventory computer program for the following USGS quadrangles: Oxnard, Saticoy, Santa Paula, Ventura, Camarillo, and Point Mugu, California;
- California Department of Fish and Wildlife (CDFW) Special Vascular Plants, Bryophytes, and Lichens List CDFW Special Animals List;
- California Department of Forestry and Fire Protection Multi-Source Land Cover Data v2:
- United States Geological Survey (USGS) Digital Orthophoto Quarter Quadrangles

Key Terms and concepts include the following:

• Sensitive Natural Community. A sensitive natural community is a biological community that is regionally rare, provides important habitat opportunities for wildlife, are structurally complex, or are in other ways of special concern to local, State, or Federal agencies. The California Environmental Quality Act (CEQA) identifies the elimination or substantial degradation of such communities as a significant impact. The CDFW tracks sensitive natural communities in the California Natural Diversity Database. Examples of sensitive natural communities in the Planning Area include Southern California Coastal Lagoon, Coastal and Valley Freshwater Marsh, Southern Coast Live Oak Riparian Forest, Southern Coastal Salt Marsh, Southern Sycamore Alder Riparian Woodland, Valley Needlegrass Grassland,

and Southern Riparian Scrub.

- Special-Status Species. Special-status species are those plants and animals that, because of their recognized rarity or vulnerability to various causes of habitat loss or population decline, are recognized for protection by Federal, State, or other agencies. Some of these species receive specific protection that is defined by Federal or State endangered species legislation. Others have been designated as "sensitive" on the basis of adopted policies and expertise of State resource agencies or organizations with acknowledged expertise, or policies adopted by local governmental agencies such as counties, cities, and special districts to meet local conservation objectives. These species are referred to collectively as "special status species" in this document, following a convention that has developed in practice but has no official sanction. For the purposes of this assessment, the term "special-status" includes those species that are:
 - o Federally listed or proposed for listing under the Federal Endangered Species Act (50 CFR 17.11-17.12);
 - O Candidates for listing under the Federal Endangered Species Act (61 FR 7596-7613);
 - State listed or proposed for listing under the California Endangered Species Act (14 CCR 670.5);
 - Species listed by the U.S. Fish and Wildlife Service (USFWS) or the California Department of Fish and Game (CDFG) as a species of concern (USFWS), rare (CDFG), or of special concern (CDFG);
 - o Fully protected animals, as defined by the State of California (California Fish and Game Code Section 3511, 4700, and 5050);
 - Species that meet the definition of threatened, endangered, or rare under CEQA (CEQA Guidelines Section 15380);
 - Plants listed as rare or endangered under the California Native Plant Protection Act (California Fish and Game Code Section 1900 et seq.); and
 - Plants listed by the California Native Plant Society (CNPS) as rare, threatened, or endangered (List 1A and List 2 status plants in Skinner and Pavlik 1994).

Wetlands and Other Waters of the U.S. Wetlands are ecologically complex habitats that support a variety of both plant and animal life. In a jurisdictional sense, the Federal government defines wetlands in Section 404 of the Clean Water Act as "areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support (and do support, under normal circumstances) a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3[b] and 40 CFR 230.3). Under normal circumstances, the Federal definition of wetlands requires three wetland identification parameters be present: wetland hydrology, hydric soils, and hydrophytic vegetation. Examples of wetlands include saline and freshwater marshes, seasonal wetlands, and vernal pool

complexes that have a hydrologic link to other waters of the U.S (see definition below for "other waters of the U.S."). The U.S. Army Corps of Engineers (Corps) is the responsible agency for regulating wetlands under Section 404 of the Clean Water Act, while the Environmental Protection Agency (EPA) has overall responsibility for the Act.

"Other Waters of the U.S." refers to those hydric features that are regulated by the Clean Water Act but are not wetlands (33 CFR 328.4). To be considered jurisdictional, these features must exhibit a defined bed and bank and an ordinary high-water mark. Examples of other waters of the U.S. include rivers, creeks, intermittent and ephemeral channels, ponds, and lakes.

The CDFW does not normally have direct jurisdiction over wetlands unless they are subject to jurisdiction under Streambed Alteration Agreements or they support State-listed endangered species; however, CDFW has trust responsibility for wildlife and habitats pursuant to California law.

Examples of jurisdictional waters that occur in the Planning Area would include the Santa Clara River, Beardsley Wash/Revolon Slough, McGrath Lake, Ormond Beach Lagoon (a seasonal wetland feature), and other potentially jurisdictional features such as agricultural and urban drains, especially where they replaced natural waterways.

3.4.2 Regulatory Context

Relevant Federal, State, and local guidelines specific to biological resource issues are discussed in this section.

3.4.2.1 Federal Regulations

The relevant federal regulations are discussed below.

Clean Water Act – Section 404. Wetlands and other waters of the U.S. (as defined above) are subject to jurisdiction by the Corps and EPA under Section 404 of the Clean Water Act. Wet areas that are not regulated by this act would include stock watering ponds, agricultural ditches created in upland areas, and isolated wetlands that do not have a hydrologic link to other waters of the U.S., either through surface or subsurface flow. The discharge of fill into a jurisdictional feature requires a permit from the Corps.

The Corps has the option to issue a permit on a case-by-case basis (individual permit) or at a program level (general permit). Nationwide permits (NWPs) are an example of general permits; they cover specific activities that generally have minimal environmental effects. Activities covered under a particular NWP must fulfill several general and specific conditions, as defined by the NWP. If a proposed project cannot meet these conditions, an individual permit may be required.

Federal Endangered Species Act. The USFWS administers the Federal Endangered Species Act (16 USC Section 153 et seq.) and thereby has jurisdiction over federally listed threatened, endangered, and proposed species. Projects that may result in "take" of a listed species must consult with the USFWS. Federal agencies that propose a project that may affect a listed species are required to consult with the USFWS under Section 7 of the Federal Endangered Species Act. If it is determined that a federally listed species may be adversely affected by the Federal action, the USFWS will issue a Biological Opinion to the Federal

agency that describes minimization and avoidance measures that must be implemented as part of the Federal action. Projects that do not have a Federal nexus must apply for a take permit under Section 10 of the Act. Section 10 of the Act requires that the project applicant prepare a habitat conservation plan as part of the permit application.

Under the Federal Endangered Species Act the USFWS designates critical habitat, areas that are essential for the conservation of a threatened or endangered species and which may require special management considerations. A designation only applies to projects with a Federal nexus; it has no specific regulatory impact on landowners who take actions on their land that do not involve Federal funding. However, Federal agencies must consult with the USFWS before taking actions that could harm or kill protected species or destroy their habitat.

Migratory Bird Treaty Act, Bald and Golden Eagle Protection Act. The Migratory Bird Treaty Act (MBTA, 16 USC Section 703-711) and the Bald and Golden Eagle Protection Act (16 USC Section 668) protect certain species of birds from direct take. The MBTA protects migrant bird species from take through the establishment of hunting limits and seasons and protecting occupied nests and eggs. The Bald and Golden Eagle Protection Act prohibits the take or commerce of any part of these species. The USFWS administers both acts, and reviews Federal agency actions that may affect species protected by the acts.

