4.3 BIOLOGICAL RESOURCES

4.3.1 Introduction

This section evaluates the impacts of the proposed General Plan Update associated with biological resources within the City of Newport Beach. Existing data sources used to prepare this section were taken from a California Natural Diversity Database search for the U.S. Geological Survey's (USGS) 7.5-minute quadrangles for Newport Beach, Tustin, and Laguna Beach and biological resources reports prepared for the City of Newport Beach General Plan Update Technical Background Report including *City of Newport Beach, California, Local Coastal Plan—Biological Appendix* (Chambers Group and Coastal Resources Management 2002, December), the *City of Newport Beach, California, General Plan Update—Newport Beach Biological Resources* (Chambers Group and Coastal Resources Management 2003, January), and the *City of Newport Beach, California, General Plan Update—Newport Beach Biological Resources Addendum* (EIP Associates 2003, December). The Biological Resources Addendum has been included as Appendix C1. Full bibliographic entries for all reference materials are provided in Section 4.3.6 (References) of this section.

During the Initial Study process, it was determined that the proposed General Plan Update could result in adverse impacts on biological resources including effects on candidate, sensitive, or special status species, riparian habitats, and jurisdictional waters of the United States. The Initial Study also identified potential impacts related to the alteration of wildlife corridors and consistency with established policies and plans.

One comment letter associated with biological resources was received in response to the IS/NOP circulated for the proposed General Plan Update. The Environmental Quality Affairs Citizens Advisory Committee for the City of Newport Beach requested that the DEIR include an analysis of potential impacts on sensitive wildlife and plant species. Section 4.3.5 (Project Impacts, Mitigation Measures, and Proposed Policies) provides such an analysis.

4.3.2 Existing Conditions

Regional Characteristics

The City of Newport Beach, with a population of approximately 83,120,[7] is an area of 13,062 acres located at the western edge of Orange County, adjacent to the Pacific Ocean, as shown in Figure 3-1. Generally, Newport Beach is bordered by Costa Mesa to the northwest, Huntington Beach to the west, Irvine to the northeast, and unincorporated portions of Orange County and Laguna Beach to the southeast. The following descriptions of climate, geomorphology, and existing preserved open space have been provided for background on the regional setting of the resources within the Planning Area.

[7] California. 2005. Department of Finance. Table 2: E-5 City/County Population and Housing Estimates. 1 January.

Watersheds

The Planning Area is located within the boundaries of four watersheds, each of which contain an interconnected system of surface water resources that feed into the underlying groundwater aquifer or drain into the ocean. The main tributaries and groundwater resources located within the Planning Area are discussed in detail below. The watersheds within the Planning Area include the Newport Bay, Newport Coast, Talbert, and San Diego Creek watersheds. Both the Newport Bay and Newport Coast watersheds cover most of the Planning Area, with the remaining smaller portions covered by the Talbert and San Diego Creek watersheds. Section 4.7 (Hydrology and Water Quality) of this EIR contains detailed descriptions of these four watersheds.

Climate

The climate of Southern California is described as Mediterranean, a wet-winter, dry-summer climate. Extremely dry summers are caused by the sinking air of the subtropical highs and may last for up to five months. Average mountain temperature in Southern California ranges from 32 to 60 degrees Fahrenheit (°F), getting colder with an increase in elevation. Along the coast, temperatures average 53-65°F. Freezing weather may sometimes occur in the winter, but only for short durations. Most of the 12-40 inches per year of precipitation is in the form of rain, fall, winter, and spring receiving equal amounts (Blue Planet Biomes, 2005). Any snow that may fall in the winter melts very quickly. The precipitation also increases with elevation. During the summer, the coastline usually experiences more moderate weather and more moisture from fog than interior regions.

Within Mediterranean climates there can be dramatic differences in rainfall from year to year. Consequently, the plant communities growing in these regions often consist of drought-tolerant, woody shrubs and trees, and annual, fall-sprouting grasses (Ritter 2006).

Geomorphology

Topography

The local topography in the Planning Area ranges from gently sloping areas in the northwest portion of the City to steeper topography in the eastern and southern areas. Over 50 percent of the Planning Area, including most of the northern and western portions, as well as some portions of the Newport Coast area, have a slope gradient that range up to approximately 10 degrees. Slopes increase with proximity to the Newport Mesa and San Joaquin Hills, and areas with more severe slopes are generally concentrated in the southern and eastern portions of the City. The bluffs that border the water-bodies in the City, including Newport Bay and City streams, have a slope gradient ranging from 10 to 40 degrees. Similarly, most of the San Joaquin Hills have a slope gradient of 10 to 40 degrees. Parts of the San Joaquin Hills located near the southern border of the City of Newport Beach have a slope gradient of 40 degrees and greater. Elevations across the City range from approximately 0 to 394 feet in the areas comprised of West Newport, Balboa Peninsula, and Newport Bay to approximately 2,460 to 3,281 feet in the high relief terrain areas of the San Joaquin Hills in the eastern portion of the City.

