3.3 Biological Resources

This section establishes the existing conditions and provides an evaluation of potential impacts to biological resources associated with the proposed program.

3.3.1 Environmental Setting

The 12 Enhanced Watershed Management Program (EWMP) areas are each located within Los Angeles County (County), which exhibits native habitats corresponding with the California Floristic Province. The County experiences a mediterranean climate, which is generally characterized by relatively heavy winter precipitation and dry summers. The County encompasses the intersection of the Transverse and Peninsular mountain ranges, supporting a variety of habitats within mountain ranges, broad alluvial valleys, deserts, and coastal shorelines. Los Angeles County hosts one of the most dense and populous urban metropolises in the country, which has substantially altered the native habitats. However, within the mountainous areas and some drainage areas, native habitats still remain.

Habitat Types

The EWMP areas contain an array of coastal habitats such as: marine, intertidal, estuarine, coastal salt marsh, and beach dunes; freshwater aquatic habitat such as marshes, lakes, and ponds; riverine aquatic habitat including streambeds and associated riparian areas; and upland communities such as coastal sage scrub, chaparral, foothill woodlands, and coniferous forests in the mountains. The dominant native plant community in Los Angeles County is chaparral (Los Angeles County, 2012a). In general, communities that are relatively undisturbed and have connectivity to other open space areas function as higher-quality habitat for sensitive plants and wildlife. Non-native, disturbed, and/or isolated habitats generally provide lower-quality wildlife habitat, though some sensitive plants and wildlife are known to occur in such areas.

Habitats within the EWMP Areas

The proposed program comprises12 EWMP areas, each with a disparate mix of urban development and natural habitat features. Although diverse habitats may occur throughout the County and within each of the EWMP areas to varying degrees, the following summaries combine EWMP groups into the following six distinct watershed groups that have similar habitat types:

1. Southern Coastal EWMP Watersheds (Beach Cites, Peninsula, Southern Santa Monica Bay, Marina del Rey, Ballona, Peninsula) – These watersheds are dominated by urbanized inland and beach communities with high-density residential and commercial land uses throughout the watersheds. Sensitive habitats in these areas include coastal drainages, coastal lagoons, and dune scrub. However, the most of the drainages in these watersheds have been channelized with hard-bottom channels such as Ballona Creek and provide minimal habitat value to sensitive species. Most of the coastal creeks have been rechannelized and are largely underground with some exceptions in the Peninsula EWMP. The value of riparian and aquatic resources in these urbanized areas is generally low except for some key exceptions, including the Del Rey Lagoon and Ballona Lagoon and wetlands where the Ballona Creek watershed meets the coast. **Figure 3.3-1** provides photographs of typical drainages in the watershed.

2. Dominguez Channel (Dominugez Channel EWMP) – This watershed is characterized by high-density inland communities and an industrial shoreline. Much of the drainages are urbanized and underground or otherwise concrete-lined, with notable exceptions such as Machado Lake. The Dominguez Channel is tidally influenced but is a man-made rip-rap or concrete-lined channel. Some vegetation occurs in localized drainages and some tributary drainages are being restored for wetland values. However, outside of the restoration areas and recreation features (such as Machado Lake), habitat values in this urban and industrial area are low. Figure 3.3-2 provides photographs of typical drainages in the watershed.

3. Northern Coastal EWMP Watersheds (Malibu and Upper Santa Monica Bay) -

These watersheds are characterized by dense residential development along the coast and less development and greater open space areas inland along the coast mountain range. Sensitive habitats in these areas are more prevalent than in the more urbanized watersheds, including coastal lagoons and dunes, streams and riparian habitats, and upland forests and scrub. Receiving waters in these watersheds remain unlined with significant riparian corridors. The developed areas have lower-density developments than in the Southern Coastal watersheds and are interspersed with canyons and creeks. The coastal streams provide important habitat for sensitive species, including arroyo toad, native fish, and avian species found in riparian forests. **Figure 3.3-3** provides photographs of typical drainages in the watershed.

4. <u>Upper Los Angeles River Watershed</u> – This watershed traverses a large diverse area of the Los Angeles Basin characterized by dense urbanization. The predominant urbanization results in limited biological value in the watershed. The natural hydrology of the Los Angeles River watershed has been altered by channelization and the construction of dams and flood control reservoirs. The Los Angeles River and many of its tributaries are lined with concrete for most or all of their length. Soft-bottomed segments of the Los Angeles River occur where groundwater upwelling prevents armoring of the river bottom. Numerous soft-bottom tributary streams feed into the river from the mountainous perimeter.

Because of persistent dry-weather flows caused by irrigation run off and wastewater treatment plant discharges, vegetation within these drainages is common. The Los Angeles County Flood Control District routinely clears the vegetation from most of the vegetated drainages under permits from the U.S. Army Corps of Engineers (USACE) and California Department of Fish and Wildlife (CDFW). However, several stream segments exhibiting high-value habitats remain throughout this watershed, including Compton Creek and Bull Creek. When not cleared for flood control purposes, these areas can develop into substantial riparian habitats supporting sensitive species such as least Bell's vireo and southwest flycatcher as well as other diverse ecological communities. Lower in the watershed where perennial flows are substantial because of wastewater discharges, aquatic habitats occur that support waders, ducks, and gulls. **Figure 3.3-4** provides photographs of typical drainages in the watershed.



Typical concrete-lined Ballona Creek segment near Culver City.



Fresh water marsh in Playa Del Rey, adjacent to Ballona Creek.

LA County PEIR EWMP . 140474 Figure 3.3-1 Typical Drainages in the Southern Coastal EWMP Watersheds



Typical Dominguez Channel segment near Hawthorne.



Dominguez Channel wetlands near Long Beach.

LA County PEIR EWMP . 140474 Figure 3.3-2 Typical Drainages in the Dominguez Channel Watershed Management Areas



Malibu Lagoon.



Drainage at Marie Canyon Low-Flow Diversion.

LA County PEIR EWMP . 140474 Figure 3.3-3 Typical Drainages in the Northern Coastal EWMP Watersheds



Showing aquatic and riparian habitat in concrete channeled Los Angeles River, near the Los Angeles Zoo.



Showing riparian habitat in Bull Creek, near Van Norman Lakes Complex.