3.4.2.2 State Regulations

The relevant state regulations are discussed below.

California Fish and Wildlife Code Sections 1600 – 1616. The CDFW regulates the modification of streams, rivers, and lakes under Sections 1600-1616 of the California Fish and Wildlife Code. Modification includes diverting, obstructing, or changing the natural flow or bed, channel, or bank of a regulated feature. While most of the features regulated by the Fish and Wildlife Code meet the definition of other waters of the U.S., the Code may regulate some ephemeral features that do not have all the criteria to qualify as other waters of the U.S. A project proponent, including both private parties and public agencies, proposing an activity that may modify a feature regulated by the Fish and Wildlife Code must notify the CDFW before project construction. The CDFW will then decide whether to enter into a Streambed Alteration Agreement with the project proponent.

California Endangered Species Act. The CDFW administers the California Endangered Species Act of 1984 (Fish and Game Code Section 2080), which regulates the listing and "take" of endangered and threatened species. A "take" may be permitted by CDFW through implementing a management agreement. Under the State laws, the CDFW is empowered to review projects for their potential impacts to listed species and their habitats. CDFW maintains lists for Candidate-Endangered Species (SCE) and Candidate-Threatened Species (SCT). California candidate species are afforded the same level of protection as listed species. California also designates Species of Special Concern (CSC), which are species of limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational, or educational value. These species do not have the same legal protection as listed species, but may be added to official lists in the future. The CSC list is intended by CDFW as a management tool for consideration in future land use decisions.

3.4.2.3 Local Regulations

The relevant local regulations are discussed below.

Oxnard 2030 General Plan. The combined Open Space/Conservation Element's of the City's existing 2030 General Plan contains several Natural Resources policies pertinent to biological resources.

3.4.3 Environmental Setting

A description of the key wildlife habitats (including plant and wildlife species) found within the Planning Area is described in this section. The section begins with a brief description of the key wildlife habitats.

Wildlife Habitats

Wildlife habitats provide food, shelter, movement corridors, and breeding opportunities for a variety of wildlife species. Habitats are classified in broad terms with an emphasis on vegetation structure, and include other elements such as vegetation species composition, soil structure, and water availability. Some wildlife species are generalists and may use a variety of habitats, while other species may be restricted to one habitat. Species that are restricted to a single habitat type are more susceptible to habitat loss than are generalists, and are more likely to experience population declines. These species are presented in greater detail later in this section.

Habitats are not distinct features that can be managed in isolation from each other. More common wildlife species, such as red-shouldered hawk (*Buteo lineatus*), great-horned owl (*Bubo virginianus*), northern flicker (*Colaptes auratus*), brown-headed cowbird (*Molothrus ater*), raccoon (*Procyon lotor*), and western toad (*Bufo boreas*) frequently use more than one habitat type. They may use riparian habitat for breeding sites, resting sites, cover while moving from one area to another, or thermal cover, and range into open upland grasslands, scrub, or over open water to forage. Frequently it is at the edges of habitats, or where they transition from one habitat to another, that the greatest number of these more common wildlife species will be found.

The PWIMP Planning Area contains mostly human-modified habitats. The vast majority of these areas include urban, industrial, or agricultural production areas. In some areas (especially in the northern part of the Planning Area), a series of industrial oil fields within agricultural lands exists. Native habitats exist mostly on the edges of the Planning Area (i.e., Santa Clara River, coastal areas, etc.) where they experience fairly heavy recreational pressure. These habitats, as classified in California Habitats (CDFG, 2000), are listed and briefly described below. Habitats present in the Plan Area, and acreage calculations, are based on the California Department of Forestry and Fire Protection's Multi-source Land Cover Data v2 (2002), which was re-classified following a reconnaissance survey and using aerial photo interpretation. A summary of the acreages for each habitat type are provided below in Table 3.4-1 below.

Table 3.4-1				
Summary of Habitats, City of Oxnard and PWIMP Planning Area				
Habitat Type Acreage				

Table 3.4-1 Summary of Habitats, City of Oxnard and PWIMP Planning Area			
Habitat Type	Acreage		
Urban	18,250		
Agriculture	23,650		
Eucalyptus	30		
Valley Foothill Riparian	930		
Coastal Scrub and Mixed Chaparral	470		
Coastal Oak Woodland	20		
Annual Grassland	130		
Saline Emergent Wetland	190		
Marine (intertidal zone)	440		
Total 44,110			

Notes: Barren, Fresh Emergent Marsh, Lacustrine, Riverine, and Estuarine habitats occur in patches too small to have been mapped

Source: California Department of Forestry and Fire Protection's Multi-source Land Cover Data, 2002

Urban. Large portions of the Planning Area (roughly 18,250 acres) are best characterized as urban habitat. A distinguishing feature of the urban wildlife habitat is the mixture of native and exotic species. This habitat type varies structurally, and can be categorized into three zones: downtown, urban residential, and suburbia. Downtown, the most heavily developed, is usually at the center, followed by concentric zones of decreasing development and increasing vegetative cover through urban residential to the suburbs. Both native and exotic plant species are valuable, with exotic species providing a good source of additional food in the form of fruits and berries, and cover. Wildlife species richness and diversity increases along this same gradient. These areas provide cover and foraging opportunities for some wildlife species, especially those adapted to human disturbance. Common examples include raccoon (*Procyon lotor*), Virginia opossum (*Didelphis virginiana*), striped skunk (*Mephitis mephitis*), northern mockingbird (*Mimus polyglottos*), mourning dove (*Zenaida macrocoura*), Anna's hummingbird (*Calypte anna*), wrentit (*Chamaea fasciata*), and black-bellied slender salamander (*Battrachoseps nigriventris*).

Irrigated Row and Field Crops. Even larger portions of the Planning Area (about 23,650 acres) contain agricultural habitats. As shown in Figure 5-1, these agricultural habitats are included within both the existing City limits and within surrounding lands that comprise the City's Planning Area. Vegetation in this habitat includes a variety of sizes, shapes and growing patterns, with individual locations representing various intensities of use that range from highly farmed to more fallow agricultural uses. Plants may be either annual (e.g. lettuce) or perennial (e.g. strawberries), and when grown in rows provide a varying amount of bare ground between rows. Annual crops are usually planted in spring and harvested in summer or fall. However, they may be planted in rotation with other irrigated crops. In some areas of southern California three crops may be grown in a year. For example, on the Oxnard plain, cool weather crops such as lettuce and cabbage are grown in the fall and winter followed by tomatoes, corn, or peppers in the spring and summer. Crops are typically grown on the most fertile soils, and have lower habitat values than the native habitats they replace. However, many species of rodents and birds have adapted to agricultural areas. Croplands provide food and water for these species, but do not generally provide long-term shelter due to the frequency of disturbance.