Habitat Types

Several different plant communities/habitats occur within the Planning Area. Each plant community is determined by the balance (percentages) of particular plant species within a respective area. The following summarizes several of the plant communities known to exist within the limits of the project.

Scrub Habitats

Scrub habitats are characterized by an 80 percent or greater coverage by shrub species. Subtypes of scrub are determined by the dominant shrub species. This type of community often occurs on gentle to steep slopes, and tends to be drought-deciduous[8], low-growing, and gray-green in color (Chambers 2003).

Diegan Coastal Sage Scrub

This community can be defined as low, drought-deciduous, and evergreen shrubs that occur generally below 3,000 feet in elevation on steep to moderate, south-facing, exposed slopes of the western mountains. Shrubs are more widely spaced than those typical of chaparral and do not have the characteristic rigidness or thick drought-resistant leaves. Coastal scrub communities are characterized by low shrubs and an absence of trees. Types of shrubs include either pure stands or mixtures of low, thick-leaved evergreens and coarse, deciduous species that drop their leaves in response to periodic drought conditions. Dominant species include California sagebrush (*Artemisia californica*), California buckwheat (*Erigonum fasciculatum*), costal goldenbush (*Isocoma menziesii*), island mallow (*Lavatera assurgentiflora*), deerweed (*Lotus scoparius*), mesa bushmallow (*Malacothamnus fasciculatus*), laurel sumac (*Malosma laurina*), lemonadeberry (*Rhus integrifolia*), white sage (*Salvia apiana*), and small-flowered needle grass (*Nassella lepida*). Diegan coastal sage scrub integrates with chaparral communities at higher elevations and Riversidian sage scrub in drier inland areas (Holland 1986).

Wildlife Use of Coastal Sage Scrub

Coastal sage scrub is considered a sensitive habitat because it supports a diverse fauna and has potential to support numerous threatened, endangered, or rare species, and has been acknowledged as such by its inclusion in the Central and Coastal Orange County Natural Community Conservation Plan (NCCP) (Orange County 1996). Among these are the coastal cactus wren (*Campylorhynchus brunneicapillus sandiegensis*), San Diego horned lizard (*Phrynosoma coronatum blainvillei*), orange-throated whiptail (*Cnemidophorus hyperthyrus*), coastal western whiptail (*Cnemidophorus tigris multiscutatus*), Bell's sage sparrow (*Amphispiza belli*), coastal California gnatcatcher, and the southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*). Scrub habitats are also important to larger species such as mule deer (*Odocoileus hemionus*) and mountain lions (*Felis concolor*).

[8] Drought-deciduous species are those that that drop their leaves in response to periodic drought conditions.

Chaparral Habitats

The presence of chaparral shrub species over 50 percent or more of an area indicates the presence of a chaparral vegetative community. Chaparral vegetation is typically thick, 4- to 12-foot tall evergreen woody shrubs and/or dwarf trees (Holland 1986). The community is composed mainly of species that are adapted to seasonal and periodic drought by having hardened leaves that resist water loss at high temperatures and/or low moisture.

Southern Mixed Chaparral

The coastal form of this community, which may contain coastal sage shrub species as its understory, is comprised primarily of toyon (*Hetermeles arbutifolia*), laurel sumac, and lemonadeberry in dense stands on moderately-wet north-facing slopes. In addition, holly-leafed redberry (*Rhamnus ilicifolia*), fuchsia-flowered gooseberry (*Ribes speciosum*), and scrub oak (*Quercus berberidifolia*) are typical of this community (Chambers 2003).

Wildlife Use of Chaparral

High-quality chaparral supports a diverse fauna. Chaparral provides suitable shelter, basking sites, and foraging habitat for reptiles like the western rattlesnake (*Crotalus viridis*), common kingsnake (*Lampropeltis getulus*), rosy boa (*Charina trivirgata*), coastal western whiptail, striped racer (*Masticophis lateralis*), northern red-diamond rattlesnake (*Crotalus ruber ruber*), and western fence lizard (*Sceloporus occidentalis*). Avian species that characteristically nest in chaparral include wrentit (*Chamaea fasciata*), California quail (*Callipepla californica*), blue-gray gnatcatcher (*Polioptila caerulea*), black-chinned sparrow (*Spizella atrogularis*), spotted towhee (*Pipilo maculatus*), and California thrasher (*Toxostoma redivivum*). Small mammals are common in chaparral and include brush rabbit (*Sylvilagus bachmani*), California kangaroo rat (*Dipodomys californicus*), and woodrat (*Neotoma* sp). Several predators will use chaparral opportunistically, foraging on the reptiles, birds, and small mammals. These include Cooper's hawk (*Accipiter cooperii*), sharp-shinned hawk (*Accipiter striatus*), bobcat (*Felis rufus*), and coyote (*Canis latrans*).