LA County PEIR EWMP . 140474 Figure 3.3-4 Typical Drainages in the Upper Los Angeles River Watershed

- 5. Upper San Gabriel and Rio Hondo and Watersheds These watersheds are characterized by high-density development in the lower watershed areas and lower-density development and open space in the upper watersheds in the San Gabriel Mountain foothills. Sensitive habitats in these areas range from sparse riparian areas and scrub within drainages in the urbanized lower watersheds to pristine mountain forests and riparian corridors the San Gabriel Mountains. The San Gabriel River and Rio Hondo are unlined in the upper watershed and convey controlled non-storm and storm flows to recharge basins and downstream sections of the river. Habitats within the soft-bottom river channels consist of chaparral and sage scrub with occasional riparian willow and sycamore riparian vegetation accustomed to long periods of dry weather with occasional ephemeral water flows. Upwelling of groundwater and dry-weather flows combine to support substantial riparian vegetation in the Whittier Narrows area. Figure 3.3-5 provides photographs of typical drainages in the watershed.
- 6. <u>Upper Santa Clara River Watershed</u> The Santa Clara River watershed is distinctive in that it is predominantly open space—nearly 90 percent of the watershed is open space with approximately 88 percent being undeveloped. The watershed contains one of the last remaining natural rivers in Southern California. In years of significant rainfall, ephemeral springs and year-round flows exist in some tributaries and natural upstream areas. The river is ephemeral in the upper watershed, experiencing groundwater-induced flows near Santa Clarita, and then wastewater treatment discharges create a perennial flow from Valencia to the Ventura County border. Habitat values in these areas are high, including extremely rare habitat for aquatic resources such as the three-spined stickleback, Santa Ana sucker, and arroyo toad. **Figure 3.3-6** provides photographs of typical drainages in the watershed.

Sensitive Habitats

The California Natural Diversity Database (CNDDB), managed by CDFW, identifies 20 natural communities of special management concern within the broad-ranging EWMP areas, as shown below. **Appendix D** contains a description of each of these habitats and **Figure 3.3-7** depicts their locations throughout the EWMP areas.

- California Walnut Woodland
- Canyon Live Oak Ravine Forest
- Mainland Cherry Forest
- Open Engelmann Oak Woodland
- Riversidean Alluvial Fan Sage Scrub
- Southern California Arroyo Chub/ Santa Ana Sucker Stream
- Southern California Coastal Lagoon
- Southern California Steelhead Stream
- Southern Coast Live Oak Riparian Forest,
- Southern California Threespine Stickleback Stream

- Southern Coastal Bluff Scrub
- Southern Coastal Salt Marsh
- Southern Cottonwood Willow Riparian Forest
- Southern Dune Scrub
- Southern Mixed Riparian Forest
- Southern Riparian Scrub
- Southern Sycamore Alder Riparian Woodland
- Southern Willow Scrub
- Valley Oak Woodland
- Walnut Forest



Typical Upper San Gabriel River landscape.



Drainage in Whittier Narrows, showing aquatic and riparian habitats.

LA County PEIR EWMP . 140474 Figure 3.3-5 Typical Drainages in the Upper San Gabriel and Rio Hondo Watersheds



Unlined river channel showing riparian habitat in Upper Santa Clara River.



Typical riparian and aquatic habitat in Upper Santa Clara River.

LA County PEIR EWMP . 140474 Figure 3.3-6 Typical Drainages in the Upper Santa Clara River Watershed



SOURCE: ESRI; California Natural Diversity Database (CNDDB), 2014.

LA County PEIR EWMP . 140474 Figure 3.3-7 Natural Communities

Special-Status Species

Special-status species are those plants and animals that, because of their recognized rarity or vulnerability to habitat loss or population decline, are recognized 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" and include the following categories:

- Plants or animals listed or proposed for listing as threatened or endangered under the federal Endangered Species Act (FESA) (50 Code of Federal regulations [CFR] 17.12 [listed plants], 17.11 [listed animals] and various notices in the Federal Register [FR] [proposed species])
- Plants or animals that are candidates for possible future listing as threatened or endangered under FESA (61 FR 40, February 28, 1996)
- Plants or animals listed or proposed for listing by the State of California (State) as threatened or endangered under the California Endangered Species Act (CESA) (14 California Code of Regulations [CCR] 670.5)
- Plants listed as rare or endangered under the California Native Plant Protection Act (California Fish and Game Code, Section 1900 et seq.)
- Plants that meet the definitions of rare and endangered under the California Environmental Quality Act (CEQA) (CEQA Guidelines Section 15380)
- Plants considered under the California Native Plant Society (CNPS) to be "rare, threatened or endangered in California" (Lists 1A, 1B, and 2 in CNPS 2014)
- Plants listed by CNPS as plants about which more information is needed to determine their status and plants of limited distribution (Lists 3 and 4 in CNPS 2014), which may be included as special-status species on the basis of local significance or recent biological information
- Animals fully protected in California (California Fish and Game Code, Sections 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians])
- Plants or animals covered by a locally or state adopted species conservation plan, including sensitive plants and animals and narrow endemic plants that have reasonable potential to occur on-site

The database search yielded 72 plant species and 83 wildlife species within the EWMP area and immediate vicinity (CNDDB 2014). Special-status species are typically supported by native upland and riparian habitats, but they can also inhabit disturbed and urbanized areas. **Appendix E** contains a list of special-status species found within the combined EWMP areas and a figure that depicts their locations.

Wildlife Movement

Habitat linkages are contiguous areas of open space that connect two larger habitat areas. Linkages provide for both diffusion and dispersal for a variety of species within the landscape. In addition, linkages can serve as primary habitat for some smaller species. Corridors are linear linkages between two or more habitat patches. Corridors provide for movement and dispersal, but do not necessarily include habitat capable of supporting all life history requirements of a species.

Wildlife movement corridors are critical for the survivorship of ecological systems for several reasons. Corridors can connect water, food, and cover sources, spatially linking these three resources with wildlife in different areas. In addition, wildlife movement between habitat areas provides for the potential of genetic exchange between wildlife species populations, thereby maintaining genetic variability and adaptability to maximize the success of wildlife responses to changing environmental conditions. This is especially critical for small populations subject to loss of variability from genetic drift and effects of inbreeding. The nature of corridor use and wildlife movement patterns varies greatly among species.

Jurisdictional Resources

Wetlands and permanent and intermittent drainages, creeks, and streams identified as waters of the United States are subject to the jurisdiction of USACE and Regional Water Quality Control Board (RWQCB) under Section 404 and Section 401, respectively, of the Federal Clean Water Act. All of the rivers and flood control drainages that flow to the ocean within the EWMP area are within the jurisdiction of these agencies.

Streambeds are subject to regulation by the CDFW under Section 1602 of the California Fish and Game Code. A stream is defined under these regulations as a body of water that flows at least periodically or intermittently through a bed or channel having banks and that supports fish or other aquatic life. This definition includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation. CDFW jurisdiction typically extends to the edge of the riparian vegetation canopy.

3.3.2 Regulatory Setting

Federal

Federal Endangered Species Act

The U.S. Fish and Wildlife Service (USFWS) administers the federal Endangered Species Act (FESA) that provides a process for listing species as either threatened or endangered, and methods of protecting listed species. Species are listed as either endangered or threatened under Section 4 of the FESA that defines "endangered" as any plant or animal species that is in danger of extinction throughout all or a significant portion of its range and "threatened" if a species is likely to become endangered in the foreseeable future. Section 9 of the FESA prohibits take of listed threatened or endangered species. Except as provided in Sections 7 and 10 of the FESA, take of listed threatened or endangered species is prohibited. The term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in such conduct. Harm under the definition of take includes disturbance or loss of habitats used by a

threatened or endangered species during any portion of its life history. Under the regulations of the FESA, the USFWS may authorize take when it is incidental to, but not the purpose of, an otherwise lawful act.

