4.3.1 INTRODUCTION

This resource section evaluates the potential environmental effects related to biological resources associated with implementation of PLAN Hermosa. The analysis includes a review of special-status species, sensitive habitats, wetlands, wildlife movement, and planning efforts associated with biological resources. Policies and implementation actions presented in the PLAN Hermosa Parks + Open Space Element intend to protect coastal and marine habitat resources by protecting and restoring these spaces that are fundamental components of Hermosa Beach's environment.

NOP Comments: No comments were received in response to the Notice of Preparation (NOP) addressing biological resources concerns. Comments included written letters and oral comments provided at the NOP scoping meeting.

Reference Information: Information for this resource section is based on numerous sources, including the PLAN Hermosa Technical Background Report (TBR) and other publicly available documents. The TBR is included as **Appendix C**.

4.3.2 ENVIRONMENTAL SETTING

Appendix C-6 describes the vegetation, habitat, and wildlife in the planning area, including special-status species, sensitive habitats, and wetlands. A summary of that information is presented below.

Vegetative Communities: The vegetative communities in the city include urban/developed, beach sand, and non-native/ornamental. Urban/developed land uses encompass the majority of the planning area.

Urban/developed communities are classified as areas that have been heavily modified by humans, including roadways, existing buildings, and structures, as well as recreation fields, small parks, lawns, and other landscaped vegetation.

Non-native/ornamental areas in the planning area include the Greenbelt, South Park, Valley Park, and a hillside west of the Marineland Mobilehome Park that runs northward through several residential parcels to 24th Street. These areas could be considered urban cover as they largely comprise non-native landscaped vegetation; however, CalVEG classifies them as non-native/ornamental. For the purposes of the TBR, they are separate from the urban/developed cover type.

The entire length of the coastline in the planning area is characterized by sandy beach habitat, the beach sand habitat referenced above. This habitat is typically found between the intertidal zone and areas where vegetation becomes established, often forming dunes.

These communities are described below and shown in **Figure 4.3-1 (Vegetative Communities)**. **Table 4.3-1 (Acreages of Vegetative Communities within the Coastal and Inland Zones)** summarizes the acreages of each vegetative community within the Coastal Zone and the inland portion of the city.

Special-Status Plants: Based on the results of the California Natural Diversity Database (CNDDB) and the California Native Plant Society (CNPS) database searches of sensitive natural resources, the presence of special-status plants is highly unlikely. This is due to the extirpation or high modification of natural habitats in Hermosa Beach. The open space areas are routinely landscaped and frequented by human traffic. The beach is extremely disturbed, and no vegetated dune habitat remains. **Figure 4.3-2 (Previously Recorded Occurrences of Special-Status Species)** illustrates the special-status plants with the potential to occur in the planning area.

TABLE 4.3-1
ACREAGES OF VEGETATIVE COMMUNITIES WITHIN THE COASTAL AND INLAND ZONES

Zone	Vegetative Community	Area (acres)
Coastal	Urban/Developed	343
	Beach Sand	57
	Non-Native/Ornamental	19
	Total	**419**
Inland	Urban/Developed	479
	Non-Native/Ornamental	18
	Total	**497**

Source: City of Hermosa Beach

Special-Status Wildlife: Based on the database search results, two wildlife species have the potential to occur within the planning area. The California least tern (*Sterna antillarum-browni*) is a federally endangered species and is state-listed as endangered. This species is a summer visitor that breeds along the Southern California coast from April to September. California least terns nest in colonies on beaches or islands cleared of vegetation (USFWS 2006). The nearest breeding colonies to the planning area are in Venice Beach and at the Port of Los Angeles (USFWS 2006). There are no records of this species nesting in the planning area; however, California least terns likely forage offshore.

The western snowy plover (*Charadrius nivosus nivosus*) is a federally endangered species and a California species of special concern. Western snowy plover habitat is known to occur in Hermosa Beach. The habitat subunit stretches roughly 0.5 mile from 11th Street southward to 1st Street and totals approximately 27 acres. This subunit supports wintering flocks of snowy plover (USFWS 2012).

Two special-status wildlife species (California least tern and western snowy plover) have the potential to occur in the beach habitats in the planning area, as shown in **Table 4.3-3 (Special-Status Wildlife Species with Potential to Occur Within and Surrounding the Planning Area)** and **Figure 4.3-2**.

Marine Wildlife: Offshore resources of Santa Monica Bay include a rich diversity of migratory and resident species of mammals, birds, fishes, and invertebrates. Common coastal seabirds found foraging near the shore of Hermosa Beach include western (*Aechmorphorus occidentalis*) and Clark's grebes (*A. clarkii*), cormorants (*Phalacrocorax* spp.), loons (*Gavia* spp.), California brown pelicans (*Pelecanus occidentalis*), and gulls. Coastal birds are at their highest densities during the winter months. Mammal species found in the area include various cetaceans (whales, dolphins, and porpoises), pinnipeds (seals and sea lions), and sea otters. All marine mammals are protected under the Marine Mammal Protection Act.

Beach Sand and Intertidal Zone: Sandy beach habitat is typically found between the intertidal zone, the area between the low tide and high tide marks, and the area where terrestrial vegetation cover is established. Sandy beach habitats can often form dunes, which are hills of sand constructed either through aeolian (wind) or alluvial (water) transport. The beach habitat is heavily used for recreation and primarily barren, except for man-made structures such as nearby lifeguard towers or volleyball courts. Occasionally kelp wrack collects on the beach, which is then removed by tractor. Beached kelp wrack can provide a food source for invertebrates and provides cover for numerous organisms that inhabit the sand of the intertidal zone. These organisms in turn act as a food source for, and attract, various species of shorebirds such as sanderling (*Calidris alba*), western sandpiper (*Calidris maudi*), least sandpiper (*Calidris minutilla*),

and willet (*Tringa semipalmata*), as well as various species of gull (*Larus spp.*). The beach may also provide habitat for special-status species. The state and federally listed western snowy plover is known to winter on the shores of the city, though nesting within the city has not been recorded since 1949. The nearest breeding colony to Hermosa Beach is located at Bolsa Chica in Orange County (City of Hermosa Beach 2015).

The intertidal zone plays an important role in coastal ecology, and sand beaches are among the most extensive coastal habitats. Sand beaches and the organisms that utilize them are subjected to a wide variety of physical instability, causing this habitat to generally be less diverse than other environments, but the beaches provide foraging and breeding habitat for a variety of species including shorebirds. Organisms occupying intertidal sand beaches are usually limited by abiotic factors such as tidal height, exposure to wave action, and the composition of the sediment.