Riparian and Wetland Habitats

Riparian communities are those that require abundant moisture during all or most of the year and, as a result, occur along perennial and intermittent streams or rivers. Riparian habitats, including forest, woodland, and scrub subtypes, may or may not be classified as wetland habitat; however; this habitat type is distributed in waterways and drainages where a permanent supply of water (on the surface or below ground) typically exists. These communities generally consist of one or more deciduous tree species with an assorted understory of shrubs and herbs that are restricted to the banks and floodplains of these waterways (Holland and Keil 1995). Riparian communities generally occur among mid- to large-order streams below 4,000 feet in elevation, primarily within the foothills and valleys.

Riparian vegetation types and size vary along stream channels. Along small stream channels the extent of the riparian community may only be a thin band of vegetation within or directly adjacent to the channel, whereas along larger streams or rivers the riparian habitat can be in the form of dense woodlands that are

quite extensive (Holland and Keil 1995). Height of these communities can vary from 3 to 10 feet in scrub habitats, to over 100 feet tall in riparian forest habitats (Grenfell 1988).

Riparian forests generally have closed canopies dominated by broadleaved, winter-deciduous trees. In the Project Area, these forests are dominated by white alder (*Alnus rhombifolia*), and big leaf maple (*Acer macrophyllum*). Closer to the coast, white alder is replaced by red alder (*Alnus rubra*). Evergreen hardwoods such as California bay and coast live oak will commonly occur along the edges of riparian corridors.

Willow Riparian Scrub (Southern Willow Scrub)

Willow riparian scrub is dominated by willow trees (*Salix* spp) and also may contain gooseberry (*Ribes* spp), Mexican elderberry, and an understory of herbaceous water-dependant plants. Arroyo willow (*Salix lasiolepis*) is the dominant species within perennial and intermittent stream channels at elevations up to about 2,450 feet. Goodding's black willow (*Salix gooddingii*) occurs along streambanks and in wet places within drier habitats at elevations below about 1,500 feet (Faber and Keller 1985).

Southern Cottonwood Riparian Forest

This community occurs on floodplains along major streams and creeks and is dominated by cottonwoods (*Populus fremontii*, *P. trichocarpa*), black willow, and red willow (*Salix laevigata*). Occasionally, a second canopy layer of arroyo willow, mulefat, poison oak (*Toxicondendron diversilobum*), western false indigo (*Amorpha fruticosa*), and desert wild grape (*Vitus girdiana*) is present. The understory is usually composed of giant creek nettle (*Urtica holosericea*), branching phacelia (*Phacelia ramosissima*), dock (*Rumex* sp.), and blackberry (*Rubus* sp.). In addition, several invasive species, including giant reed (*Arundo donax*), castor bean (*Ricnius communis*), and tree tobacco (*Nicotiana glauca*), are typical of this plant community (Chambers 2003).

Southern Arroyo Willow Forest

This community is typical of floodplains along major streams and rivers. Arroyo willow, which forms a closed canopy, is the dominant species in this community. The understory vegetation is generally comprised of nettle, poison oak, mugwort, western ragweed, dock, mustard (*Brassica* sp.), nightshade (*Solanum* sp.), poison hemlock (*Conium maculatum*), milk thistle (*Silybum marianum*), and blackberry.

Southern Coastal Salt Marsh

Coastal salt marshes develop along the intertidal shores of bays and estuaries. Estuaries occur where a river meets the sea, and the water is somewhat brackish. Salt marsh plants are adapted to a harsh, semi-aquatic environment and saline soils. Species composition and distributions in the salt marsh are governed by salinity gradients in combination with the amount of intertidal exposure (California Resources Agency 2005). Common species within this vegetation community include pickleweed (*Salicornia* sp.) and saltgrass (*Distichlis* sp.) (Sawyer and Keeler-Wolf 1995).

Coastal Freshwater Marsh

Coastal freshwater marshes are sometimes found in association with salt marshes. Typical freshwater marsh plants include numerous species of sedges; these grass-like plants often exceed five feet in height (California Resources Agency 2005). Slough sedge (*Carex obnupta*) is one of the most common. Other typical species include cattails (*Typha latifolia*), bushy, needle-leaved rushes (*Juncus phaeocephalus*), aquatically adapted wildflowers such as yellow pond-lily (*Nuphar polysepalum*), water buttercup (*Ranunculus orthorhynchus*), and succulent water parsley (*Oenanthe sarmentosa*) are also typical freshwater marsh inhabitants. Most species have developed air tubes to their roots, buoyant leaves, or porous leaf coverings that enhance gas exchange. In contrast to salt marshes, freshwater marshes have little if any water movement.