Pursuant to the FESA, USFWS and National Marine Fisheries Service (NMFS) have designated critical habitat for several endangered and threatened species within Los Angeles County. Critical habitat is identified as a specific geographic area that contains features essential for the conservation of a threatened or endangered species and that may require special management and protection. Critical habitat may include an area that is not currently occupied by the species but that will be needed for its recovery (USFWS, 2014a). **Figure 3.3-8** identifies federally designated critical habitats in the County.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C. 703-711) makes it unlawful to possess, buy, sell, purchase, barter or take any migratory bird listed in Title 50 of the Code of Federal Regulations Part 10. Take in the context of the MBTA is the possession or destruction of migratory birds, their nests or eggs. Disturbances that causes nest abandonment and/or loss of reproductive effort or the loss of habitats upon which these birds depend would be in violation of the MBTA.

Although impacts to migratory birds are highly unlikely because of the disturbed nature of the proposed project's site locations, the applicant will be required to either avoid impacts to migratory birds and their nests, or to obtain a permit from the USFWS providing for the take of a migratory bird. Should the nesting of any migratory bird occur on or adjacent to the project site during grading or construction activities, a USFWS-qualified biological monitor would have the authority to halt all work activities and notify the city and corresponding resource agency.

Clean Water Act Section 404

Wetlands are generally considered to be areas that are periodically or permanently inundated by surface or ground water and support vegetation adapted to life in saturated soil. Wetlands are recognized as important features on a regional and national level because of their high inherent value to fish and wildlife, use as storage areas for stormwater and floodwater, and water recharge, filtration, and purification functions. Technical standards for delineating wetlands have been developed USACE which generally define wetlands through consideration of three criteria: hydrology, soils, and vegetation. Under Section 404 of the Clean Water Act (CWA), USACE is responsible for regulating the discharge of dredged or fill material into waters of the United States. The term "waters" includes wetlands and non-wetland bodies of water that meet specific criteria as defined in the Code of Federal Regulations. All three of the identified technical parameters (hydrology, soils, and vegetation) must be met for an area to be identified as a wetland under USACE's CWA Section 404 jurisdiction, unless the area has been modified by human activity. In general, a permit must be obtained before the discharge of dredged or fill material can be placed in wetlands or other waters of the United States. USACE, at its discretion, issues several types of permits (Nationwide, Individual, or General) depending on the acreage and purpose of discharge of fill or dredged material into waters of the United States.



SOURCE: ESRI; Los Angeles County GIS; FWS, 2014.

LA County PEIR EWMP . 140474 **Figure 3.3-8** Los Angeles County Significant Ecological Areas and Critical Habitat

State

California Endangered Species Act

The CDFW administers the CESA. The State of California considers an endangered species one whose prospects of survival and reproduction are in immediate jeopardy. A threatened species is one present in such small numbers throughout its range that it is likely to become an endangered species in the near future in the absence of special protection or management. And a rare plant species is one present in such small numbers throughout its range that it may become endangered if its present environment worsens. Except as provided in CESA Section 2081, State threatened, endangered, and candidate species are protected against take, which under the CESA is restricted to direct killing or harm of individual animals and does not apply to the loss of habitat as it does under FESA.

Clean Water Act Section 401 Certification or Waiver, and State Discharge Permit under the Porter-Cologne Act

The State of California regulates water quality related to discharge of fill material into waters of the State pursuant to Section 401 of the CWA. Section 401 compliance is a federal mandate regulated by the State. The local RWQCBs have jurisdiction over all those areas defined as jurisdictional under Section 404 of the CWA. Where a 404 permit is required, a 401 water quality certification from the RWQCB is also required.

In addition, the State regulates water quality for all waters of the State, that may also include isolated wetlands as defined under the California Porter-Cologne Water Quality Control Act (Porter Cologne; Ca. Water Code, Div. 7, Section 13000 et seq.). The State 401 Certification Program regulates all discharges that can affect water quality, even if there is no significant nexus to a traditional navigable water body required for USACE determination of jurisdiction over waters of the United States. In such instances, a Waste Discharge Permit is required even though federal CWA Section 401 water quality certification or 404 permits are not required.

Section 1602 Lake and Streambed Alteration Agreement

Jurisdictional authority of the CDFW over the bed, bank, or channel of a river, stream, or lake is established under Section 1600 et seq. of the Fish and Game Code, which pertains to activities that would disrupt the natural flow or alter the channel, bed, or bank of any lake, river, or stream. The Fish and Game Code stipulates that it is unlawful to substantially divert or obstruct the natural flow or substantially change the bed, channel or bank of any river, stream, or lake resulting in a substantial effect on a fish or wildlife resource without notifying the CDFW and completing the Streambed Alteration Agreement process.

Fish and Game Code of California

All birds, and raptors specifically, and their nests, eggs, and parts thereof are protected under Sections 3503.5 of the Fish and Game Code of California. Disturbance that causes nest abandonment and/or loss of reproductive effort (e.g., killing or abandonment of eggs or young) is considered a violation of this code. Additionally Section 3513 prohibits the take or possession of any migratory nongame bird listed by the MBTA.

Non-Listed Species Management and Conservation Concerns

Species of Special Concern is an informal designation used by CDFW for some declining wildlife species that are not proposed for listing as threatened or endangered. This designation does not provide legal protection, but signifies that these species are recognized as declining by CDFW.

The CNPS has developed an inventory of California's sensitive plant species. This inventory summarizes information on the distribution, rarity, and endangerment of California's vascular plants. The inventory is divided into four lists based on the rarity of the species. In addition, the CNPS provides an inventory of plant communities that are considered natural communities of special concern by the State and federal resource agencies, academic institutions, and various conservation groups. The determination of the level of significance of impacts on plant species and natural communities is based on the number and size of remaining occurrences as well as recognized threats.

Natural communities of special concern are those that support concentrations of special-status plant or wildlife species, are of relatively limited distribution, or are of particular value to wildlife. Natural communities of special concern are not afforded legal protection unless they are designated critical habitat for federally listed threatened or endangered species, support formally listed species, or are jurisdictional wetland habitats.

Local

Los Angeles County Significant Ecological Areas

As part of the General Plan Conservation/Open Space and Land Use elements, the County has identified and adopted policies for Significant Ecological Areas (SEAs). The purpose of establishing a SEA is to maintain biological diversity by establishing natural biological parameters, including species, habitat types, and linkages. The County General Plan includes recommended management practices for each SEA. Forty-eight SEAs fall within the EWMP area, as shown in Figure 3.3-7.