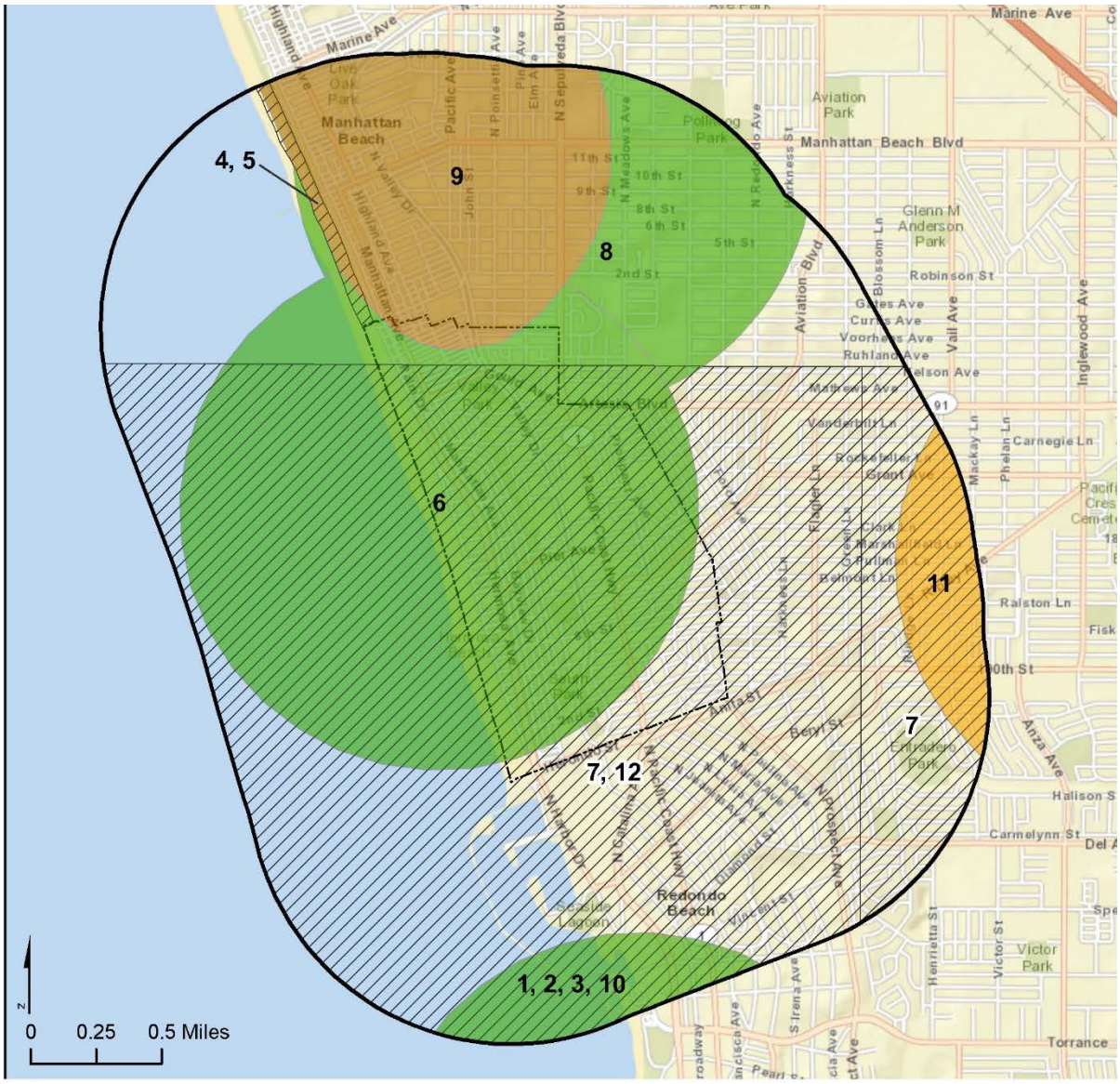
Dominant species include amphipods (*Synchelidium spp.*), polychaete worms (*Nerine cirratulus* and *Euzonus mucronata*), and isopods (*Excirolana chiltoni*). Zonation patterns for intertidal sand beach assemblages are less distinct than rocky intertidal communities. Small beach hoppers (*Orchestoidea sp.*) and kelp flies (*Coelopa vanduzeei*) are abundant in clumps of giant kelp (*Macrocystis pyrifera*) cast up on the beach at the high tide line (City of Hermosa Beach 2015).

Dominant fishes that use the intertidal zone include small active plankton feeders such as northern anchovy (*Engraulis mordax*) and topsmelt (*Atherinops affinis*), roving substrate feeders such as the barred surfperch (*Amphistichus argenteus*), and flatfishes such as juvenile California halibut (*Paralichthys californicus*). Other fishes that migrate through the surf zone include yellowfin croaker (*Umbrina roncador*) and spotfin croaker (*Roncador stearnsii*), and beach spawners such as California grunion (*Leuresthes tenuis*) are also expected to occur (City of Hermosa Beach 2015).

Sensitive Natural Communities: Two habitats (southern coastal bluff scrub and southern dune scrub) located in the planning area were identified in the CNDDB query as locally sensitive habitats. Southern coastal bluff scrub occurs south of the planning area along the bluffs of the Palos Verdes Peninsula. Southern dune scrub occurs north of the planning area in the El Segundo dunes. Neither habitat is present in or located adjacent to the planning area.

FIGURE 4.3-1
VEGETATIVE COMMUNITIES

FIGURE 4.3-2
PREVIOUSLY RECORDED OCCURRENCES OF SPECIAL-STATUS SPECIES



Legend

- City Boundary
- 1-Mile Buffer

CNDDB Occurrence Type

- Mammal
- Reptile
- Invertebrate
- Plant

Map ID	Scientific Name	Common Name	Federal Listing	State Listing	Rare Plant Rank
1	*Aphanisma blitoides*	aphanisma	None	None	1B.2
2	*Atriplex pacifica*	south coast saltscale	None	None	1B.2
3	*Atriplex parishii*	Parish's brittlescale	None	None	1B.1
4	*Brennania belkini*	Belkin's dune tabanid fly	None	None	
5	*Cicindela senilis frosti*	senile tiger beetle	None	None	
6	*Dithyrea maritima*	beach spectaclepod	None	Threatened	1B.1
7	*Glaucopsyche lygdamus palosverdesensis*	Palos Verdes blue butterfly	Endangered	None	
8	*Navarretia prostrata*	prostrate vernal pool navarretia	None	None	1B.1
9	*Perognathus longimembris pacificus*	Pacific pocket mouse	Endangered	None	
10	*Phacelia stellaris*	Brand's star phacelia	None	None	1B.1
11	*Phrynosoma blainvillii*	coast horned lizard	None	None	
12	*Rhaphiomidas terminatus terminatus*	El Segundo flower-loving fly	None	None	