Wildlife Use of Riparian and Wetland Habitats

The frequently abundant water that is available in riparian communities and seeps and springs provides breeding habitat for many amphibian species, including Pacific slender salamander (*Batrachoseps pacificus major*), coast range newt (*Taricha torosa torosa*), arroyo toad (*Bufo microscaphus californicus*), western toad (*Bufo boreas*), and numerous species of treefrogs (*Hyla* spp). Reptiles that depend on or are closely associated with water include the two-striped garter snake (*Thamnophis hammondii*), red racer (coachwhip) (*Masticophis flagellum piceus*), and southwestern pond turtle (*Clemmys marmorata pallida*) (Stebbins 2003).

Resident bird species that are commonly found in riparian areas include the mourning dove, woodpeckers (*Picoides* sp), black phoebe (*Sayornis nigricans*), orange-crowned warbler (*Vermivora celata*), and song sparrow. Several of these species nest or roost in riparian areas and feed in adjacent habitat types, such as annual grassland and agricultural fields. Mammals found within riparian woodland habitat may include the Virginia opossum (*Didelphis virginiana*), raccoon (*Procyon lotor*), broad-footed mole (*Scapanus latimanus*), woodrats, striped skunk (*Mephitis mephitis*), and gray fox (*Procyon cinereoargenteus*). The abundance of birds and small mammals provides prey for several raptor species that nest and/or forage in riparian communities, including Cooper's hawk, sharp-shinned hawk, western screech owl (*Otus kennicottii*), and red-shouldered hawk (*Buteo lineatus*). In addition to providing high value wildlife habitat, riparian corridors provide local movement corridors between patches of fragmented habitat. Riparian habitats are considered a sensitive habitat type and are monitored closely by the CDFG.

Grassland Habitats

Grassland consists of low herbaceous vegetation dominated by grasses. It grows in deep, well-developed soils on gentle slopes and flats, mostly at low elevations. There are three types of grassland in the Planning Area including native grassland, nonnative annual grassland, and ruderal grassland. Each type of grassland is further discussed below.

Native Grassland (Needlegrass Grassland)

Native grasslands are treeless areas dominated by perennial bunchgrasses and interspersed with native annual herbs and wildflowers (Holland and Keil 1995). Native grassland habitat is most often found at elevations below 1,500 feet, and is a mid-height (to 2 feet tall) grassland. In California, the dominant

bunchgrass is the perennial, tussock-forming purple needlegrass (*Nassella pulchra*) (Holland 1986). Native grasslands usually occur on fine-textured (often clay) soils that are moist or even waterlogged during the winter, but very dry in the summer. Historically, native grasslands were much more widespread throughout California than today. The introduction of nonnative grasses and forbs, livestock grazing, and alteration of the natural fire regime are factors that resulted in the displacement of native bunchgrass, other native grasses, and forbs by introduced species (Heady 1988). Native and nonnative annual grasslands, as well as coastal scrub habitats, form transitional stages but are found primarily in rich-soiled valley bottoms and lower foothills. Generally, perennial grasses, such as needlegrasses (*Nassella* spp), dominate these communities. Native grasslands also provide a matrix for a host of native grasses and forbs including ryegrass (*Elymus glaucus*), junegrass (*Koeleria macrantha*), mariposa lily (*Calochortus* spp), brodiaea (*Brodiaea* sp), checker bloom (*Sidalcea malvaeflora*), one-sided bluegrass (*Poa secunda*), blue wild-rye (*Elymus glaucus*), and melic grasses (*Melica* spp). These native species are often interspersed with nonnative annual grasses such as wild oats and bromes. Once covering one-fifth of the state, today native perennial grasslands cover approximately 0.1 percent of that area (CNPS 2005). Native grasslands that exist in California today are considered sensitive by resource agencies.

Nonnative Annual Grassland

Annual grasslands are virtually treeless areas dominated by nonnative annual grasses. Annual grasslands occur from sea level to about 3,600 feet (Kie 1988). Annual grasslands occur throughout California and have largely replaced the perennial, native grasslands. European grasses dominate the nonnative annual grassland habitat present within southern California (Holland, 1986). Characteristic species within the Planning Area include wild oats, ripgut brome, foxtail chess (*Bromus madritensis*), and cheat grass (*Bromus tectorum*), barley (*Hordeum* sp), and fescue *(Vulpia* sp). Other species commonly associated with nonnative grasslands include filaree (*Erodium botrys*), sweet fennel (*Foeniculum vulgare*), mustards, and thistles (*Carduus* spp, *Centaurea calcitrapa*, and others). Nonnative annual grasslands occur primarily in the deeper-soiled, clay-loam bottomlands bordering riparian communities and on the lower hillsides where they meet coastal live oak woodlands, chaparral, and coastal scrub communities. They generally constitute lands that are highly modified by humans' repeated disturbance.