Santa Monica Mountains Conservancy

The Santa Monica Mountains Conservancy was established by the California State Legislature in 1980. The Conservancy's mission is to preserve and restore natural habitats in Southern California to form an interlinking system of parks and wildlife habitats that are easily accessible to the general public. The Conservancy's Comprehensive Plan outlines conservation priorities and recreational opportunities in the Santa Monica Mountains. Development projects in the Santa Monica Mountains area subject to review by the County for consistency with the Comprehensive Plan.

Los Angeles County Oak Tree Ordinance and City Tree Preservation Ordinances

Title 22, Part 16, of the Los Angeles County Code of Ordinances is the Oak Tree Ordinance. The ordinance was established to recognize oak trees within the County as a historical, aesthetic, and ecological resource. The ordinance applies to all unincorporated areas of the County. Several cities within the County may have adopted this or a similar ordinance. The Los Angeles County

ordinance, in particular, prohibits a person to "cut, destroy, remove, relocate, inflict damage, or encroach into the protected zone of any tree of the oak genus" that is 8 inches or more in diameter. Other city ordinances, such as the City of Los Angeles, may protect other tree species in addition to oaks.

Los Angeles County Oak Woodland Management Plan

Los Angeles County adopted a California Oak Woodlands Conservation Management Plan pursuant to the requirements of Assembly Bill (AB) 242 in 2011. The Los Angeles County Oak Woodlands Conservation Management Plan provides consistent policy for the management of oak woodlands that can be incorporated into the Los Angeles County General Plan and other relevant planning documents, developing a comprehensive and cohesive strategy for dealing with loss, and creating opportunities for recovering oak woodlands.

3.3.3 Impact Assessment

Thresholds of Significance

To determine the level of significance of an identified impact, the criteria outlined in the CEOA Guidelines were used. CEQA Guidelines Section 15065 directs lead agencies to find that a project may have a significant effect on the environment if it has the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory. CEQA Guidelines Section 15206 further specifies that a project shall be deemed to be of statewide, regional, or area-wide significance if it would substantially affect sensitive wildlife habitats including, but not limited to, riparian lands, wetlands, bays, estuaries, marshes, and habitats for rare and endangered species as defined by the Fish and Game Code Section 903. CEQA Guidelines Section 15380 provides that a plant or animal species, even if not on one of the official lists, may be treated as "rare or endangered" if, for example, it is likely to become endangered in the foreseeable future. Additional criteria to assess significant impacts to biological resources due to the proposed project are specified in CEQA Guidelines Section 15382 (Significant Effect on the Environment) "...a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance."

Appendix G of the CEQA Guidelines indicates that a project would have a significant impact on biological resources if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFG or USFWS.
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFG or USFWS.

- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.

Project Impact Discussion

Impact 3.3-1: The proposed project could have a substantial adverse effect, either directly or through habitat modifications, on any sensitive species identified as special-status in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

Structural (Regional, Centralized, and Distributed) BMPs

Construction

Construction of structural Best Management Practices (BMPs) would occur primarily within high-density urban, commercial, industrial, and transportation areas where they will either replace or improve upon existing stormwater infrastructure. Construction typically requires the permanent removal of aboveground infrastructure and/or surface materials such as asphalt and concrete, as well as excavation and grading for projects on soil-covered sites. The majority of the construction impact area would occur within developed and disturbed areas adjacent to existing infrastructure that do not support native vegetation or undisturbed habitat. However, since most of the BMPs would be located in existing drainages, each individual BMP could affect riparian vegetation during installation. Most of the smaller BMPs would avoid impacting high-value habitats during construction. Upland scrubs and native oak forests would be only incidentally affected if at all. In stream effects could occur to riparian scrub and aquatic habitats.

Construction of structural BMPs, regional and centralized BMPs in particular, may affect large open space or riparian habitats that would have a higher potential to support special-status wildlife species. For example, centralized BMPs include the construction of stream/creek restoration projects and low-flow diversion (LFD) projects which may require working within or adjacent to sensitive communities (i.e., streams or wetlands) that could support special-status wildlife species. Large projects could affect upland scrub or oak woodlands. **Mitigation Measure BIO-1** requires that implementing agencies evaluate the suitability of potential BMP sites for their potential to impact valued habitats such as oak woodland and riparian willow forests.

Common and protected migratory birds and raptors are likely to nest or forage in habitats found within the EWMP area. Implementation of the structural BMPs may result in temporary or permanent loss of foraging habitat for migratory birds, including raptor species. Similarly,

proposed construction activities could impact nesting birds or roosting bats. Potential bat roost sites in the vicinity of the project areas may include abandoned structures and bridges.

Mitigation Measures BIO-2 through **BIO-8** require impact characterization, minimization and compensation for impacts to highly valued habitats in consultation with the USFWS and CDFW. Implementation of mitigation measures requiring careful consideration of suitable sites would reduce impacts to natural habitats on a regional scale to less-than-significant levels.

Operation

Maintenance of BMPs may involve accessing drainages through habitat areas or clearing vegetation. If BMPs require routine maintenance that affects habitat, those activities would need to be conducted in the non-bird nesting season to avoid impacts to nesting birds where feasible. Since drainages are within the CDFW jurisdiction, any vegetation-clearing activities would be subject to permits from CDFW as well as potentially the Los Angeles RWQCB and USACE. These permits would include provisions to avoid and mitigate impacts to sensitive habitats and species. Adherence to these conditions of approval would ensure that impacts to natural resources from maintenance would be less than significant.

BMPs designed to retain peak storm flows including regional BMPs would have no impact on downstream biological resources, since peak storm flows do not support perennial vegetation. The natural hydrology of the region experiences ephemeral flows that respond to seasonal precipitation, conveying water from the upper watersheds to the lower watersheds quickly. Urbanization has increased the speed of water flows through the system. The BMPs are designed to slow water flows and return to a hydrology closer to predevelopment conditions.

However, some drainages have developed new perennial flow regimes that support vegetation as a result of landscape runoff or wastewater discharges. Some of this vegetation may support special-status species including least Bell's vireo or southwest willow flycatcher, particularly in suburban areas. If BMPs designed to retain dry-weather flows reduced the wetted area of drainages or completely eliminated flows in certain drainages that support riparian habitat, impacts to sensitive species would be significant.

This potential effect is most likely to occur within suburban areas, which are more prevalent in the Santa Clara River watershed, Malibu watershed, and San Gabriel watershed. The more urbanized watersheds in the southern coastal areas, such as Dominguez Channel and Ballona Creek, would be less likely to experience impacts to riparian vegetation from low-flow retention, with some noted exceptions such as the Ballona wetlands.

The primary threat to the local ecology in Los Angeles County is urban development. Returning the local hydrology to a more natural condition would occur over time and would result in improved natural habitat functions with little direct impact to protected sensitive species. Although riparian habitat may flourish in certain urban drainages, the vegetation is often a nuisance. Many soft-bottom channels are periodically cleared of vegetation by the Los Angeles County Flood Control District under a permit from the USFWS and CDFW that requires compensation elsewhere in the watershed. The reduction in perennial flows in most channels may

result in less "choking" of flood control channels with nuisance vegetation, resulting in flood control benefits.