TABLE 4.3-2
SPECIAL-STATUS PLANT SPECIES WITH POTENTIAL TO OCCUR WITHIN AND SURROUNDING THE PLANNING AREA

Species	Status USFWS/ CDFW/CNPS	Habitat and Blooming Time	Potential for Occurrence
aphanisma *Aphanisma blitoides*	–/–/1B.2	Sandy soils in coastal bluff scrub, coastal dunes, and coastal scrub. Elev: 3-1,000 ft. (1-305 m.) Blooms: March-June	Not expected to occur: No suitable habitat is present within the planning area. Sandy coastline is unvegetated and routinely disturbed.
Ventura Marsh milk-vetch *Astragalus pycnostachyus* var. *lanosissimus*	FE/SE/1B.1	Coastal dunes, coastal scrub, and the edges of coast salt or brackish marshes and swamps. Elev: 3-115 ft. (1-35 m.) Blooms: June-Oct.	Not expected to occur: No suitable habitat is present within the planning area. Sandy coastline is unvegetated and routinely disturbed.
alkali milk-vetch *Astragalus tener* var. *tener*	–/–/1B.2	Alkaline soils. Playas, valley and foothill grassland (adobe clay), and vernal pools. Elev: 3-197 ft. (1-60 m.) Blooms: March-June	Not expected to occur: No suitable habitat is present within the planning area.
South Coast saltscale *Atriplex pacifica*	–/–/1B.2	Playas, coastal bluff scrub, coastal dunes, and coastal scrub. Elev: 0-459 ft. (0-140 m.) Blooms: March-Oct.	Not expected to occur: No suitable habitat is present within the planning area. Sandy coastline is unvegetated and routinely disturbed.
Parish's brittlescale *Atriplex parishii*	–/–/1B.1	Alkaline soils in playas, vernal pools and chenopod scrub. Elev: 82-6,233 ft. (25-1900 m.) Blooms: June-Oct.	Not expected to occur: No suitable habitat is present within the planning area.
southern tarplant *Centromadia parryi* ssp. *australis*	–/–/1B.1	Vernally mesic valley and foothill grassland, vernal pools, and the margins of marshes and swamps. Elev: 0-1,575 ft. (0-480 m.) Blooms: May-Nov.	Not expected to occur: No suitable habitat is present within the planning area.
Orcutt's pincushion *Chaenactis glabriuscula* var. orcuttiana	–/–/1B.1	Sandy coastal bluff scrub and coastal dunes. Elev: 0-328 ft. (0-100 m.) Blooms: Jan.-Aug.	Not expected to occur: No suitable habitat is present within the planning area. Sandy coastline is unvegetated and routinely disturbed.
coastal goosefoot *Chenopodium littoreum*	–/–/1B.2	Coastal dunes. Elev: 33-98 ft. (10-30 m.) Blooms: April-Aug.	Not expected to occur: No suitable habitat is present within the planning area.
San Fernando Valley spineflower *Chorizanthe parryi* var. *fernandina*	FC/SE/1B.1	Sandy coastal scrub, and valley and foothill grassland. Elev: 492-4,003 ft. (150-1,220 m.) Blooms: April-July	Not expected to occur: No suitable habitat is present within the planning area. Sandy coastline is unvegetated and routinely disturbed.
beach spectaclepod *Dithyrea maritima*	–/ST/1B.1	Coastal dunes and sandy coastal scrub. Elev: 10-164 ft. (3-50 m.) Blooms: March-May	Not expected to occur: No suitable habitat is present within the planning area. Sandy coastline is unvegetated and routinely disturbed.
many-stemmed dudleya *Dudleya multicaulis*	–/–/1B.2	Often on clay soil in chaparral, coastal scrub, and valley and foothill grassland. Elev: 49-2,592 ft. (15-790 m.) Blooms: April-July	Not expected to occur: No suitable habitat is present within the planning area.
island green dudleya *Dudleya virens* ssp. *insularis*	–/–/1B.2	Rocky substrates in coastal bluff scrub and coastal scrub. Elev: 16-984 ft. (5-300 m.) Blooms: April-June	Not expected to occur: No suitable habitat is present within the planning area.

Species	Status USFWS/ CDFW/CNPS	Habitat and Blooming Time	Potential for Occurrence
island wallflower *Erysimum insulare*	–/–/1B.3	Coastal bluff scrub and coastal dunes. Elev: 0-984 ft. (0-300 m.) Blooms: March-July	Not expected to occur: No suitable habitat is present within the planning area. Sandy coastline is unvegetated and routinely disturbed.
Coulter's yellow goldfields *Lasthenia glabrata* ssp. *coulteri*	–/–/1B.1	Coastal salt marshes and swamps, playas and vernal pools. Elev: 3-4,003 ft. (1-1,220 m.) Blooms: Feb.-June	Not expected to occur: No suitable habitat is present within the planning area.
sea dahlia *Leptosyne maritima*	–/–/2B.2	Coastal bluff scrub and coastal dunes. Elev: 16-492 ft. (5-150 m.) Blooms: March-May	Not expected to occur: No suitable habitat is present within the planning area. Sandy coastline is unvegetated and routinely disturbed.
spreading navarettia *Navarretia fossalis*	FT/–/1B.1	Assorted shallow freshwater marshes and swamps, and chenopod scrub, playas and vernal pools. Elev: 98-2,149 ft. (30-655 m.) Blooms: April-June	Not expected to occur: No suitable habitat is present within the planning area.
prostrate vernal pool navarettia *Navarretia prostrata*	–/–/1B.1	Mesic areas in coastal scrub, meadows and seeps, vernal pools, and alkaline valley and foothill grasslands. Elev: 49-3,970 ft. (15-1,210 m.) Blooms: April-July	Not expected to occur: No suitable habitat is present within the planning area.
California Orcutt grass *Orcuttia californica*	FE/SE/1B.1	Vernal pools. Elev: 49-2,165 ft. (15-660 m.) Blooms: April-Aug.	Not expected to occur: No suitable habitat is present within the planning area.
Brand's star phacelia *Phacelia stellaris*	FC/-/1B.1	Coastal dunes and coastal scrub. Elev: 3-1,312 ft. (1-400 m.) Blooms: March-June	Not expected to occur: No suitable habitat is present within the planning area. Sandy coastline is unvegetated and routinely disturbed.
Ballona cinquefoil *Potentilla multijuga*	–/–/1A	Brackish meadows and seeps. Elev: 0-6 ft. (0-2 m.) Blooms: June-Aug.	Not expected to occur: No suitable habitat is present within the planning area.
estuary seablight *Suaeda esteroa*	-/-/1B.2	Coastal salt marshes and swamps. Elev: 0-16 ft. (0-5 m.) Blooms: May-Jan.	Not expected to occur: No suitable habitat is present within the planning area.