Ruderal Grassland

Though not a true habitat community as defined by Holland (1986), ruderal grasslands are common within urbanized landscapes. These areas contain herbaceous vegetation dominated by highly adaptive and invasive species with few, if any, native species. Ruderal habitat is found most frequently in areas disturbed by human activities such as roadways, maintained ditches, and areas frequently cleared of vegetation. Characteristic ruderal species identified in the Planning Area include wild oats, ripgut brome, yellow star thistle (*Centaurea solstitialis*), bindweed (*Convolvulus arvensis*), California wild rose (*Rosa californica*), sow thistle, mustard, alyssum, lambs quarters, sunflower, telegraph weed, giant horseweed, common knotweed (*Polygonum arenastrum*), bermuda grass (*Cynodon dactylon*), wild radish (*Raphanus sativus*), and clover (*Melilotus* sp).

Wildlife Use of Grasslands

Grasslands provide food and refuge for numerous wildlife species. Those species that formerly relied on native grasslands for nesting now also use annual grasslands. Native and nonnative grasslands and herbaceous understories provide habitat for a number of bird species including the grasshopper sparrow (*Ammodramus savannarum*), western meadowlark (*Sturnella neglecta*), horned lark (*Eremophila alpestris*), and western burrowing owl (*Athene cunicularia hypugea*). Grasslands produce large numbers of seeds that are a valuable food source for many bird species including American pipit (*Anthus rubescens*), lark sparrow (*Chondestes grammacus*) and savannah sparrow (*Passerculus sandwichensis*). Rodents common within grasslands include deer mouse (*Peromyscus maniculatus*), California vole (*Microtus californicus*), Botta's pocket gopher (*Thomomys bottae nigracans*), San Diego pocket mouse (*Perognathus fallax fallax*), and California ground squirrel (*Spermophilus beecheyi*). These and other rodents become the prey base for various resident raptors, such as golden eagle (*Aquila chrysaetos*), red-tailed hawk, white-tailed kite (*Elanus leucurus*), ferruginous hawk (*Buteo regalis*), and northern harrier (*Circus cyaneus*) that utilize wide, open grasslands as foraging habitat. Coyote, Pacific gopher snake (*Pituothis melanoleucus*), western yellow-bellied racer (*Coluber constrictor mormon*), and western rattlesnake also feed on small rodents present in grasslands.

Ornamental

Ornamental landscaping consists of areas supporting introduced trees, shrubs, flowers, and turf grass. Ornamental landscaping occurs in green belts, parks, and horticultural plantings throughout Orange County. Typical species include gum trees (*Eucalyptus* sp.), pepper trees (*Schinus* sp.), Canary Island date palm (*Phoenix canariensis*), and Mexican fan palm (*Washingtonia robusta*) (Chambers 2003).

Disturbed

Disturbed areas are either devoid of native vegetation, (cleared or graded) including dirt roads, or dominated by a sparse cover of ruderal vegetation. These areas also include paved and upaved roads, as well as developed areas (offices, residences, etc.) (Chambers 2003).

Sensitive Biological Resources

Special Status Species

Literature Survey

Information regarding the occurrences of special-status species in the vicinity of the Project Area was obtained from searching the California Department of Fish and Game's (CDFG) Natural Diversity Data Base (CNDDB, July 2005) and California Native Plant Society's Electronic Inventory (CNPSEI July 2005) for the USGS 7.5-minute quadrangles for Newport Beach, Tustin, and Laguna Beach. These databases contain records of reported occurrences of federal- or state-listed endangered, threatened, rare, or proposed endangered or threatened species, federal species of concern, state species of special concern, or otherwise sensitive species or habitat that may occur within or in the immediate vicinity of the Planning Area. Lists from the U.S. Fish and Wildlife Service (USFWS) and CDFG were also

reviewed, and lists of sensitive wildlife and plant species potentially occurring within the Planning Area were developed. This search range encompasses a sufficient distance to accommodate for regional habitat diversity and to overcome the limitations of the CNDDB. The CNDDB is based on reports of actual occurrences and does not constitute an exhaustive inventory of every resource.

Additional background information on biological resources was derived from:

- City of Newport Beach General Plan Update Technical Background Report – Newport Beach Biological Resources, January 2003
- The Southern Coastal Sage Scrub Natural Community Conservation Plan
- Riverside County Multiple Species Habitat Conservation Plan (MSHCP)

Additional botanical information came from the *Preliminary Descriptions of the Terrestrial Natural Communities of California* (Holland 1986), the *List of California Terrestrial Natural Communities Recognized by the Natural Diversity Data Base* (CDFG 2004, January), the *Jepson Manual of Higher Plants of California* (Hickman 1993), and *A Manual of California Vegetation* (Sawyer and Keeler-Wolf 1995). Based upon the results of the literature review, record searches, and site-specific surveys, a list of special-status plant and animal species and habitats with the potential to occur within the Planning Area was developed for analysis (Appendix C2).