Furthermore, in many cases, it is difficult to attribute the health and extent of a wetted area supporting vegetation to specific Municipal Separate Storm Sewer System (MS4) discharge points. Individual BMP installation may reduce flows, but not eliminate wetted areas supporting certain habitat areas, resulting in no immediate observed reduction in riparian cover.

Over time, the addition of BMPs into suburban watersheds may reduce vegetation within certain drainages slowly as the cumulative effects of multiple BMPs combine to limit dry-weather flows. The gradual reduction in habitat would allow sensitive species to adapt to the changing conditions, particularly avian species such as least Bell's vireo would relocate to other nesting areas as conditions change. This is not dissimilar to natural conditions where riparian areas change over time with large flood flows. Although this gradual decrease in dry-weather flows in the region may reduce riparian vegetation in certain locations, the overall reduction is not expected to be significant, since the high-value habitats are limited and largely dependent on groundwater or wastewater treatment discharges.

Nonetheless, to ensure that impacts to downstream biological resources are less than significant, **Mitigation Measure BIO-1** requires that implementing agencies evaluate the potential direct impacts that could result from dry-weather flow reduction to downstream habitats. These conditions may be most prevalent in the Santa Clara River watershed, Malibu Watershed, the Upper Los Angeles River Watershed, and San Gabriel River Watershed where suburban landscape irrigation runoff has created isolated patches of riparian vegetation. **Mitigation Measures BIO-2** and **BIO-4** would require consultation with the wildlife agencies if flow reduction resulted in significant downstream habitat impacts. However, on a regional scale, a return to a more natural hydrology is not expected to significantly reduce the prevalence of highvalue habitats or their use by sensitive species in the County. With implementation of Mitigation Measures BIO-1, BIO-2 and BIO-4, impacts to riparian vegetation from flow retention would be less than significant.

Future project-level environmental review processes will consider proposed projects as necessary to determine project-level impacts on special-status wildlife species and will require the implementation of project-specific mitigation measures to minimize and reduce potentially significant impacts to special-status wildlife species. Where potentially significant impacts to biological resources are identified for individual projects, implementation of Mitigation Measures BIO-1 through BIO-8 would avoid or reduce the impact to a less than significant level.

Summary of EWMP Groups

The following discussion provides additional detail to each of the watershed groups:

Southern Coastal EWMP Watersheds (Beach Cites, Southern Santa Monica Bay, Peninsula,

Marine del Rey, Ballona) – Few direct impacts to biological resources from construction would be expected in these watersheds since the drainages are largely channelized. Large-scale lagoon restoration projects would temporarily affect habitats within the construction zones, but the

objective of these projects is to enhance biological functions. Otherwise, the urbanized drainages in these areas exhibit low-quality habitats and any work on the beach that could affect sensitive avian species would be minimal.

LFDs and dry-weather flow retention in this EWMP area would result in less fresh water reaching the tidal areas than is currently the case. However, at the lower end of the watershed, impacts to riparian and aquatic resources would be minimal since the areas are highly urbanized and the drainages are channelized with low habitat value. An exception to this is the Ballona freshwater marsh. Reduction in dry-weather flows to the coastal lagoons would reduce pollutant loading from the watershed and as a result improve water quality and native habitat values compared to existing conditions. In the upper portion of the watersheds, the reduction of perennial flows in drainages could affect urban-influenced low-value habitats. However, if these habitats were of sufficient value to support least Bell's vireo or other sensitive species, mitigation may be required. Implementation of mitigation measures BIO-1 through BIO-8 would reduce impacts to less-than-significant levels.

Northern Coastal EWMP Watersheds (Malibu and Upper Santa Monica Bay) – Installation of structural BMPs within drainages could affect existing habitats and sensitive species, particularly in the upper drainages that are largely undeveloped and exhibit high habitat values. Implementation of mitigation measures BIO-1 through BIO-8 would ensure that implementing agencies identify potentially affected resources and implement measures to avoid or reduce impacts to less-than-significant levels. Once installed, the modification to the hydrology created by the BMPs would more closely resemble historical conditions.

LFDs in the upper watersheds would return local coastal creeks to conditions resembling preurbanization. Native habitats along the coast have adapted to the climatological conditions and would continue to thrive with implementation of dry-weather-flow diversions and flow retention. However, in some localized areas, flow diversions could affect downstream riparian and aquatic habitat, reducing fresh water flow and wetted areas inhabited by willow forests. However, much of the high-value riparian and aquatic habitats in the upper coastal watershed that support sensitive birds and fish are fed from natural seepage. Infiltration BMPs would augment seepage and would serve to expand wetted areas supporting riparian and wetland habitats. Implementation of mitigation measures BIO-1 through BIO-8 would reduce impacts to less-than-significant levels.

<u>Upper San Gabriel and Rio Hondo and Watersheds</u> – Installation of structural BMPs in the upper San Gabriel and Rio Hondo watersheds have the potential to impact riparian and in-channel scrub habitats. The larger rivers are dry most of the year and habitat is adapted to the ephemeral cycle. If construction activities were to occur in an area exhibiting native vegetation, implementing agencies would need to implement measures to avoid, reduce, or compensate for significant impacts. Implementation of mitigation measures BIO-1 through BIO-8 would ensure that implementing agencies identify potentially affected resources and implement measures to avoid or reduce impacts to less-than-significant levels.

<u>Upper Los Angeles River Watershed</u> – The Upper Los Angeles River watershed is large and exhibits a large variety of habitats within drainages and within surrounding uplands and mountains. If construction activities were to occur in an area exhibiting native vegetation, implementing agencies would need to implement measures to avoid, reduce, or compensate for significant impacts. However, these construction effects would be temporary and would not result in significant reduction in habitat values within the watershed.

LFDs and retention in this highly urbanized watershed could result in substantial modifications to hydrologic conditions in the smaller channels and streams. Much of the higher value habitat occurs on the perimeter of the watershed and would not be affected by the BMPs. However, the vegetated channels in the mid and lower portions of the watershed could be cut off from perennial flows, resulting in a reduction of wetted area and associated habitat. Implementation of mitigation measures BIO-1 through BIO-8 would ensure that implementing agencies identify potentially affected resources and implement measures to avoid or reduce impacts to less-than-significant levels.

Dominguez Channel Watershed – These watersheds are highly urbanized, supporting little native vegetation. What vegetation does exist is associated with either the tidal channel or urban runoff. Construction within these areas would not encounter high-value upland, riparian, or aquatic habitats. Implementation of mitigation measures would ensure that impacts to habitat values would be less than significant.