KEY	
Federal & State Status	**CNPS Rare Plant Rank**
(FE) Federal Endangered	Rareness Ranks
(FT) Federal Threatened	(1A) Presumed Extinct in California
(FC) Federal Candidate	(1B) Rare, Threatened, or Endangered in California or elsewhere
(SE) State Endangered	(2) Rare, Threatened, or Endangered, but more common elsewhere
(ST) State Threatened	Threat Ranks
(SSC) State Species of Special Concern	Seriously threatened in California
	Fairly threatened in California
	Not very threatened in California

TABLE 4.3-3
SPECIAL-STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR WITHIN AND SURROUNDING THE PLANNING AREA

Species	Status USFWS/CDFW	Habitat	Potential for Occurrence
Invertebrates			
vernal pool fairy shrimp *Branchinecta lynchi*	FT/–	Found only in vernal pools and vernal pool-like habitats (USFWS 2005).	Not expected to occur: No vernal pool habitat is present within the planning area.
San Diego fairy shrimp *Branchinecta sandiegonensis*	FE/–	Small, shallow vernal pools. Occasionally occur in ditches and road ruts with suitable conditions. Have never been found in permanent water bodies (USFWS 1998a).	Not expected to occur: No vernal pool habitat is present within the planning area.
El Segundo blue butterfly *Euphilotes battoidea allyni*	FE/–	Known only from the El Segundo sand dunes. Dependent on food plant, coast buckwheat (*Eriogonum parvifolium*) (USFWS 1998b).	Not expected to occur: No suitable habitat is present within the planning area. Planning area is outside species range.
Palos Verdes blue butterfly *Glaucopsyche lygdamus palosverdesensis*	FE/–	Require one of two larval host plants: coast locoweed (*Astragalus trichopodus lonchus*) or deerweed (*Acmispon glaber*). Found in coastal sage scrub habitat (USFWS 2014c).	Not expected to occur: No suitable habitat is present within the planning area. Coastal sage scrub habitat has been extirpated from the planning area.
Amphibians			
California red-legged frog *Rana draytonii*	FT/SSC	Ponds/streams in humid forests, woodlands, grasslands, coastal scrub, and streamsides with plant cover in lowlands or foothills. Breeding habitat = permanent or ephemeral water sources; lakes, ponds, reservoirs, slow streams, marshes, bogs, and swamps. Ephemeral wetland habitats require animal burrows or other moist refuges for estivation when the wetlands are dry. From sea level to 5,000 ft. (1,525 m.) (Nafis 2014).	Not expected to occur: No suitable aquatic breeding habitat is present within the planning area.
Reptiles			
coast horned lizard *Phrynosoma blainvillii*	–/SSC	Occur in valley-foothill hardwood, conifer and riparian habitats, as well as in pine-cypress, juniper and annual grassland habitats. Range up to 4,000 feet (1,219 m) in the Sierra Nevada foothills, and up to 6,000 feet (1,800 m in the mountains of southern California (CDFW 2014b).	Not expected to occur: No suitable habitat is present within the planning area.
Birds			
tricolored blackbird *Agelaius tricolor*	-/SSC	Dominant nest substrate species includes cattails, bulrushes, Himalayan berry, agricultural silage. Dense vegetation is preferred but heavily lodged cattails not burned in recent years may preclude settlement. Need access to open water. Strips of emergent vegetation along canals are avoided as nest sites unless they are about 10 or more meters wide but in some ponds, especially where associated with Himalayan	Not expected to occur: No wetland habitat is present within the planning area.

Species	Status USFWS/CDFW	Habitat	Potential for Occurrence
		blackberries and deep water, settlement may be in narrower fetches of cattails. If sites are hard for an observer to reach, the site it is relatively suitable (Hamilton 2004).	
western snowy plover *Charadrius nivosus* ssp. *nivosus*	FT/SSC	Barren to sparsely vegetated sand beaches, dry salt flats in lagoons, dredge spoils deposited on beach or dune habitat, levees and flats at salt-evaporation ponds, river bars, along alkaline or saline lakes, reservoirs, and ponds (Cornell 2014).	Known to occur: Occupied designated critical habitat subunit on Hermosa Beach. Beach is wintering habitat however, no nesting birds have been recorded since 1949 (USFWS 2007).
southwestern willow flycatcher *Empidonax traillii extimus*	FE/SE	Dense riparian forest and scrub habitats associated with rivers, swamps, wetlands, lakes and reservoirs (USFWS 2002).	Not expected to occur: No suitable habitat is present within the planning area.
California black rail *Laterallus jamaicensis coturniculus*	–/ST	Yearlong resident of saline, brackish, and fresh emergent wetlands. Occurs most commonly in tidal emergent wetlands dominated by pickleweed or in brackish marshes supporting bulrushes, cattails and saltgrass (CDFW 2014b).	Not expected to occur: No wetland habitat is present within the planning area.
coastal California gnatcatcher *Polioptila californica californica*	FT/SSC	Scrub-dominated plant communities, strongly associated with coastal scrub, sage scrub, and coastal succulent scrub communities. Distribution ranges from southern Ventura County down through Los Angeles, Orange, Riverside, San Bernardino, and San Diego counties (USFWS 2010).	Not expected to occur: No suitable habitat is present within the planning area. Coastal sage scrub habitat has been extirpated from the planning area.
light-footed clapper rail *Rallus longirostris levipes*	FE/SE	Coastal salt marshes, lagoons, and their maritime environs. Require shallow water and mudflats for foraging, with adjacent higher vegetation for cover during high tide (USFWS 2009).	Not expected to occur: No suitable habitat is present within the planning area.
California least tern *Sternula antillarum browni*	FE/SE	Nest and roost in colonies on open beaches, forage near shore ocean waters and in shallow estuaries and lagoons (USFWS 2006).	May occur: Suitable nesting habitat present on the beach; however, no historical records of nesting in the planning area. Nearest breeding colonies are at the Port of Los Angeles and Venice Beach (USFWS 2006). May forage in offshore waters.
least Bell's vireo *Vireo bellii pusillus*	FE/SE	Obligate riparian breeder. Cottonwood willow, oak woodlands, and mule fat scrub along watercourses (Kus 2002).	Not expected to occur: No riparian habitat is present within the planning area.
Mammals			
western mastiff bat *Eumops perotis californicus*	-/SSC	Open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, palm oases, chaparral, and desert scrub. Roosts in crevices on vertical cliff faces, high buildings, trees, and tunnels (CDFW 2014b).	Not expected to occur: No suitable habitat is present within the planning area.

Species	Status USFWS/CDFW	Habitat	Potential for Occurrence
Pacific pocket mouse *Perognathus longimembris pacificus*	FE/SSC	Found predominantly on sandy substrates in coastal sage scrub, coastal strand, coastal dune, and river alluvium, on marine terraces within 2.5 miles of the ocean (USFWS 1998c).	Not expected to occur: No suitable habitat is present within the planning area. No records of this species in Los Angeles County since 1938. Closest known population is at Dana Point in Orange County (USFWS 1998c).