Eucalyptus. About 30 acres of this habitat occurs in windbreaks, small copses, and within riparian habitats located throughout the Planning Area. Usually only one or to species of

Eucalyptus trees occur together. Although planted for horticultural values and as windbreaks, these non-native trees will invade and displace native habitats (e.g. riparian habitat). Raptors such as red-shouldered hawk may nest in Eucalyptus, which also serves as a food source for birds such as Anna's hummingbird and yellow-rumped warbler; however, sticky gum produced by Eucalyptus can effectively glue shut the bills of birds foraging on nectar, resulting in their death (William, 2002). Monarch butterflies commonly use large stands of Eucalyptus trees for roosts along the California Coast.

Valley Foothill Riparian. Within the Planning Area, riparian habitat occurs over an estimated 930 acres mostly along the Santa Clara River, and to a lesser extent along other waterways such as Calleguas Creek and Revolon Slough. This habitat is principally composed of a sparse cottonwood overstory and a dense willow subcanopy mixed with introduced giant reed, Myoporum, and tamarisk. Many species of wildlife use this habitat type for movement corridors, foraging, cover, and breeding. Recent estimates of this habitat remaining in California range from 2–15%; native riparian habitats have been recognized as an important component of properly-functioning ecosystems, and have been identified as the most important habitat to land-bird species (RHJV, 2000).

Coastal Scrub and Mixed Chaparral. These fairly open habitats occur over a small (470 acres) area in the northwest part of the Planning Area, in rear dunes between the coast and agricultural lands. They are principally composed of a discontinuous canopy of coyote brush, California sagebrush, and iceplant with a mixed herbaceous layer. They provide foraging habitat for many species of wildlife, and breeding habitat for a more limited number of common species such as California ground squirrel and white-crowned sparrow. Coastal sage scrub also supports more than 100 species of plants and animals that are considered rare, sensitive, threatened, or endangered by California or U.S. Federal wildlife agencies (Atwood 1993, McCaull 1994 in CalPIF. 2004).

Coastal Oak Woodland. Several small inclusions of this habitat are mapped within the Valley Foothill Riparian on the Santa Clara River, and in the vicinity of Mandalay Beach. About 20 acres occurs within the Planning Area. The structure of this habitat is extremely variable. Within the Planning Area Coastal Oak Woodland provides habitat values similar to Valley Foothill Riparian and Coastal Scrub.

Annual Grassland. This habitat is annual herbaceous vegetation with little structural complexity. Within the Planning Area it is composed of the non-native grass series, which occurs in small areas on fallowed fields and other unused and disturbed ground. It is a minor type (mapped at about 130 acres) of habitat within the Planning Area.

Fresh Emergent Marsh. This habitat is composed of bulrush and cattail, and occurs in small patches throughout the Planning Area within suitable aquatic areas. Fresh Emergent Marsh occurs in patches too small to have been mapped for the purpose of this document, but is associated with freshwater systems within the Planning Area. Examples include the eastern edge of McGrath Lake, within the estuary of the Santa Clara River, and in un-lined portions of Revolon Slough. This habitat provides important cover and nest or nursery sites for aquatic-associated wildlife species such as waterfowl.

Saline Emergent Marsh. This habitat occurs in about 190 acres of undeveloped coastal areas within the Planning Area, and is characterized by pickleweed (*Salicornia*) and saltgrass

(Distichlis) vegetation. The majority of saline emergent wetlands occur at the terminus of the Hueneme and Industrial Drains, which flow to the coast between Port Hueneme and the Edison power plant to the south. This habitat type has been severely reduced throughout California. As a consequence, the populations of a large number of wildlife species, including many special status species dependent on this habitat have also declined. Altered hydrologic regimes (i.e., freshwater input, artificial breaching of the sandbars) can alter the functioning of these areas of saline emergent marsh. Saline Emergent Marsh habitats are used extensively by a variety of waterfowl species.

Lacustrine. This open water habitat type is fairly limited within the Planning Area (with patches too small to have been mapped for the purpose of this document), and occurs where agricultural drains back up behind sandbars at their mouths. McGrath Lake, at the southern end of the park, is an example of a 10-acre back-dune lake that receives agricultural runoff from farming activities east of Harbor Boulevard. This habitat consists of open water, which is bordered by fresh emergent marsh. Lacustrine habitat typically provides roosting and foraging opportunities for wildlife. Near marine environments, they also provide bathing opportunities to wildlife. Under conditions where pollutants accumulate in lakes or ponds, they can become a hazard to wildlife using the habitat.

Riverine. The Santa Clara River is the longest free-flowing river in Southern California and is one of the few remaining rivers in the area that remain in a relatively natural state. The total river length is approximately 70 miles, extending from its headwaters at Mount Pinos to the Santa Clara River Estuary adjacent to McGrath State Beach. In the lower 30-mile stretch in Ventura County, the channel becomes wide and sandy. The bed and banks in the lower reaches are composed of unconsolidated sand and gravel, which are easily eroded, and are mapped as "barren" habitat. Historically, the floodplain of the river contained a dense riparian zone with marshy areas. Agricultural land reclamation and urban development throughout the 1900's have resulted in a narrowing of the river and its riparian area and a concurrent increase in erosion damage in the floodplain (PWA, 1996).

Current aquatic habitat values in the floodplain reaches are low, primarily due to very low to entirely absent surface flows during most of the year. The construction of a 20-foot tall concrete diversion dam, Vern Freeman Diversion Dam near Saticoy, was completed in 1991 and replaced the temporary diversion dikes used at this location since the 1920's. The dam is operated by the UWCD and delivers water to underground recharge basins via percolation areas. The dam is equipped with a fish ladder to enhance steelhead passage, but the National Marine Fisheries Service (NMFS) is currently reviewing the operation and design of the fish ladder.

In addition to water diversions and steelhead migration issues, other stressors on the Santa Clara River include water quality problems associated with agricultural and urban runoff, inchannel gravel and sand mining, and non-native species invasions.

Estuarine. Principally unvegetated, this habitat occurs at the mouth of the Santa Clara River. It is characterized by a mixing of freshwater and saltwater influences, and is a rich source of phyto-and zooplankton. These plankton form the basis of a rich food web which support a wide variety of wildlife species, including steelhead, terns, shorebirds, and waterfowl. This is a dynamic habitat, due to seasonal flooding and breaching of the sandbar at the mouth of the river. Depending on the timing of flooding, breaching, and tides, it can form a large lagoon or

mudflats. The Santa Clara River mouth, including the estuary (as lagoon and mudflats), riparian vegetation, and adjacent beach and dunes has been designated as a California Important Bird Area (Cooper, 2001).

Marine. This unique habitat extends from the ocean to the upper limit of the unvegetated shore and comprises four zones. The pelagic zone is characterized by open water with depths greater than required for growth of canopy-forming kelps and extends offshore 12-miles. The subtidal zone includes the area from the depth that supports canopy-forming kelps to the low-low tide line. The intertidal zone includes the area exposed by lowest-low tide up to and including the spray zone. Finally, the shore zone consists of any barren land between the spray zone to where terrestrial vegetation exceeds 10 percent canopy closure and may vary in width from a few feet to several hundred meters.