The CNDDB search for these quadrangles results in 1 amphibian, 1 fish, 8 invertebrates, 7 reptiles, 16 birds, 12 mammals, and 33 plant species. However, it should be noted that some of these species are restricted to habitats not found within the Planning Area.

Marine Resources

The marine resources of the Planning Area and surrounding ocean waters include plants and animals of marshes and wetlands living in Upper Newport Bay, the developed channels, beaches, and hardscape of Lower Newport Bay (Newport Harbor), and the intertidal and subtidal landforms (sandy beaches, rocky intertidal, sandy subtidal, and subtidal reefs) along the coast of Newport Beach between the Santa Ana River and the boundary between the City and unincorporated Orange County. Many of these areas are considered wetland habitat by the state of California and federal wetland definitions are protected by a no-net loss wetlands policy.

Sensitive Marine Species

Several species of marine mammals are present in the waters near the shore along the Newport coastline. All marine mammals are protected by the Marine Mammal Protection Act. Protected marine mammals that are most likely to occur in the City are: California sea lion, Harbor seal, California gray whale, Killer whale, Common dolphin, Pacific white sided dolphin, and Dall's porpoise.

Eelgrass (*Zostera marina*), a flowering, marine vascular plant, is considered a sensitive marine resource due to its nursery function for invertebrates and fishes, and because it is considered critical foraging habitat for the federal- and state-listed California least tern. Eelgrass is protected by the Southern California Eelgrass Mitigation Policy, which requires impacts to this species be avoided, minimized or compensated.

Other sensitive marine resources (shown in Figure 4.3-1) include eelgrass restoration areas, Giant kelp, California Grunion, and California halibut.

Environmental Study Areas

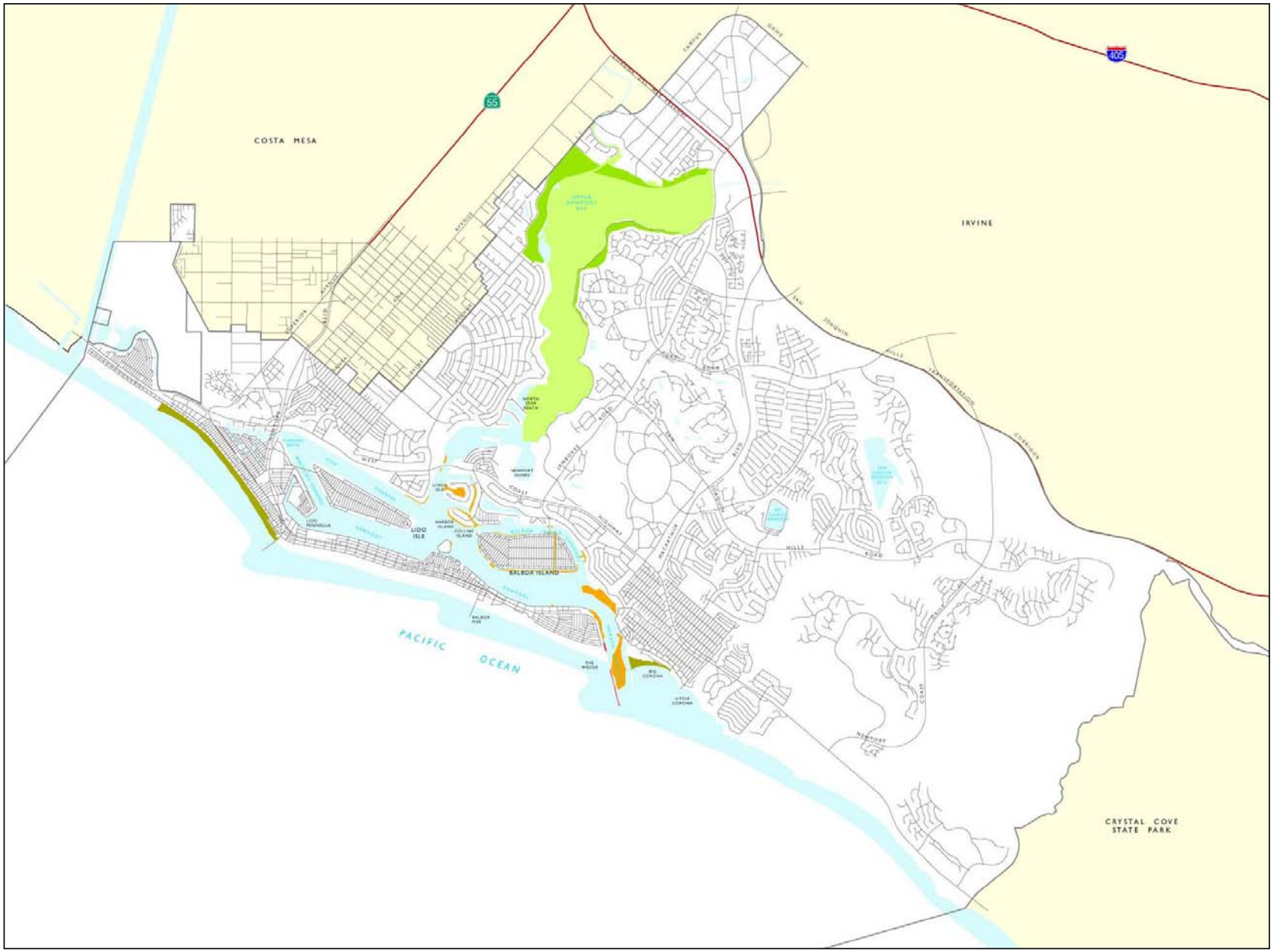
Undeveloped areas supporting natural habitats that may be capable of supporting sensitive biological resources within the City are referred to as Environmental Study Areas (ESAs). An ESA may support species and habitats that are sensitive and rare within the region or may function as a migration corridor for wildlife. ESAs, or portions of them, within the Coastal Zone that are shown, after more detailed study, to contain sensitive or rare species are referred to as Environmentally Sensitive Habitat Areas (ESHAs), as defined by the California Coastal Act. ESHAs are areas in which "plant or animal life or their habitats are either rare or are especially valuable because of their special nature or role in an ecosystem that could easily be disturbed or degraded by human activities and developments." The Coastal Act requires that ESHAs be protected against any significant disruption of habitat values. Only uses dependent on those resources are allowed within ESHAs and adjacent development must be sited and designed to prevent impacts that would significantly degrade the ESHA and must be compatible with the continuance of the ESHA.