Key to State & Federal Status	
(FE) Federal Endangered	(SE) State Endangered
(FT) Federal Threaten	(ST) State Threatened
(FC) Federal Candidate	(SSC) State Candidate

4.3.3 REGULATORY SETTING

Federal, state, and local laws, regulations, and policies pertain to biological resources, including special-status species and habitat, in the planning area. They provide the regulatory framework to address all aspects of biological resources that would be affected by implementation of PLAN Hermosa. The regulatory setting for biological resources is discussed in detail in **Appendix C-6.**

FEDERAL

- **Endangered Species Act:** The Endangered Species Act of 1973 (ESA), as amended, provides protective measures for federally listed threatened and endangered species, including their habitats, from unlawful take (16 United States Code [USC] Sections 1531–1544). The ESA defines "take" to mean "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Title 50, Part 222, of the Code of Federal Regulations (50 CFR Section 222) further defines "harm" to include "an act which actually kills or injures fish or wildlife. Such acts may include habitat modification or degradation where it actually kills or injures fish or wildlife by significantly impairing essential behavioral patterns including feeding, spawning, rearing, migrating, feeding, or sheltering."

- **Clean Water Act:** The basis of the Clean Water Act (CWA) was established in 1948; however, it was referred to as the Federal Water Pollution Control Act. The act was reorganized and expanded in 1972 (33 USC Section 1251), and at this time the Clean Water Act became the act's commonly used name. The basis of the CWA is the regulation of pollutant discharges into waters of the United States, as well as the establishment of surface water quality standards.

- **Migratory Bird Treaty Act:** Migratory birds are protected under the Migratory Bird Treaty Act (MBTA) of 1918 (16 USC Sections 703–711). The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 CFR Section 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR Section 21). The majority of birds found in the vicinity of Hermosa Beach would be protected under the MBTA.

- **Marine Mammal Protection Act:** Under the Marine Mammal Protection Act of 1972, the Secretary of Commerce delegated the authority to protect all cetaceans and pinnipeds to the National Marine Fisheries Service. The Secretary of the Interior is responsible for protecting sea otters and delegated this authority to the US Fish and Wildlife Service (USFWS). The act established a moratorium on the taking of marine mammals in waters under US jurisdiction. Under the act, "taking" includes hunting, capturing, and killing and attempting to harass, hunt, capture, or kill any marine mammal. "Harassment" is defined as any act of pursuit, torment, or annoyance that has the potential to injure a marine mammal or marine mammal stock in the wild.

- **Coastal Zone Management Act:** In accordance with the Coastal Zone Management Act and the Coastal Zone Act Reauthorization Amendments of 1990, all federal activities must be consistent, to the maximum extent practicable, with the enforceable policies of each affected state's Coastal Zone Management program. The programs set forth policies and standards regarding public and private use of land and water in the Coastal Zone.

STATE

- **California Endangered Species Act:** The California Endangered Species Act (CESA) mandates that state agencies should not approve projects that would jeopardize the continued existence of endangered or threatened species if reasonable and prudent

alternatives are available. Take authorizations from the California Department of Fish and Wildlife (CDFW) are required for any unavoidable impact on state-listed species resulting from proposed projects.

- **Santa Monica Bay Restoration Commission:** The Santa Monica Bay Restoration Commission is an independent state organization devoted to restoring and protecting Santa Monica Bay and its resources. The State of California and the US Environmental Protection Agency established the Santa Monica Bay Restoration Project (SMBRP) as a National Estuary Program in December 1988. The SMBRP was formed to develop the Santa Monica Bay Restoration Plan to ensure the long-term health of the bay and its watershed. The primary mission of the SMBRP is to facilitate and oversee the implementation of the plan.
- **California Coastal Act of 1976:** The California Coastal Act of 1976 and the California Coastal Commission, the state's coastal protection act and planning agency, were established by voter initiative in 1972 to plan for and regulate new development and to protect public access to and along the shoreline. The Coastal Act contains policies to guide local and state decision-makers in the management of coastal and marine resources. To provide maximum public access to the coast and public recreation areas, the Coastal Act directs each local government located within the Coastal Zone to prepare a Local Coastal Program (LCP) consistent with Section 30501 of the Coastal Act, in consultation with the Coastal Commission and with public participation.

LOCAL

- **City of Hermosa Beach General Plan:** The City's General Plan was last adopted in October 1979. Policies that relate to natural resources are included in the Conservation and Open Space elements of the existing General Plan. Policies address preserving and enhancing open space areas, including the beach; prohibiting oil drilling on the beach or by offshore platform; and minimizing the effects of water runoff.
- **City of Hermosa Beach Local Coastal Program (LCP):** An LCP consists of the Coastal Land Use Plan (general plan–level policies and maps) and a Local Implementation Program (coastal zoning code, zoning maps, and implementing ordinances). The City does not have a certified LCP. The Coastal Land Use Plan component, adopted by the City and certified by the California Coastal Commission in 1981, as amended, does not include policies or programs specifically related to biological resources.
- **City of Hermosa Beach Municipal Code:** Chapter 8.44 of the Municipal Code ensures the future health, safety, and general welfare of citizens of the city and the water quality of the receiving waters of the surrounding coastal areas. The chapter prohibits illicit discharges and connections, littering, disposal of landscape debris, non-stormwater discharges, and any discharges in violation of the Municipal National Pollutant Discharge Elimination System (NPDES) Permit. Chapter 12.36 strives to preserve and protect trees in the public right-of-way (parkway). The chapter prohibits the planting, maintenance, damage, destruction, or removal of parkway trees. Chapter 12.36 also states that a permit is necessary for the removal of a parkway tree. Additionally, during construction projects, the project proponent must take all necessary precautions to protect parkway trees.

4.3.4 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

For the purposes of this EIR, the impact analysis provided below is based on the following California Environmental Quality Act (CEQA) Guidelines Appendix G thresholds of significance and impacts

on biological resources are considered significant if adoption and implementation of PLAN Hermosa would:

1) 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 CDFW or the USFWS.

2) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the CDFW or the USFWS.

3) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

4) 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.

5) Conflict with local policies or ordinances protecting biological resources, including but not limited to Chapter 12.36 of the Hermosa Beach Municipal Code protecting certain trees.

6) Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.

There are no habitat conservation plans, natural community conservation plans, or other related plans for lands in the planning area. Therefore, there would be no impact related to conflict with provisions of such a plan, and this threshold is not discussed further in this resource section.