Low-flow and dry-weather-flow retention in the Dominguez Channel watershed would not result in significant impacts to riparian or aquatic habitats downstream since very few high-value habitats exist in the watershed. One exception to this is Machado Lake, which relies on freshwater flows to maintain vegetation. However, returning the local hydrology to a more natural condition would result in less-than-significant impacts to biological resources.

Upper Santa Clara River Watershed – The Santa Clara River watershed exhibits the most open space and high-value riparian habitats of all the EWMP groups. Construction of structural BMPs could impact upland forests, scrub, riparian and aquatic habitats. If construction activities were to occur in an area exhibiting native vegetation, implementing agencies would need to implement measures to avoid, reduce, or compensate for significant impacts. In addition mitigation measure BIO-1 requires that implementing agencies evaluate the suitability of BMP locations prior to development in order to avoid impacts to sensitive habitats.

LFDs and dry-weather-flow retention may affect areas downstream of urbanized areas. However, the Upper Santa Clara River is ephemeral and generally dry upstream of the wastewater discharges. Furthermore, the stream is a gaining stream below the urbanized area, responding to rising groundwater levels. Any retention of dry-weather flow would have only minor effects on the aquatic or riparian habitats in tributary streams and no impacts to the Santa Clara River itself. In fact, increased underflow into the riverbed from groundwater would benefit the riparian and aquatic habitats. In addition, implementing agencies would be required to evaluate potential impacts from flow retention BMPs. Implementation of mitigation measures would ensure that impacts are less than significant.

Summary of Impact

BMPs designed to retain dry-weather flows could reduce wetted area or completely eliminate flows in certain drainages that support sensitive species. To ensure that impacts to downstream biological resources are less than significant for regional and centralized BMPs, Permittees would implement **Mitigation Measures BIO-1** through **BIO-8** which provide for the identification and minimization of potential effects. As a result, impacts to sensitive species resulting from the implementation the EWMPs would be less than significant. The smaller distributed BMPs would not result in significant impacts and would not be required to implement mitigation measures.

Mitigation Measures

BIO-1: Prior to approving a regional or centralized BMP, the Permittee shall conduct an evaluation of the suitability of the BMP location. Appropriate BMP sites should avoid impacting large areas of native habitats including upland woodlands and riparian forests that support sensitive species to the extent feasible. The evaluation shall include an assessment of potential downstream impacts resulting from flow diversions.

BIO-2: Prior to ground-disturbing activities in areas that could support sensitive biological resources, a habitat assessment shall be conducted by a qualified biologist to determine the potential for special-status wildlife species to occur within affected areas, including areas directly or indirectly impacted by construction or operation of the BMPs.

BIO-3: If a special-status wildlife species is determined to be present or potentially present within the limits of construction activities, a qualified biologist shall conduct preconstruction surveys of proposed work zones and within an appropriately sized buffer around each area as determined by a qualified biologist within 14 days prior to ground disturbing activities. Any potential habitat capable of supporting a special-status wildlife species shall be flagged for avoidance if feasible.

BIO-4: If avoidance of special-status species or sensitive habitats that could support special-status species (including, but not limited to, critical habitat, riparian habitat, and jurisdictional wetlands/waters) is not feasible, the Permittee shall consult with the appropriate regulating agency (USACE/USFWS or CDFW) to determine a strategy for compliance with the Endangered Species Act, California Fish and Game Code, and other regulations protecting special-status species and sensitive habitats. The Permittee shall identify appropriate impact minimization measures and compensation for permanent impacts to sensitive habitats and species in consultation with regulatory agencies. Construction of the project will not begin until the appropriate permits from the regulatory agencies are approved.

BIO-5: If construction and vegetation removal is proposed between February 1 and August 31, a qualified biologist shall conduct a pre-construction survey for breeding and nesting birds and raptors within 500-feet of the construction limits to determine and map the location and extent of breeding birds that could be affected by the project. Active nest sites located during the pre-construction surveys shall be avoided until the adults and young are no longer reliant on the nest site for survival as determined by a qualified biologist.

BIO-6: All construction areas, staging areas, and right-of-ways shall be staked, flagged, fenced, or otherwise clearly delineated to restrict the limits of construction to the minimum necessary near areas that may support special-status wildlife species as determined by a qualified biologist.

BIO-7: Prior to construction in areas that could support special-status plants, a qualified botanist shall conduct a pre-construction floristic inventory and focused rare plant survey of project areas to determine and map the location and extent of special-status plant species populations within disturbance areas. This survey shall occur during the typical blooming periods of special-status plants with the potential to occur. The plant survey shall follow the CDFW Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (November 24, 2009).

BIO-8: If temporary construction-related impacts to special-status plant populations are identified within a disturbance area, the implementing agencies shall prepare and implement a special-status species salvage and replanting plan. The salvage and replanting plan shall include measures to salvage, replant, and monitor the disturbance area until native vegetation is re-established under the direction of CDFW and USFWS.

Significance Determination: Less than significant with mitigation. (The application of these mitigation measures to specific BMP types and categories are identified in Table 3.3-1.)

Non-Structural (Institutional) BMPs

As discussed in Chapter 2.0, Project Description, non-structural/institutional BMPs do not include the construction of new facilities. Consequently, there would be no direct impacts to special-status species or their habitats. However, many of the non-structural BMPs would result in the reduction of dry-weather urban runoff that could reduce perennial flows in local drainages. Returning the local hydrology to a more natural condition would occur overtime and would reduce overall wetted areas within minor drainages and swales throughout the region. Local riparian and lake features that rely on urban runoff could gradually shift from riparian and marsh to upland and sparse riparian. Shorelines may shift and wetted areas may decrease over time as more water is retained in the upper watershed, but these changes would not significantly degrade biological resources in the region as a whole since the revised hydrology would be a more natural condition for the arid region. Groundwater seepage would continue to support the major riparian corridors in the Malibu, Santa Clara, Upper Los Angeles, and San Gabriel watersheds. Retention of flows in the upper watershed would even augment these groundwater resources, offsetting any impacts from surface flow reductions. Moreover, improved water quality in the region's drainages and lagoons would be beneficial to habitat health. Overall, implementation of nonstructural BMPs will not significantly impact sensitive species in the EWMP areas.

Mitigation Measures: None required

Significance Determination: Less than significant

Riparian Habitat or Other Sensitive Natural Communities

Impact 3.3-2: The proposed project could have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS.

Structural (Regional, Centralized, and Distributed) BMPs

As previously discussed, 20 sensitive natural communities tracked by the CNDDB occur within the EWMP area. In addition, Significant Ecological Areas are considered sensitive natural communities as identified by the Los Angeles County General Plan. The SEAs, riparian and other sensitive communities (which include riparian habitats such as Southern Cottonwood Willow Riparian Forest) are not expected to occur within the disturbance areas of the BMP projects since the majority of the structural BMPs would occur in developed or disturbed areas. While some regional and centralized structural BMPs (i.e., floodplain management and stream restoration projects) could occur within or adjacent to SEAs, riparian habitat or other sensitive natural communities, these types of BMPs would provide multi-beneficial water quality and habitat restoration improvements to the applicable EWMP watershed. Further, each development proposed within a designated SEA must undergo a performance review process for compliance with the SEA design compatibility criteria and other standards for approval by the Los Angeles County Department of Regional Planning (County of Los Angeles 2012).