There are 28 identified ESAs within the City of Newport Beach, as shown in Figure 4.3-2: (1) Semeniuk Slough, (2) North Star Beach, (3) West Bay, (4) Upper Newport Bay State Marine Park (formerly Ecological Reserve), (5) De Anza Bayside Marsh Peninsula, (6) San Diego Creek, (7) East Bluff Remnant, (8) Mouth of Big Canyon, (9) Newporter North, (10) Buck Gully, (11) Morning Canyon, (12) Newport Beach Marine Life Refuge, (13) Castaways, (14) Banning Ranch, (15) Newport Coast Open Space, (16) Los Trancos, Pelican Hill, (17) Ridge Park, (18) Irvine Coast Marine Life Refuge, (19) Newport Harbor Entrance Channel, (20) Bonita Canyon Creek Watershed, (21) San Joaquin Reservoir, (22) Arroyo Park, (23) Coyote Canyon, (24) MacArthur and Bison, (25) MacArthur and San Miguel, (26) MacArthur and San Joaquin Hills, (27) Spyglass Hill, and (28) and Non-Coastal Buck Gully.

Many of these sites contain one or more sensitive plant communities, and many species of wildlife. Some of the ESAs also contain endangered species of plants and animals. Most of these ESAs are protected as parks, conservation areas, nature preserves, and other open space areas. However, each of these ESAs are subjected to various threats from the surrounding urban environment that include polluted water quality, traffic, noise, public access, development encroachment, erosion and sedimentation, dredging or filling, stormwater runoff, invasive species, and feral animals.

Wildlife Movement

Terms such as habitat corridors, linkages, crossings, and travel routes are used to describe physical connections that allow wildlife to move between patches of suitable habitat in undisturbed landscapes as well as environments fragmented by urban development. To clarify the meaning of these terms and facilitate the discussion of wildlife movement in this analysis, these terms are further defined below.