The intertidal zone covers about 440 acres in the Planning Area. This zone provides foraging opportunities for shorebirds and opportunistic feeders such as crows, ravens, turkey vultures, and, historically, California condor. The shore zone extends from the spray zone inland to vegetated habitat. Sand dunes and salt flats are included in the shore zone, including areas where vegetation cover is sparse. Wildlife that use salt flats and dunes for breeding, roosting, or foraging (including the federally-listed western snowy plover and California least tern) find cover under or near drift wood and other debris deposited by high tides and moved by wind. Seed-eating small mammals and birds find forage in vegetated portions of the shore zone. Much of this habitat experiences strong recreation pressure on both public and private land.

Special Status Species in the Planning Area

On November 22, 2017 a record search of CDFW's California Natural Diversity Database (CNDDB) and USFWS' Species List was conducted for the area within a five-mile radius of the Project area to identify previously reported occurrences of state and federal special-status plants and animals (See Appendix C). In addition, field visits for the major PWIMP project facilities was conducted on May 2 and 3, 2018 to determine the potential for special-status species to occur within the general vicinity of the PWIMP Study Area (i.e. Construction Area) as described in Chapter 2 – Project Description. This field visit was not intended to be a protocol-level survey to determine the actual absence or presence of special-status species, but was conducted to determine the potential for special-status species to occur within the Proposed Project/Action Area. During the field visits no special status species were observed. Special status plant and wildlife species known or having the potential to occur in the PWIMP Planning Area is provided below in Table 3.4-2 and shown on Figure 3.4-1. Information in the table includes a brief description of each species along with a list of habitat areas where the species may occur.

Table 3.4-2 Potential of Special Status Species to Occur in the PWIMP Planning Area				
Species Status Habitat Potential for Occurrence Recommendations				
Plants				
California Orcutt Grass Orcuttia californica	FE	Small, hairy annual grass with prostrate stems sometimes forming small	Unlikely. Suitable habitat for this species does not occur in the Study Area.	No further actions are recommended for this species.

Table 3.4-2 Potential of Special Status Species to Occur in the PWIMP Planning Area				
Species	Status	Habitat	Potential for Occurrence	Recommendations
		tufts or mats associated with vernal pools.		
Coulter's goldfields Lasthenia glabrata ssp. coulteri	CNPS 1B.1	Occurs over a range of habitat, such as meadows, shrubland and open forest, but tend towards semiarid conditions. They are commonly found at ephemeral pools and are important plants in coastal regions.	Unlikely. Suitable habitat for this species does not occur in the Study Area.	No further actions are recommended for this species.
Gambel's Watercress Rorippa gambellii	FE	A perennial herb growing decumbent to erect, its branching stems reaching up to 2 meters long. It is aquatic or semi-aquatic, its herbage sometimes floating on standing water or sprawling over wet ground.	Unlikely. Suitable habitat for this species does not occur in the Study Area.	No further actions are recommended for this species.
Marsh Sandwort Arenaria paludicola	FE	It is present in two native locations in San Luis Obispo County, California, and it has been reintroduced nearby in Nipomo and Los Osos	Unlikely. Suitable habitat for this species does not occur in the Study Area.	No further actions are recommended for this species.
Mexican malacothrix Malacothrix simillis	CNPS 2A	An annual herb native to California.	Unlikely. Suitable habitat for this species does not occur in the Study Area.	No further actions are recommended for this species.
Salt Marsh Bird's-beak (Cordylanthus Maritimus)	FE, SE, CNPS 1B.1	In areas with sandy soils and often in disturbed sites within closed-cone coniferous forest, maritime chaparral, cismontane woodland, coastal dunes, and coastal scrub habitats.	Unlikely. Suitable habitat for this species does not occur in the Study Area.	No further actions are recommended for this species.
Spreading Navarretia Navarretia fossalis	FT	Known only from vernally wet areas, such as vernal	Unlikely. Suitable habitat for this species does not	No further actions are recommended for this species.

Detendal of C		Table 3.4-2	- 4k a DW/IMD Dia-	A
Species	Status	Species to Occur i Habitat	Potential for Occurrence	Recommendations
		pools, ditches, and other areas that are wet or flooded during the rainy season and dry the rest of the year.	occur in the Study Area.	
Ventura Marsh milk-vetch (Astragalus pycnostachyus)	FE, SE, CNPS 1B.1	Coastal dunes, sandy areas in coastal bluff scrub, and mesic areas in coastal prairie habitats.	Low. Suitable habitat could be wholly or partially in the Study Area.	As a precautionary measure, preconstruction surveys should be conducted for any major construction activities between February 1 and August 31.
White Rabbit-tobacco Pseudognaphalium leucocephalum	CNPS 2B.2	A perennial herb that is native to California and is also found outside of California, but is confined to western North America.	Unlikely. Suitable habitat for this species does not occur in the Study Area.	No further actions are recommended for this species.
Birds				
Bank swallow Riparia riparia	ST	Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	Low. Suitable habitat could be wholly or partially in the Study Area.	As a precautionary measure, preconstruction surveys should be conducted for any major construction activities between February 1 and August 31.
Belding's savannah sparrow Passerculus sandwichensis beldingi	SE	Forages on the ground or in low bushes; particularly in winter they are also found in grazed low-growth grassland.	Low. Suitable habitat could be wholly or partially in the Study Area.	As a precautionary measure, preconstruction surveys should be conducted for any major construction activities between February 1 and August 31.
Burrowing Owl Athene cunicularia	CSSC	Grassland habitat with ground squirrel burrows (used for nesting).	Low. Suitable habitat could be wholly or partially in the Study Area.	As a precautionary measure, preconstruction surveys should be conducted for any major construction activities between February 1 and August 31.
California black rail Lateralus jamaicensis coturniculus	ST, FPT	Inhabits freshwater marshes, wet	Low. Suitable habitat could be wholly or partially	As a precautionary measure, pre- construction surveys