In addition, future project-level environmental review processes would consider all proposed projects on a case-by-case basis to determine whether an individual project would impact riparian or other sensitive natural communities and where it is necessary, would require the implementation of site-specific mitigation measures to minimize and reduce potentially significant impacts to riparian and other sensitive natural communities. Impacts would be reduced to less-than-significant levels with the implementation of Mitigation Measures BIO-1 through BIO-8.

Mitigation Measures: Implement Mitigation Measures BIO-1 and BIO-8.

Significance Determination: Less than significant with mitigation. (The application of these mitigation measures to specific BMP types and categories are identified in Table 3.3-1.)

Non-Structural (Institutional) BMPs

As discussed in Chapter 2.0, *Project Description*, non-structural/institutional BMPs do not include the construction of new facilities. Consequently, there would be no impacts to riparian or other sensitive natural communities from construction. However, many of the non-structural BMPs would result in the reduction of dry-weather urban runoff that could reduce perennial flows in local drainages. Returning the local hydrology to a more natural condition would occur overtime and would reduce overall wetted areas within minor drainages and swales throughout the region. Local riparian and lake features that rely on urban runoff could gradually shift from riparian and marsh to upland and sparse riparian. Shorelines may shift and wetted areas may decrease over time as more water is retained in the upper watershed, but these changes would not significantly degrade biological resources in the region as a whole since the revised hydrology

would be a more natural condition for the arid region. Groundwater seepage would continue to support the major riparian corridors in the Malibu, Santa Clara, Upper Los Angeles, and San Gabriel watersheds. Retention of flows in the upper watershed would even augment these groundwater resources, offsetting any impacts from surface flow reductions. Moreover, improved water quality in the region's drainages and lagoons would be beneficial to habitat health. Overall, implementation of non-structural BMPs will not significantly impact riparian habitat or other sensitive natural communities in the EWMP areas.

Mitigation Measures: None required

Significance Determination: No impact

Wetland Habitats

Impact 3.3-3: The proposed project could have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

Structural (Regional, Centralized, and Distributed) BMPs

Construction through areas within or adjacent to waterways (creeks, stream, reservoir) or wetland features would require approval from one or more of the following: USACE, RWQCB, or CDFW. Wetlands occur throughout the EWMP Areas ranging from isolated segments of improved urban channels to the open river segments of the Santa Clara, Los Angeles, and San Gabriel Rivers. Once project facility locations and designs are determined, exact locations and acreages of jurisdictional areas located within or adjacent to impact areas shall be determined through a formal jurisdictional delineation.

For projects impacting native vegetation within jurisdictional drainages, the implementing agency would be required to obtain California Fish and Game Code Section 1602 compliance and Section 404 compliance from the USACE and Section 401 Certification from the RWQCB. In addition, implementation of Mitigation Measures BIO-1 through BIO-9 would ensure compliance with state and federal regulations relating to potentially jurisdictional features, including wash habitat vegetation that may fall under CDFW jurisdiction.

Mitigation Measures

Implement Mitigation Measures BIO-1 through BIO-8.

BIO-9: Prior to construction, a qualified wetland delineator shall be retained to conduct a formal wetland delineation in areas where potential jurisdictional resources (i.e., wetlands or drainages) subject to the jurisdiction of USACE, RWQCB, and CDFWmay be affected by the project. If jurisdictional resources are identified in the EWMP area and would be directly or indirectly impacted by individual projects, the qualified wetland delineator shall prepare a jurisdictional delineation report suitable for submittal to USACE, RWQCB, and

CDFW for purposes of obtaining the appropriate permits. Habitat mitigation and compensation requirements shall be implemented prior to construction in accordance with Mitigation Measure BIO-4.

Significance Determination: Less than significant with mitigation. (The application of these mitigation measures to specific BMP types and categories are identified in Table 3.3-1.)

Non-Structural (Institutional) BMPs

As discussed in Chapter 2.0, *Project Description*, non-structural/institutional BMPs do not include the construction of new facilities. Consequently, there would be no impacts to wetlands or other jurisdictional features from construction. Non-structural BMPs would result in a reduction of urban dry-weather surface flows that currently may support wetlands. Returning the local hydrology to a more natural condition would occur overtime. Local wetland features that rely on urban runoff could gradually become non-hydric, resulting in a reduction in wetlands in the region. However, their functions as ephemeral water ways would not be reduced, but rather would reflect the more natural condition of waters of the United States. Moreover, the retained water infiltrated into the ground would augment the shallow groundwater that serves to support local wetlands and riparian habitats. Increased groundwater seepage would increase the extent of wetlands and wetted areas and on a regional scale offset any reduction caused by surface flow reductions.

Implementation of BMPs would ensure compliance with the CWA requiring MS4s to reduce dryweather flows in this region. Although compliance with Section 402 of the CWA may result in a reduction of wetlands in the region supported by surface flow, the infiltration of surface water into the ground would offset the potential impact, resulting in no net loss and a less-thansignificant impact to wetlands.

Mitigation Measures: None required

Significance Determination: No impact

Wildlife Movement

Impact 3.3-4: The proposed project 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.

Structural (Regional, Centralized, and Distributed) BMPs

There are no established wildlife movement corridors within the EWMP area as described within the Los Angeles County General Plan directly affected by implementation of the EWMPs. While portions of the EWMP areas are located within the linkage design for the San Gabriel-Castaic and Santa Monica-Sierra Madre connections, implementation of structural BMPs would primarily be constructed within existing stormwater facilities or disturbed areas. Furthermore, the EWMPs would not reduce open water features used by migratory birds or reduce fresh water flows that support sensitive fish species.

Implementation of the EWMP would not be expected to interfere with wildlife movement or any migratory corridor/linkage, and would not be constructed within a native wildlife nursery site.

Mitigation Measures: None required

Significance Determination: Less than significant

Non-Structural (Institutional) BMPs

As discussed in Chapter 2.0, *Project Description*, non-structural/institutional BMPs do not include the construction of new facilities. Consequently, there would be no impacts related to the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors.

Mitigation Measures: None required

Significance Determination: No impact

Local Policies or Ordinances

Impact 3.3-5: The proposed project could conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Structural (Regional, Centralized, and Distributed) BMPs

The proposed project would mainly be constructed within highly urbanized and disturbed areas within existing infrastructure. Any impacts to oak trees within Los Angeles County would be required to comply with the Oak Tree Preservation Ordinance (or other tree ordinances established by the local city). A tree permit may be required if impacts to oak trees or other protected trees are determined to be necessary. No impacts to oak trees or other protected tree species is anticipated. However, the exact locations of the BMP projects have not been established. Implementation of **Mitigation Measure BIO-10** would reduce any potential impacts to protected tree species to a less-than-significant level.