ANALYSIS APPROACH

The analysis of impacts is based on the likely consequences of adoption and implementation of PLAN Hermosa compared to existing conditions. The following analysis of impacts on biological resources is qualitative and based on available habitat, limited field review, and species occurrence information for the planning area, along with a review of regional information. A significant impact would occur if a substantial degradation in the quality of the environment or reduction of habitat would occur that would eliminate or reduce the population of a sensitive species in the planning area. The analysis assumes that all future and existing development in the planning area complies with all applicable laws, regulations, design standards, and plans. An analysis of cumulative impacts uses qualitative information for the planning area and the region.

DRAFT PLAN HERMOSA POLICIES AND IMPLEMENTATION ACTIONS

PLAN Hermosa policies and implementation actions that address biological resources include the following:

Policies

Parks + Open Space Element

- **9.1 Protect critical habitats.** Preserve, protect, and improve remaining open space areas to the greatest extent possible to improve on existing limited habitats and prevent further extirpation of species.
- **9.2 Beach maintenance.** Consider species and habitat impacts and potential improvements when implementing beach maintenance activities.

- **9.3 Beach habitat.** Ensure beaches can function as a quality habitat for permanent and migratory species.
- **9.4 Coordinated habitat protection.** Enhance information sharing and research regarding habitat and wildlife with resource agencies and neighboring jurisdictions to ensure coordinated decision-making and management.
- **9.5 Minimal activity impacts to habitat.** Protect coastal and marine habitats from impacts from maintenance, construction, recreation, and industrial activities.
- **9.6 Tree protection.** Protect existing trees and tree copses that may provide temporary or permanent bird habitat and encourage replacement with specimen trees whenever they are lost or removed.
- **10.1 Urban forest.** Expand the urban forest and green spaces citywide on public and private property.
- **10.2 Native landscapes.** Require the planting of native, non-invasive landscaping and trees, and encourage the planting of edible landscapes and fruit trees.
- **10.3 Green space co-benefits.** Recognize the many positive qualities provided by landscaping, trees, and green space including reduced heat gain, controlled stormwater runoff, absorbed noise, reduced soil erosion, improved aesthetic character, and absorption of air pollution.
- **10.4 Scenic features.** Ensure landscaping, trees, and green spaces on public and private property are designed to conserve scenic and natural features of Hermosa Beach.
- **10.5 Park landscaping.** Landscaping in parks located within the Coastal Zone shall consist of non-invasive, native, drought-tolerant plants.

Implementation Actions

- LAND USE-13. Create a checklist and resource guide comprising local, state, and federal requirements for the development of offshore renewable energy facilities to streamline permitting requirements and improve public awareness.
- PARKS-24. Partner with local nonprofits such as the Santa Monica Bay Restoration Commission or the University of California, Los Angeles, to conduct education demonstration projects or presentations on coastal and marine habitat conservation.
- PARKS-25. Evaluate existing beach conditions and identify areas that may be appropriate to restore vegetated dune habitat. Pursue grant funding.
- PARKS-26. Review and revise as needed, the City's tree ordinance to ensure protection of existing parkway trees, and update the master tree list.
- PARKS-27. Complete and maintain a citywide public tree inventory, including quantity, species type, diameter, condition, trimming strategies and geo-codes and recommendations.
- PARKS-28. Maintain a list of approved plantings for trees and landscaping within City parkways.
- PARKS-29. Amend the municipal code to incorporate tree removal and replacement requirements. If preservation of existing mature trees is not feasible, removed trees shall be replaced at a minimum 2:1 ratio either on-site, or elsewhere as prescribed by the City.

IMPACTS AND MITIGATION MEASURES

IMPACT 4.3-1 ***Would PLAN Hermosa Have a Substantial Adverse Effect on Any Special-Status Species?*** *PLAN Hermosa would guide future development and reuse projects in the city in a manner that could result in the development or expansion of beach-supporting uses that could adversely affect western snowy plover and California least tern. This impact would be* ***potentially significant****.*

The city is largely built out with urban uses and does not support habitat suitable for special-status plant species, as shown in **Table 4.3-2** and **Figure 4.3-1**. Additionally, PLAN Hermosa does not propose any land use changes that would convert existing open space areas to developed uses. Special-status plant species are not expected to occur because of the extirpation or modification of natural habitats in the planning area. In addition, beach areas are highly disturbed and no vegetated dune habitat remains. Therefore, no impacts on special-status plants species would occur.

Two special-status wildlife species (California least tern and western snowy plover) have the potential to occur in the beach habitats in the planning area, as shown in **Table 4.3-3** and **Figure 4.3-2**. Based on current and anticipated future extent of beach activity in the city (e.g., routine grooming, recreation, and patrolling), these species are expected to have a low potential of nesting. There are documented observations of the western snowy plover roosting at the beach during the winter adjacent to 19th and 22nd streets as well as from 26th to 28th streets (City of Hermosa Beach 2015). PLAN Hermosa would limit uses on the beach to structures that are essential to the safe operation and enjoyment of the beach (e.g., restrooms, playgrounds, stormwater facilities).

The Parks + Open Space Element includes several policies that would assist in the protection of these species. In particular, Policies 9.3, 9.4, 9.5, and 9.6 would protect coastal and marine habitats from construction impacts and would protect trees and beaches so they can function as a quality habitat for permanent and migratory species. For instance, under Policy 9.4, the City would enhance information sharing and research regarding habitat and wildlife with resource agencies and neighboring jurisdictions to ensure coordinated decision-making and management.

Further, the Parks + Open Space Element would support restoring potentially suitable habitat for special-status species by pursuing grant funding to initiate a process to restore vegetated dune habitat in appropriate areas of the beach.

However, the potential for impacts to these species is considered significant.

Mitigation Measures

MM 4.3-1 Construction of facilities on the beach that must occur between the months of April and August (roosting season for snowy plovers) will require preconstruction surveys to determine the presence of western snowy plovers or California least terns. If these species are present, no construction may occur until the species leave the roost based on review by a qualified biologist and consultation with the California Department of Fish and Wildlife (CDFW) and the US Fish and Wildlife Service (USFWS). If the project is within a Special Protection Zone, construction activities will not be allowed until western snowy plovers are no longer present. If the area is not within a Special Protection Zone, a qualified biologist will survey the area for western snowy plovers using established protocols and in coordination with the USFWS and CDFW to determine if plovers are present. If they are present, no work will occur until after snowy plovers leave the roost site for the season. The qualified biologist will also survey the area for California least terns using established protocols and in coordination

with the USFWS and CDFW to determine if California least terns are present. If surveys are negative for western snowy plovers or California least terns, work may proceed during the roosting period and the biologist will be present to monitor the establishment of the beach landing sites to ensure that no western snowy plovers or California least terns are injured or killed, should they arrive in the area subsequent to work commencing. The project will include fencing/walls that will prevent western snowy plovers or California least terns from entering the work areas. The biologist will conduct weekly site visits to ensure that fencing/walls are intact until construction activities are finished at the sites and all equipment is removed from the beach. The results of the preconstruction survey will be submitted to the City prior to the establishment of beach landing sites. All biological monitoring efforts will be documented in monthly compliance reports to the City.