Table 3.4-2					
	Potential of Special Status Species to Occur in the PWIMP Planning Area				
Species	Status	Habitat	Potential for Occurrence	Recommendations	
		meadows & shallow margins of saltwater marshes bordering larger bays. Nests and forages intidal emergent wetland with pickleweed and cordgrass.	in the Study Area.	should be conducted for any major construction activities between February I and August 31.	
California Condor Gymnogyps californianus	FE, SE	Forages for carrion over a variety of open habitats.	Low. Suitable habitat could be wholly or partially in the Study Area.	As a precautionary measure, pre-construction surveys should be conducted for any major construction activities between February 1 and August 31.	
California Least Tern Sterna antillarum browni	FE	Breeds primarily in bays of the Pacific Ocean within a very limited range of Southern California, in San Francisco Bay and in northern regions of Mexico.	Low. Suitable habitat could be wholly or partially in the Study Area.	As a precautionary measure, preconstruction surveys should be conducted for any major construction activities between February 1 and August 31.	
Least Bell's Vireo Vireo bellii pusillus	FE, SE	Breeds in thick willow riparian groves. Range, once thought to be limited to southern California, is expanding.	Low. Suitable habitat could be wholly or partially in the Study Area.	As a precautionary measure, pre-construction surveys should be conducted for any major construction activities between February 1 and August 31.	
Light-footed Clapper Rail Rallus longirostris obsoletus	FE, SE	Found in tidal salt marshes of the San Francisco Bay. Requires mudflats for foraging and dense vegetation on higher ground for nesting.	Low. Suitable habitat could be wholly or partially in the Study Area.	As a precautionary measure, pre-construction surveys should be conducted for any major construction activities between February 1 and August 31.	
Marbled Murrelet Brachyramphus marmoratus	FT	Feeds at sea both in pelagic offshore areas (often associating with upwellings) and inshore in protected bays and fiords.	Low. Suitable habitat could be wholly or partially in the Study Area.	As a precautionary measure, preconstruction surveys should be conducted for any major construction activities between February 1 and August 31.	
Southwestern Willow Flycatcher Empidonax trailii	FE, SE	Breeds in mature riparian habitat. Now extirpated	Low. Suitable habitat could be wholly or partially	As a precautionary measure, pre- construction surveys	

		Table 3.4-2		
Potential of Special Status Species to Occur in the PWIMP Planning Area				
Species	Status	Habitat	Potential for Occurrence	Recommendations
extimus		from coastal California.	in the Study Area.	should be conducted for any major construction activities between February 1 and August 31.
Western Snowy Plover Charadrius alexandrinus nivosus	FT	Resident on coastal beaches and salt panne habitat.	Low. Suitable habitat could be wholly or partially in the Study Area.	As a precautionary measure, preconstruction surveys should be conducted for any major construction activities between February 1 and August 31.
Western Yellow-billed cuckoo Coccyzus americanus occidentallis	FT, SE	A secretive, difficult to detect, neotropical migrant that formally bred in riparian regions throughout the western United States	Low. Suitable habitat could be wholly or partially in the Study Area.	As a precautionary measure, preconstruction surveys should be conducted for any major construction activities between February 1 and August 31.
Fish		T 24 44 4		
Tidewater goby Eucyclogobius newberryi	FE, CSSC	Shallow lagoons and lower stream reaches with fairly still, but not stagnant water.	Unlikely. Suitable habitat for this species does not occur in the Study Area.	No further actions are recommended for this species.
Amphibians		1 sugmin water	111000	
California Red-legged Frog Rana aurora draytoni	FT, SP, CSSC	Streams, freshwater pools and ponds with overhanging vegetation. Requires pools of > 0.5 m depth for breeding.	Unlikely. Suitable habitat for this species does not occur in the Study Area.	No further actions are recommended for this species.
Western Pond Turtle Emys marmorata	SSC	Occurs in perennial ponds, lakes, rivers and streams with suitable basking habitat (mud banks, mats of floating vegetation, partially submerged logs) and submerged shelter.	Unlikely. Suitable habitat for this species does not occur in the Study Area.	No further actions are recommended for this species.
Crustaceans				
Riverside Fairy Shrimp Streptocephalus woottoni	FE	Lives in vernal pools or other seasonal pools at least 30 centimeters in depth, and can be observed in January through March.	Unlikely. Suitable habitat for this species does not occur in the Study Area.	No further actions are recommended for this species.
Vernal pool fairy shrimp	FT	Inhabit small, clear-	Unlikely. Suitable	No further actions

		Table 3.4-2		
Potential of Special Status Species to Occur in the PWIMP Planning Area				
Species	Status	Habitat	Potential for Occurrence	Recommendations
Branchinecta lynchi		water sandstone depression pools, grassy swales, slumps, or basalt- flow depression pools.	habitat for this species does not occur in the Study Area.	are recommended for this species.
Reptiles				
Coast Horned Lizard Phrynosoma blainvillii	CSSC	A species of phrynosomatid lizard, which can be found in Baja California Sur.	Unlikely. Suitable habitat for this species does not occur in the Study Area.	No further actions are recommended for this species.
Southern California legless lizard Anniella Stebbinsi	CSSC	Mostly found in coastal sand dunes and a variety of interior habitats, including sandy washes and alluvial fans. They live mostly underground, burrowing in the loose, sandy soil.	Unlikely. Suitable habitat for this species does not occur in the Study Area.	No further actions are recommended for this species.

Key to status codes:

FE Federal Endangered

FT Federal Threatened FC Federal Candidate

FD Federal De-listed

FPD Federal Proposed for De-listing

FPT Federal Proposed Threatened

NMFS Species under the Jurisdiction of the National Marine Fisheries Service

BCC USFWS Birds of Conservation Concern

RP Sensitive species included in a USFWS Recovery Plan or Draft Recovery Plan

SE State Endangered

ST State Threatened

SR State Rare

SSC CDFW Species of Special Concern

Draft SSC 4 April 2000 Draft CDFG Species of Special Concern

CFP CDFW Fully Protected Animal

WBWG Western Bat Working Group High Priority species

SLC Species of Local Concern

List 1A CNPS List 1A: Plants presumed extinct in California

List 1B CNPS List 1B: Plants rare, threatened or endangered in California and elsewhere

List 2 CNPS List 2: Plants rare, threatened, or endangered in California, but more common elsewhere

List 3 CNPS List 3: Plants about which CNPS needs more information (a review list)

SLC Species of Local Concern

List 1A CNPS List 1A: Plants presumed extinct in California

List 1B CNPS List 1B: Plants rare, threatened or endangered in California and elsewhere

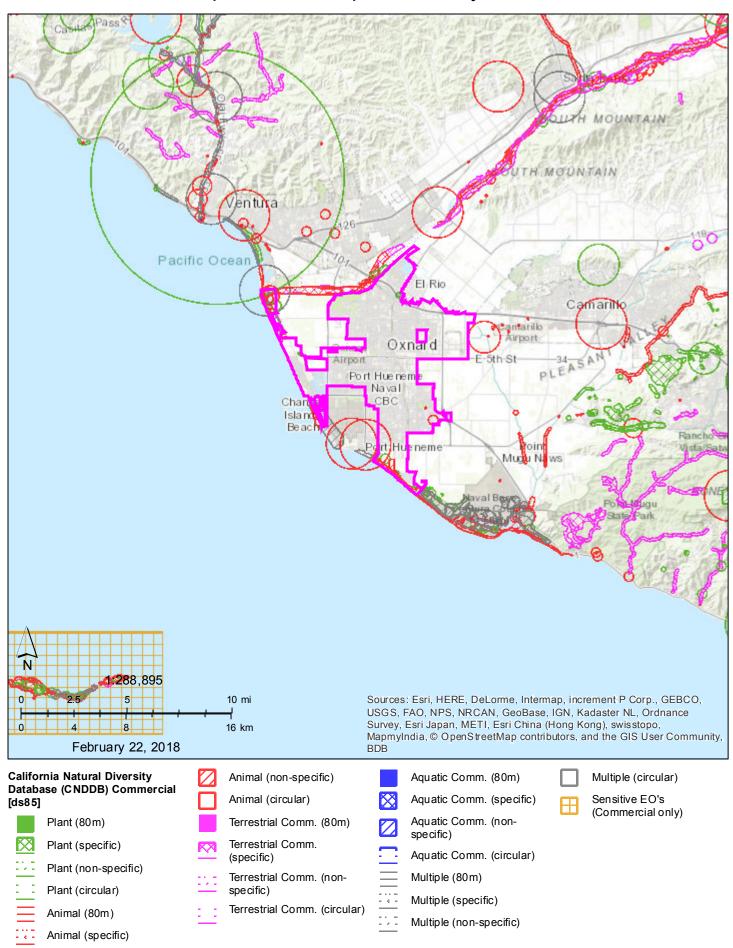
List 2 CNPS List 2: Plants rare, threatened, or endangered in California, but more common elsewhere