Mitigation Measure

BIO-10: Oak trees and other protected trees shall be avoided to the extent feasible. If trees may be impacted by project construction, a certified arborist shall conduct a tree inventory of the construction impact area. If any oak trees or other protected trees will be impacted by BMP construction, the implementing agency shall obtain any required County or City permits.

Significance Determination: Less than significant with mitigation. (The application of this mitigation measures to specific BMP types and categories are identified in Table 3.3-1.)

Non-Structural (Institutional) BMPs

As discussed in Chapter 2.0, *Project Description*, non-structural/institutional BMPs do not include the construction of new facilities. Consequently, there would be no impacts related to conflicts with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Mitigation Measures: None required

Significance Determination: No impact

Adopted Habitat Conservation Plans

Impact 3.3-6: The proposed project could conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.

Structural (Regional, Centralized, and Distributed) BMPs

The EWMP areas are not located within an adopted federal or state habitat conservation plan area, but 48 SEAs are located within the boundary of the EWMP area (Figure 3.3-1). In addition, the County Oak Woodland Management Plan covers habitats that exist within some EWMPs. The SEAs and Oak Woodland Management Plan provide protection to many of the sensitive natural communities and special-status species within the County; however, the majority of the structural BMPs would occur in developed or disturbed areas that are expected to be outside of adopted SEAs. As previously discussed, while some regional and centralized structural BMPs (i.e., floodplain management and stream restoration projects) could occur within or adjacent to SEAs, these types of BMPs would provide multi-beneficial water quality and habitat restoration improvements to the applicable EWMP watershed. Further, each development proposed within a designated SEA must undergo a performance review process for compliance with the SEA design compatibility criteria and other standards for approval by the Los Angeles County Department of Regional Planning (County of Los Angeles 2012). Therefore, conflicts with the management policies for each SEA are not anticipated, and impacts would be less than significant.

Mitigation Measures: None required

Significance Determination: Less than significant.

Non-Structural (Institutional) BMPs

As discussed in Chapter 2.0, *Project Description*, non-structural/institutional BMPs do not include the construction of new facilities. Consequently, there would be no impacts related to conflicts with an adopted habitat conservation plan or the Los Angeles County General Plan.

Mitigation Measures: None required

Significance Determination: No impact

Cumulative Impact Discussion

Structural (Regional, Centralized, and Distributed) BMPs

BMPs would be constructed throughout the EWMP watersheds. Most of the distributed BMPs would be small in scale and would not result in cumulatively significant impacts, as they would occur within existing developed or disturbed areas at existing stormwater infrastructure/facilities. For regional and centralized BMPs at the larger scale, Mitigation Measures BIO-1 through BIO-10 would reduce potentially significant impacts to biological resources, and any additional or more site-specific mitigation measures developed during the future project-level environmental review processes may further reduce potential impacts.

Cumulatively, throughout the region, the retention of stormwater and treatment of pollutants within each watershed, and the reduction of pollutant loading in waterways would substantially benefit the water quality of the region's aquatic and coastal habitats, as well as the plants and wildlife dependent on them. Implementation of the BMPs would also return the local hydrology to a more natural condition. Much of the vegetation supported by urban runoff within these EWMP areas as discussed above is cleared to ensure sufficient flood control function of the channels. In addition, the majority of high-value habitats in the region rely on groundwater seepage rather than perennial urban runoff. Although some drainage segments may exhibit reduced riparian habitat or wetlands over time due to the reduced dry-weather flow, the cumulative effect would be offset by increased groundwater recharge and seepage supporting expanded wetland and riparian vegetation supporting local flora and fauna populations. Therefore, the program's potential contribution to cumulative effects on biological resources is considered less than significant.

Implementation of BMPs would ensure compliance with Section 402 of the CWA that requires MS4s to reduce dry-weather flows in this region. Although compliance with Section 402 of the CWA may result in a reduction of wetlands in the region supported by surface flow, the infiltration of surface water into the ground would offset the potential impact, resulting in a less than significant cumulative impact to biological resources in the region.

Mitigation Measures: None required

Significance Determination: Less than significant

Non-Structural (Institutional) BMPs

As discussed previously, cumulatively, throughout the region, the retention of stormwater and treatment of pollutants within each watershed, and the reduction of pollutant loading in waterways would substantially benefit the water quality of the region's aquatic and coastal habitats, as well as the plants and wildlife dependent on them. Although some drainage segments may exhibit reduced riparian habitat or wetlands over time due to the reduced dry-weather flow, the cumulative effect would be offset by increased groundwater recharge and seepage supporting expanded wetland and riparian vegetation supporting local flora and fauna populations.

Therefore, the program's potential contribution to cumulative effects on biological resources is considered less than significant.

Mitigation Measures: None required

Significance Determination: Less than significant

3.3.4 Summary of Impact Assessment

Table 3.3-1 shows a summary of the structural BMPs requiring mitigation.

TABLE 3.3-1 SUMMARY OF BIOLOGICAL RESOURCE IMPACTS REQUIRING MITIGATION MEASURES

	Thresholds of Significance						
Structural BMPs	Sensitive Species	Sensitive Habitats	Wetland Habitats	Wildlife Movement	Local Policies and Ordinances	Habitat Conservation Plans	Cumulative Impacts
Applicable Mitigation Measures:	BIO-1 through BIO-8	BIO-1 through BIO-8	BIO-1 through BIO-9	None Required	BIO-10	None Required	None Required
Regional BMPs							
Regional Retention and Infiltration	Yes	Yes	Yes	No	No	No	Yes
Regional Capture, Detention and Use	Yes	Yes	Yes	No	No	No	Yes
Centralized BMPs							
Bioinfiltration	Yes	Yes	Yes	No	No	No	Yes
Constructed Wetlands	Yes	Yes	Yes	No	No	No	Yes
Treatment/LFDs	Yes	Yes	Yes	No	No	No	Yes
Creek, River, Estuary Restoration	Yes	Yes	Yes	No	No	No	Yes
Distributed BMPs							
Site Scale Detention	Yes	Yes	Yes	No	No	No	Yes
LID – Infiltration/Filtration BMPs – Porous Pavement, Green Streets, Bioswale/Filter Strips, downspout disconnects	No	No	No	No	No	No	No
LID – Green Infrastructure – Capture and Use – Cisterns, Rain Barrels, Green roofs, Planter Boxes	No	No	No	No	No	No	No
Flow through Treatment BMPs	No	No	No	No	No	No	No
Source Control Treatment BMPs (catch basin inserts/screens, hydrodynamic separators, gross solids removal devices)	No	No	No	No	No	No	No
Low-Flow Diversion	No	No	No	No	No	No	No

NOTE: These conclusions are based on typical sizes and locations of BMPs.