Significance After Mitigation

Implementation of mitigation measure **MM 4.3-1** would specifically require that western snowy plovers or California least terns which roost on the beach are protected if they occur in an area proposed for beach-supporting facilities. Implementation of this mitigation measure would reduce this impact to **less than significant**.

IMPACT 4.3-2 ***Would PLAN Hermosa Have a Substantial Adverse Effect on Sensitive Biological Communities or Riparian Habitat?*** *Hermosa Beach does not contain any sensitive biological communities or riparian habitat that could be impacted by implementation of PLAN Hermosa.* ***No impact*** *would occur.*

Numerous federal regulations include protections for endangered species, coastal and marine areas and wildlife, and surface water resources. Additional California regulations, including the California Endangered Species Act and the Coastal Act, protect certain special-status species and important habitat areas, including Environmentally Sensitive Habitat Areas (ESHAs). In its plans, the City must comply with state and federal requirements to protect special-status species, native plants, beach areas, and the watershed. No ESHAs are present in Hermosa Beach.

PLAN Hermosa does not propose land use changes that would convert existing open space areas containing native vegetation or habitat to developed uses. Therefore, future development would not result in loss or degradation of riparian habitat or sensitive natural communities. Additionally, policies in the Parks + Open Space Element would protect sensitive habitat (Policies 9.3, 9.4, and 9.5 protect beach, coastal, and marine habitats). Policy 9.1 would require protection and preservation of critical habitats to prevent further extirpation of species.

The PLAN Hermosa policies and implementation actions discussed above would ensure that potential impacts on sensitive natural communities are reduced or avoided if those communities are later identified in the planning area. In addition, projects must comply with state laws that would reduce impacts on sensitive natural communities. Therefore**, no impact** would occur.

Mitigation Measures

None required.

IMPACT 4.3-3 ***Would PLAN Hermosa Have a Substantial Adverse Effect on Federally Protected Wetlands as Defined by Section 404 of the Clean Water Act?*** *PLAN Hermosa would guide future development and reuse projects in the city in a manner that could indirectly impact jurisdictional waters of the United States, particularly Santa Monica Bay. However, implementation of PLAN Hermosa policies and*

implementation actions and enforcement of existing grading and erosion regulations would result in a ***less than significant*** *impact.*

There are no federally protected wetlands or water bodies considered waters of the United States within the city boundaries.

However, Santa Monica Bay is a jurisdictional water of the United States and could be indirectly impacted by development in Hermosa Beach. The potential for stormwater flows to affect water quality would be controlled through implementation of Municipal Code Chapter 8.44 (Stormwater and Urban Runoff Pollution Control Regulations), which includes the City's Low-Impact Design Ordinance (Municipal Code Section 8.44.095) and the City's Green Street Policy. Construction activities resulting from implementation of PLAN Hermosa would also temporarily increase the amount of sediments and pollutants in stormwater runoff. Implementation of PLAN Hermosa policies and implementation actions and enforcement of existing grading and erosion regulations (Municipal Code Section 8.44.090 and NPDES Construction General Permit stormwater pollution prevention plan requirements) would result in a **less than significant** impact. See Impact 4.8-1, in Section 4.8, Hydrology and Water Quality, of this EIR for a more complete discussion of this impact.

Mitigation Measures

None required.

IMPACT 4.3-4 ***Would PLAN Hermosa Interfere Substantially with the Movement of Native Resident or Migratory Fish or Wildlife Species or Within an Established Migratory Corridor****? PLAN Hermosa would guide future development and reuse projects in the city in a manner that could impede wildlife movement in the planning area. However, PLAN Hermosa policies and implementation actions would result in a* ***less than significant*** *impact.*

Wildlife movement is affected when physical constraints impede the ability of wildlife to search for food, water, shelter, and mates. In addition, when urban development fragments open space or creates obstacles or distractions, it compromises the quality of wildlife corridors and further hinders wildlife movement. Hermosa Beach is an urbanized community. Open space and areas not disturbed or heavily used by humans are scarce and are generally located at the beach along the coastline, the Hermosa Valley Greenbelt, the hillside along Loma Drive, and the Valley neighborhood. Implementation of PLAN Hermosa would not result in any actions that would substantially alter these areas.

Although no established migratory routes have been identified in the city, several migratory wildlife species are found along the city's coastline. Common coastal seabirds found foraging near the shore of Hermosa Beach include western and Clark's grebes, cormorants, loons, California brown pelicans, and gulls. Coastal birds are at their highest densities during the winter months. Mammal species found in the area include various cetaceans (whales, dolphins, and porpoises), pinnipeds (seals and sea lions), and sea otters. All marine mammals are protected under the Marine Mammal Protection Act. Additionally, several invertebrate species, such as crustaceans and worms, live in the sand of the intertidal zone. These invertebrates attract shorebirds such as sanderling, western sandpiper, least sandpiper, willet), and various species of gull. Western snowy plover, a special-status species, is known to winter on the shores of Hermosa Beach.

Implementation of PLAN Hermosa would result in further protection for existing open spaces and wildlife corridors. PLAN Hermosa does not propose land use changes that would convert existing open space areas containing native vegetation or habitat to developed uses. However, future development, including infrastructure improvements, could potentially result in loss or degradation of wildlife corridors. Parks + Open Space Element Policies 9.3 and 9.5 would protect

habitats and wildlife movement corridors from construction, recreation, and industrial activities while also ensuring the beaches function as high quality habitat for migratory species. Subsequent discretionary projects in the city would be required to demonstrate compliance with these policies and provide site-specific measures to address any potential impacts to migratory species.

Implementation of PLAN Hermosa policies would ensure that habitats used by migratory species would be protected from impacts associated with construction, recreation, and industrial activities. Therefore, impacts on wildlife corridors and wildlife movement would be minimized, and the impact would be **less than significant**.

Mitigation Measures

None required.