List 3 CNPS List 3: Plants about which CNPS needs more information (a review list)

3.4.4 Impact Analyses

This section includes a discussion of the relevant significance criteria, the approach and methodology to the analyses, and any identified impacts and mitigation measures.

Figure 3.4-1
Special Status Species in Project Area



3.4.4.1 Significance Criteria

Significance thresholds below are based on Appendix G (Environmental Checklist Form) of the *CEQA Guidelines* and modified from the City's *May 2017 CEQA Guidelines*, which indicates that a potentially significant impact on agricultural resources would occur if the PWIMP would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any
 species identified as a candidate, sensitive, or special-status species in local or regional
 plans, policies, or regulations, or by the California Department of Fish and Wildlife or
 U.S. Fish and Wildlife Service;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations adopted by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service;
- Have a substantial adverse effect on federally protected waters of the U.S. as defined by Section 404 of the federal Clean Water Act or protected waters of the state as defined by Section 1600 et seq. of the California Fish and Game Code (including, but not limited to, marshes, vernal pools, and coastal wetlands) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or
- wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources; and/or
- Conflict with an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

3.4.4.2 Approach and Methodology

As described in Chapter 2, Project Description, the City's PWIMP is comprised of improvements to the City's Water Supply System, Recycled Water System, Wastewater System, and Stormwater System through build-out of the City's 2030 General Plan. However, the design details, final options, and the timing of construction phases are not precisely known, despite the best estimates provided in the schedules in Chapter 2. Further, it is not practical or prudent to try to provide project-level or detailed quantitative analysis at this time as many of the details are not known and the timing will likely change and/or the requirements for project-level analysis could change and be different in the future. As such, the environmental impact analysis for this section has been prepared at a programmatic level of detail and it addresses the full range of potential environmental effects associated with implementation of the PWIMP, but the analysis is more qualitative and general. Specifically, the analysis focuses on providing a discussion on potential significant impacts and provides broad mitigation measures that can and should be implemented at the project-level. This approach is consistent with the State CEQA Guidelines provisions for a Program EIR, as described in Section 15168, which suggests that the level of detail is dictated by "ripeness"; detailed analysis should be reserved for issues that are ripe for consideration.

As identified above in Table 3.4-2, a record search of CDFW's California Natural Diversity Database (CNDDB) and USFWS' Species List was conducted for the area within a five-mile radius of the Project area to identify previously reported occurrences of state and federal special-status plants and animals. Figure 3.4-1 shows the location of known state and federal listed species within the Project/Action Area. In addition, field visits for the major PWIMP project facilities was conducted on May 2 and 3, 2018 to determine the potential for special-status species to occur within the general vicinity of the PWIMP Study Area (i.e. Construction Area) as described in Chapter 2 – Project Description. This field visit was not intended to be a protocollevel survey to determine the actual absence or presence of special-status species, but was conducted to determine the potential for special-status species to occur within the Proposed Project/Action Area. During the field visits no special status species were observed.

3.4.4.3 Impacts and Mitigation Measures

Based on the significance criteria and approach and methodology described above, the potential impacts to biological resources are discussed below.

Impact 3.4-1: Implementation of the PWIMP and/or identified components/facilities could have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. The potential impacts due to temporary construction and long-term operations are discussed below.

Temporary Construction Impacts

The PWIMP Study area is located in a highly urbanized area and the potential for presence of special-status plants and animals at the project sites is very low and unlikely. As identified above in Table 3.4-2, a record search of CDFW's California Natural Diversity Database (CNDDB) and USFWS' Species List was conducted for the area within a five-mile radius of the Project area to identify previously reported occurrences of state and federal special-status plants and animals. Figure 3.4-1 shows the location of known state and federal listed species within the Project/Action Area. In addition, field visits for the major PWIMP project facilities was conducted on May 2 and 3, 2018 to determine the potential for special-status species to occur within the general vicinity of the PWIMP Study Area (i.e. Construction Area) as described in Chapter 2 – Project Description. This field visit was not intended to be a protocol-level survey to determine the actual absence or presence of special-status species, but was conducted to determine the potential for special-status species to occur within the Proposed Project/Action Area. During the field visits no special status species were observed.

However, due to the fact that the PWIMP would be implemented over time, there is the potential that the construction of the PWIMP project facilities to have an adverse impact on current and future listed special status species. The type of impact depends on the type, location, and the timing of the construction of each PWIMP Project-level component. The type of impacts that would be applicable to each project component type is discussed below.

Inside Versus Outside the Fence Projects

Many of the PWIMP projects and components will occur within the fence line of the City's water, wastewater treatment, and/or recycled water facilities which are very developed sites that are maintained to be free of vegetation and therefore would have a low or no potential to affect special-status species. This would include the proposed expansions of the wastewater treatment plant, the recycled water treatment improvements, and the expanded desalter, among others. However, some of the PWIMP facilities such as the new storage tanks, the TMDL infiltration pond, and water supply and IPR/DPR wells could be located or located near areas of natural, high quality habitat, and disturbance in these areas could result in impacts to special-status species, especially birds. For animals, impacts are sometimes due to movement into the construction area from nearby habitat, and associated risks from vehicles and equipment traffic, by falling into excavations, or when dewatering aquatic habitat. Construction noise could result in abandonment of nests or other breeding areas used by special-status animals.

Construction of Linear Projects

The PWIMP's linear projects (i.e. rehabilitation/replacement or new water supply pipelines, wastewater and stormwater collection facilities, manholes, and etc.) are and would be located within existing paved existing roadways and other disturbed areas and would have a low or no potential to affect special-status species. However, some of these facilities could be near trees and could result in abandonment of nests of migratory birds and other special status bird species. In addition, these projects have the potential to cross creeks and drainages which could have adverse impacts to special status plant and animal specie sat or downstream of the construction area(s).