IMPACT 4.3-5 ***Would PLAN Hermosa Conflict with Any Local Policies or Ordinances Protecting Biological Resources, Such as a Tree Preservation Policy or Ordinance?*** *PLAN Hermosa would guide future development and reuse projects in the city in a manner that would not result in a conflict with a local policy or ordinance protecting biological resources, including but not limited to Chapter 12.36 of the Hermosa Beach Municipal Code protecting certain trees. Therefore, impacts would be* ***less than significant****.*

Hermosa Beach Municipal Code Chapter 12.36, Trees, protects biological resources by preserving and protecting trees in the public right-of-way (parkway). Additionally, several Parks + Open Space Element policies recognize the importance of and seek to protect green spaces and urban forests citywide on public and private property. For example, Policy 10.1 promotes expansion of urban forests and green spaces. Policy 10.2 requires planting of native, non-invasive landscaping and trees and encourages the planting of edible landscapes and fruit trees. Additionally, implementation actions PARKS-26 and PARKS-27 require that a citywide tree inventory be completed and maintained and that the tree ordinance be reviewed and revised as needed to ensure protection of existing trees. Development projects would be required to minimize the removal of natural vegetation and replace any existing mature trees removed at a minimum of 2:1 ratio either on-site or elsewhere as prescribed by the City.

Future projects proposed under PLAN Hermosa would be required to comply with applicable local ordinances. Regulatory processes to ensure compliance are already in place and would not be affected by the plan. In addition, PLAN Hermosa policies and implementation actions would ensure the protection of existing trees in the city. Therefore, impacts would be **less than significant.**

Mitigation Measures

None required.

CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

The cumulative setting associated with PLAN Hermosa is the Southern California Bight, which is a region that consists of a large and gradual bend in the California coastline that is adjacent to the Los Angeles metropolitan area and contains a diverse range of habitats and marine life. This region is impacted by the existing urban conditions in the region as well as from recreational activities, urban runoff, and related impacts of urban uses. This cumulative setting also includes approved, proposed, planned, and other reasonably foreseeable projects and development in Hermosa Beach and the South Bay Cities Council of Governments (COG) planning area. Developments and planned land uses, including PLAN Hermosa, would contribute to impacts on biological resources in the region.

IMPACT 4.3-6 ***Would PLAN Hermosa Contribute to Cumulative Effects on Biological Resources?*** *Implementation of PLAN Hermosa, in combination with existing, approved, proposed, and reasonably foreseeable development in the South Bay Cities COG planning area, could result in the conversion of habitat and impact biological resources. Biological impacts from PLAN Hermosa would be limited due to the small size of potential projects and the focus on urban infill sites, and PLAN Hermosa would not contribute to any cumulative impacts. This would be a* ***less than cumulatively considerable*** *impact.*

PLAN Hermosa does not propose land use changes that would affect open space in the city. However, cumulative changes, including land use changes, could affect wildlife movement either directly or indirectly due to factors discussed in Impacts 4.3-1 and 4.3-4 above and are limited to the city and not regional biological conditions or wildlife movement. PLAN Hermosa does not propose land use changes that would convert existing open space areas to developed uses. Furthermore, the policies and implementation actions described in Impact 4.3-4 would reduce PLAN Hermosa's contribution to cumulative effects. Because PLAN Hermosa would not convert existing open space areas to developed uses and would implement these policies and implementation actions, the plan's contribution to cumulative effects would not be considerable. The impact would be **less than cumulatively considerable**.

Mitigation Measures

None required.

4.3.5 REFERENCES

CDFW (California Department of Fish and Wildlife). 2014a. California Natural Diversity Database – February 4, 2014, update. Sacramento: CDFW Biogeographic Data Branch.

———. 2014b. *California Wildlife Habitat Relationships System Life History Accounts and Range Maps* (online edition). Sacramento: CDFW Biogeographic Data Branch. http://www.dfg.ca.gov/biogeodata/cwhr/cawildlife.aspx.

City of Hermosa Beach. 2015. *Transpacific Submarine Fiber Optic Cable Draft EIR.*

CNPS (California Native Plant Society). 2014. Inventory of Rare and Endangered Plants (online edition, v8-01a). Sacramento: CNPS.

Cornell Lab of Ornithology. 2014. *All About Birds*. http://www.allaboutbirds.org/Page.aspx?pid=1189.

Goudey, Charles B., and Scott R. Miles. 1998. *Ecological Subregions of California: Section & Subsection Descriptions.* Major contributions by Earl B. Alexander and John O. Sawyer. UDSA, Forest Service, Pacific Southwest Region.

Hamilton, W. J. 2004. "Tricolored Blackbird (*Agelaius tricolor*)." In The *Riparian Bird Conservation Plan: A strategy for reversing the decline of riparian-associated birds in California*. California Partners in Flight.

Kus, B. 2002. "Least Bell's Vireo (*Vireo bellii pusillus*)." In *The Riparian Bird Conservation Plan: a strategy for reversing the decline of riparian-associated birds in California*. California Partners in Flight.

McNab, W. H., D. T. Cleland, J. A. Freeouf, J. E. Keys Jr., G. J. Nowacki, C.A. Carpenter, compilers. 2007. *Description of ecological subregions: sections of the conterminous United States*. General Technical Report WO-76B. Washington, DC: USDA, Forest Service.

Nafis, Gary. 2014. *California Herps: A Guide to Reptiles and Amphibians of California.* Accessed February 26, 2014. http://www.californiaherps.com/.

USFS (US Forest Service). 2014. Vegetation Classification & Mapping. http://www.fs.usda.gov/detail/r5/landmanagement/resourcemanagement/?cid=stelprdb5347192.

USFWS (US Fish and Wildlife Service). 1998a. *Vernal Pools of Southern California Recovery Plan*. Portland, OR: USFWS.

———. 1998b. *Recovery Plan for the El Segundo Blue Butterfly.* Portland, OR: USFWS.

———. 1998c. *Recovery Plan for the Pacific Pocket Mouse.* Portland, OR: USFWS.

———. 2002. *Final Recovery Plan Southwestern Willow Flycatcher* (Empinodax traillii extimus). Albuquerque, NM: USFWS.

———. 2005. *Recovery Plan for Vernal Pool Ecosystems of California.*

———. 2006. *California Least Tern 5-Year Review*. Carlsbad, CA: USFWS.

———. 2007. *Recovery Plan for the Pacific Coast Population of the Western Snowy Plover* (Charadrius alexandrius nivosus). Sacramento: USFWS.

———. 2009. *Light-footed Clapper Rail* (Ralluss longirostris levipes) *5-Year Review: Summary and Evaluation*. Carlsbad, CA: USFWS.

———. 2010. *Coastal California Gnatcatcher* (Polioptila californica californica) *5-year Review: Summary and Evaluation.* Carlsbad, CA: USFWS.

———. 2012. *Endangered and Threatened Wildlife and Plants; Revised Designation of Critical Habitat for the Pacific Coast Population of the Western Snowy Plover*. Final rule. Federal Register 77(118): 36728–36869.

———. 2014a. Information, Planning, and Conservation System (IPaC).

———. 2014b. Critical Habitat Portal. Accessed February 2014.

———. 2014c. *5-Year Review for Palos Verdes Blue Butterfly*. Carlsbad, CA: USFWS.

This page intentionally left blank.