Temporary Construction Mitigation Measures

The potential impact of the PWIMP facilities and components would be considered less-than-significant with the implementation of **Mitigation Measures 3.4-1a through 3.4b** below.

Mitigation Measure 3.4-1a: Conduct Pre-construction Biological Survey(s). For each individual or group of PWIMP projects to be constructed, the City shall have the project site and area screen by a qualified biologist to determine whether biological resources may be affected by construction activities. In the event further investigation is necessary, the City will comply with all requirements for investigation, analysis and protection of biological resources. The biologist will review standard information sources to determine special status species with the potential to occur on the project site. The biologist would carry out a site survey by walking or driving over the project site, as appropriate, to note the general resources and whether any habitat for special-status species is present. The biologist would then document the survey with a brief letter report or memo, setting forth the date of the visit, whether habitat for special-status species is present, providing a map or description showing where sensitive areas exist within the site, and identifying any appropriate avoidance measures.

Significance After Mitigation: Less-than-Significant Impact

Long-Term Operational Impacts

Operational impacts would be similar to those of existing facilities. Biological resources could be subject to increases in noise, traffic, night-lighting and further habitat disturbance during routine

or emergency repairs. However, PWIMP operations are not expected to have significant impacts on any known special status plant or animal species.

Long-Term Operational Mitigation Measures

PWIMP operations are not expected to have significant impacts on special status plant or animal species and no mitigation measures are required

Significance Determination: Less-than-Significant Impact

Impact 3.4-2: Implementation of the PWIMP and/or identified components/facilities could have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations adopted by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. The potential impacts due to temporary construction and long-term operations are discussed below.

Temporary Construction Impacts

As discussed above, the PWIMP area would be located in a highly disturbed area from a biological resources standpoint. However, sensitive habitats, including riparian habitats could be affected by the construction of the PWIMP linear projects in particular as they can cross existing creeks and/or drainages and potentially cause impacts at and downstream of the location(s). These would be temporary, but potentially significant.

Temporary Construction Mitigation Measures

The potential impact of the construction of PWIMP facilities on riparian habitats or other sensitive natural communities would be less than significant with implementation of **Mitigation Measures** 3.4-2a and 3.4-2b. The type of impact depends on the project component and the species present.

Mitigation Measure 3.4-2a: Avoid Construction Impacts on Riparian Habitat. PWIMP Project facilities and construction activities shall be designed in a manner that avoids and/or minimizes impacts on riparian habitats to the maximum extent feasible. Temporary disturbance and/or permanent loss of riparian habitat requires a Streambed Alteration Agreement from the California Department of Fish and Game (CDFW) and ESA Section 7 or 10 consultation with USFWS and NMFS if there is a potential impact to listed species or critical habitat.

Unavoidable impacts on riparian habitat shall be formally assessed to satisfy the requirements of the California Department of Fish and Game (CDFW) 1601 Streambed Alteration Agreement) and federal consultation, which typically include compensatory mitigation. Acceptable riparian mitigation ratios shall be based on habitat quality characteristics, such as vegetation structure and complexity, that correspond to fish and wildlife habitat value. Impact ratios of 3:1, 2:1, and 1:1 shall be applied for impacts on high-, medium-, and low-quality habitats, respectively:

High-Quality Habitat – Native overstory with continuous understory or occurring in dense
thickets; dense native overstory with sparse, non-native, or no understory; and native
willow thicket.

- *Medium Quality Habitat* Sparse native overstory with sparse, non-native, or no understory; non-native overstory with native understory; and dense non-native overstory with sparse, non-native, or no understory.
- Low Quality Sparse non-native overstory with sparse, non-native, or no understory; and any areas not included in the medium- or high-quality habitats that will be covered with riprap, gabions, etc. (e.g., ruderal habitat and bare ground).

Furthermore, impacts from encroachment into riparian buffer zones may be considered significant. Appropriate riparian setbacks can be as great as 100-feet and are assessed on a case-by-case basis. A Riparian Restoration Plan shall be prepared by the City and approved by the USFWS, NMFS, and CDFW as appropriate.

Mitigation Measure 3.4-2b: Avoid Construction Impacts on Critical Habitats. The USFWS and CDFW indicated that the PWIMP Study Area overlaps critical habitat for Southwestern Willow Flycatcher, Ventura Marsh Milk-vetch, and Western Snowy Plover habitat. In addition, the PWIMP facilities could also disturb other migratory birds within the area. As a result, and in conjunction with Mitigation Measure 3.4-1a above, construction activities for new facilities and conveyance systems shall be sited in a manner that avoids sensitive upland habitats to the maximum extent feasible. Sensitive upland habitats shall be preserved where possible through facility siting within degraded or non-native vegetation. Sensitive areas shall be flagged for avoidance to minimize the possibility of inadvertent encroachment during construction. Construction staff shall be educated on the sensitive habitats located within and adjacent to the Project's footprint, and a biological monitor shall be present to ensure compliance with off-limits areas.

When avoidance is not feasible during construction activities; sensitive upland habitats temporarily disturbed during construction activities shall be quantified and appropriate restoration strategies shall be set forth in a Habitat Restoration Plan which shall be developed in consultation with the USFWS and the CDFW. The Plan shall include the following elements: specific location of restoration site, details on soil preparation, seed collection, planting, maintenance, and monitoring, and quantitative success criteria. At a minimum, temporarily disturbed areas shall be restored by the Applicant to the natural (preconstruction) conditions, which may include the following actions: salvage and stockpiling of topsoil from maritime chaparral, central dune scrub, and oak woodland; re-grading of disturbed sites with salvaged topsoil; and re-vegetation with native, locally collected species.

Where restoration is not feasible (i.e., the impact is permanent), the City shall purchase and/or preserve similar undisturbed habitat off-site, or restore nearby disturbed areas at a ratio to be determined by the USFWS, CDFW, and other responsible resource agencies with jurisdiction over the project area.

Significance after Mitigation: Less-than-Significant Impact

Long-Term Operational Impacts

PWIMP operational impacts would be similar to those of existing facilities. Biological resources could be subject to increases in noise, traffic, night-lighting and further habitat disturbance during routine or emergency repairs. However, PWIMP operations are not expected to have significant impacts on any known riparian, Southwestern Willow Flycatcher, Ventura Marsh Milk-vetch, Western Snowy Plover and/or any other sensitive habitats.

Long-Term Operational Mitigation Measures

PWIMP operations are not expected to have significant impacts on any known riparian, Southwestern Willow Flycatcher, Ventura Marsh Milk-vetch, Western Snowy Plover and/or any other sensitive habitats.

Significance: Less-than-Significant Impact

Impact 3.4-3: Implementation of the PWIMP and/or identified components/facilities could have a substantial adverse effect on federally protected waters of the U.S. as defined by Section 404 of the federal Clean Water Act or protected waters of the state as defined by Section 1600 et seq. of the California Fish and Game Code (including, but not limited to, marshes, vernal pools, and coastal wetlands) through direct removal, filling, hydrological interruption, or other means. The potential impacts due to temporary construction and long-term operations are discussed below.

Temporary Construction Impacts

Some of the PWIMP project elements could affect streams or wetlands that fall under state or federal jurisdiction. Most impacts would be associated with construction activities and thus would be temporary. Wetland resources could also be affected by siltation or degradation of water quality from spills during construction. The extent of wetlands affected by a project is highly dependent on the final project design.

Temporary Construction Mitigation Measure

Mitigation Measure 3.4-3a: Avoid Federally Protected Wetlands and Waters of the U.S. In conjunction with Mitigation Measure 3.4-1a above, the City shall implement the following measures for those PWIMP facilities sited on or adjacent to wetlands.

- The PWIMP project facilities shall avoid areas of potentially jurisdictional wetland habitats to the maximum extent feasible through Project siting and construction avoidance. The project shall implement Best Management Practices¹ during construction to minimize impacts associated with erosion and sediment deposition into wetland and aquatic habitats. Temporary disturbance and/or permanent loss of wetlands or other waters of the U.S. require permits from both the U.S. Army Corps of Engineers (USACE) and (for areas within the Coastal Zone) the California Coastal Commission (CCC) as well as the Regional Water Quality Control Board (RWQCB).
- A wetland delineation per the USACE Wetland Delineation Manual, and using the oneparameter approach in areas within the Coastal Zone, shall be conducted prior to construction.
- A delineation report shall be prepared and submitted to the USACE and CCC for verification, and approval. Through this process, final calculations of wetland area present

Best Management Practices are subject to review and approval, and may be expected to include BMPs as described in Caltrans (2003) Caltrans Storm Water Quality Handbooks; Construction Site Best Management Practices Manual.

in the Project area would be obtained for Project permitting. In addition, plans for proposed alteration to any watercourse shall be submitted to the CDFW for review.

- The wetland habitat that would be lost under any given project element shall be functionally replaced as part of the Mitigation and Monitoring Plan required for permit issuance. In-kind and on-site replacement of lost wetland habitats must be done where possible. If multiple impacts on wetlands occur from the construction of facilities, larger wetland mitigation areas shall be created that provide greater functions and values than numerous small mitigation sites. The determination of wetland impacts and the subsequent location and design of potential mitigation sites be determined by qualified biologists in coordination with resource agency personnel. Mitigation and Monitoring Plans shall require the following of the City:
 - o Replacement of lost acreage and functions of wetland habitat;
 - o Identification of the restoration opportunities, complete with an analysis of the technical approach to create high quality wetlands;
 - o Prior to construction of any project element that may impact wetland habitats, obtaining any necessary permits from the USACE, RWQCB or the CCC;
 - O Preparation of detailed plans for wetland mitigation construction that include excavation elevations, location of hydrologic connections, planting plans, and soil amendments, if necessary; preparation of maintenance and monitoring plans in consultation with a qualified habitat restoration specialist; monitoring of any mitigation wetlands for a period of 5 years, during which the site will achieve the target jurisdictional acreage by Year 5; and determination of specific performance criteria and monitoring for site success; provision of annual monitoring reports to the appropriate resource agencies.

Significance After Mitigation: Less-than-Significant Impact

Long-Term Operational Impacts

PWIMP operations are not expected to have significant impacts on any known wetlands and/or Waters of the U.S.

Long-Term Operational Mitigation Measures

PWIMP operations are not expected to have significant impacts to wetlands and/or Waters of the U.S. and no mitigation measures are required

Significance Determination: Less-than-Significant Impact

Impact 3.4-4: Implementation of the PWIMP and/or identified components/facilities could interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. The potential impacts due to temporary construction and long-term operations are discussed below.

Temporary Construction Impacts

Habitat in the PWIMP Project Area is fragmented by industrial uses, commercial uses, residential developments, roads and adjacent agricultural fields. Construction activities are not expected to have any significant effect on fish and wildlife movement. However, the potential exists that some construction activities could affect migratory birds in the area. With the implementation of the **Mitigation Measure 3-4-1a** above, impacts would be considered less than significant.

Temporary Construction Mitigation Measures

With the implementation of the **Mitigation Measure 3-4-1a** above, impacts would be considered less than significant.

Significance After Mitigation: Less-than-Significant Impact

Long-Term Operational Impacts

PWIMP operations are not expected to have significant impacts on any fish and wildlife movement.

Long-Term Operational Mitigation Measures

PWIMP operations are not expected to have significant impacts fish and wildlife movement and no mitigation measures are required

Significance Determination: Less-than-Significant Impact

Impact 3.4-5: Implementation of the PWIMP and/or identified components/facilities could conflict with any local policies or ordinances protecting biological resources. The potential impacts due to temporary construction and long-term operations are discussed below.

Temporary Construction Impacts

Construction activities associated with the PWIMP facilities would not conflict with the City's 2030 General Plan, the Ventura County General Plan, and/or any other local plans or policies protecting biological species.

Temporary Construction Mitigation Measures

Construction activities associated with the PWIMP facilities would not conflict with the City's 2030 General Plan, the Ventura County General Plan, and/or any other local plans or policies protecting biological species. No Impacts are expected and no mitigation measures are required.

Significance Determination: No Impact

Long-Term Operational Impacts

Operational activities associated with the PWIMP facilities would not conflict with the City's 2030 General Plan, the Ventura County General Plan, and/or any other local plans or policies protecting biological species.

Long-Term Operational Mitigation Measures

Operational activities associated with the PWIMP facilities would not conflict with the City's 2030 General Plan, the Ventura County General Plan, and/or any other local plans or policies protecting biological species. No Impacts are expected and no mitigation measures are required.

Significance Determination: No Impact

Impact 3.4-6: Implementation of the PWIMP and/or identified components/facilities could conflict with an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. The potential impacts due to temporary construction and long-term operations are discussed below.

Temporary Construction Impacts

Construction activities associated with the PWIMP facilities would not conflict with an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Temporary Construction Mitigation Measures

Construction activities associated with the PWIMP facilities would not conflict an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. No Impacts are expected and no mitigation measures are required.

Significance Determination: No Impact

Long-Term Operational Impacts

Operational activities associated with the PWIMP facilities would not conflict with an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Long-Term Operational Mitigation Measures

Operational activities associated with the PWIMP facilities would not conflict with the City's 2030 General Plan, the Ventura County General Plan, and/or any other local plans or policies protecting biological species. No Impacts are expected and no mitigation measures are required.

Significance Determination: No Impact

3.4.5 Cumulative Effects

The proposed PWIMP will mostly take place within already-developed roadways and parcels in urbanized areas. Most of the project area has low biological sensitivity. The project is not likely to affect built environment resources, and little or no ground-disturbing activity in undeveloped areas will occur. Mitigation measures are detailed above that would reduce individual impacts to

less than significant. Given these factors, the PWIMP will not result in significant impacts to biological resources, and would not contribute to potential significant cumulative impacts. No mitigation measures for cumulative impacts are thus proposed.