CITY of NEWPORT BEACH
GENERAL PLAN UPDATE EIR

Figure 4.3-1
BIOLOGICAL RESOURCES

Legend

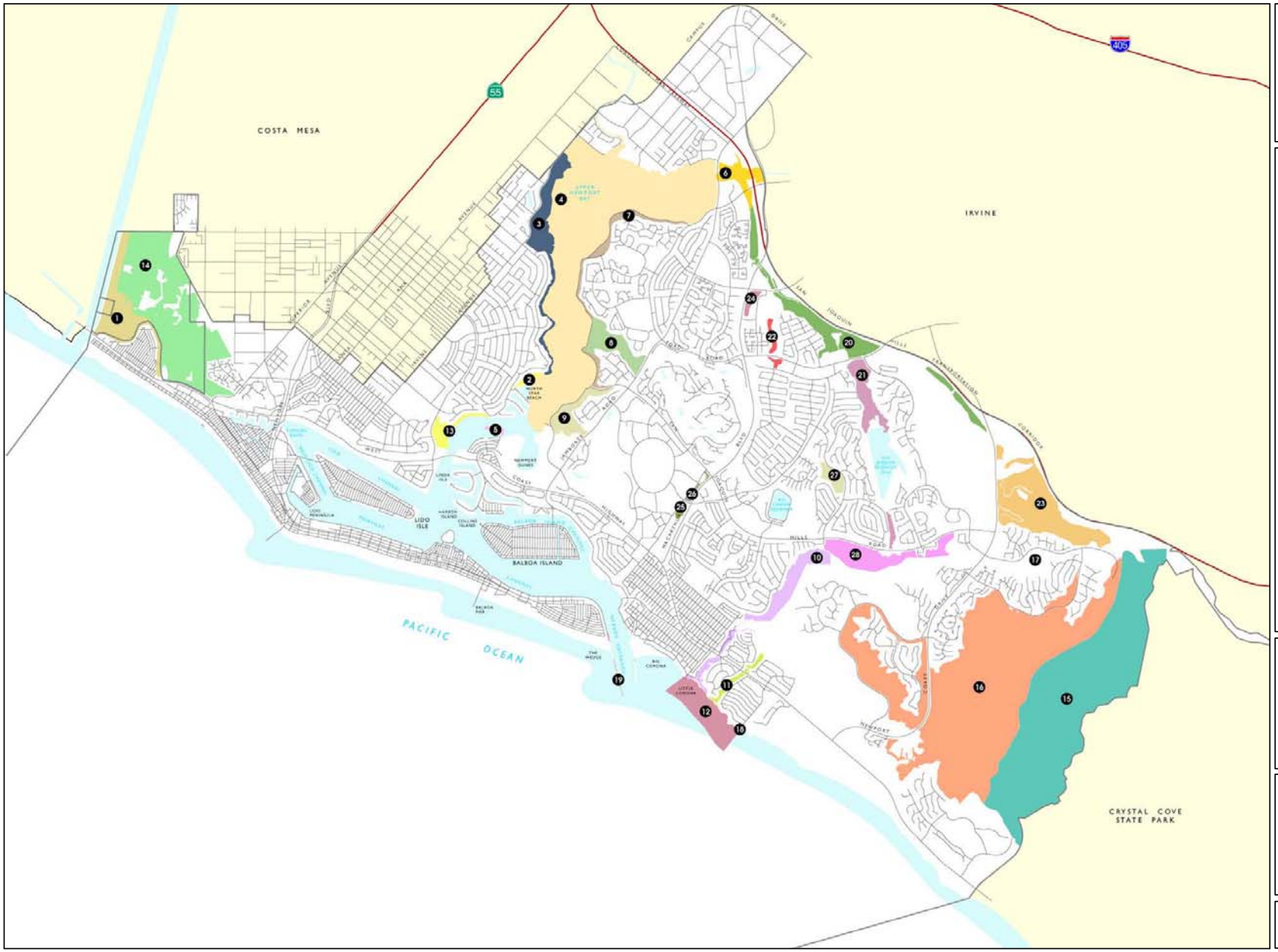
- Eelgrass Bed
- Giant Kelp Bed
- Historic Grunion Spawning Area
- Upper Newport Bay Nature Preserve
- Upper Newport Beach State Marine Park
- City Boundary
- County Boundary

0 0.5 1
Miles

Source: City of Newport Beach, 2005.

Project No. 10579-03

EIP ASSOCIATES



CITY of NEWPORT BEACH
GENERAL PLAN UPDATE EIR

Figure 4.3-2
ENVIRONMENTAL STUDY AREAS

Legend

1. Seminuik Slough
2. Northstar Beach
3. West Bay
4. Upper Newport Bay State Marine Park and Upper Newport Bay Nature Preserve
5. De Anza Bayside Marsh Peninsula
6. San Diego Creek
7. Eastbluff Remnant
8. Big Canyon
9. Newporter North
10. Buck Gully
11. Morning Canyon
12. Newport Beach Marine Life Refuge
13. Castaways
14. Banning Ranch
15. Newport Coast
16. Los Trancos, Pelican Hill
17. Ridge Park
18. Irvine Coast Marine Life Refuge
19. Giant Kelp Bed in Newport Harbor Entrance Channel
20. Bonita Canyon Creek Watershed
21. San Joaquin Reservoir
22. Arroyo Park
23. Coyote Canyon
24. MacArthur and Bison
25. MacArthur/SanMiguel
26. MacArthur/SanJoaquin
27. Spyglass Hill
28. Non-Coastal Buck Gully

0 0.5 1
Miles

Source: City of Newport Beach, 2005.

Project No. 10579-03

EIP ASSOCIATES

Wildlife corridors link areas of suitable habitat that are otherwise separated by areas of nonsuitable habitat such as rugged terrain, changes in vegetation, or human disturbance. Wildlife corridors are essential to the regional ecology of a species because they provide avenues of genetic exchange and allow animals to access alternative territories as dictated by fluctuating population densities. Fragmentation of open space areas by urbanization creates "islands" of wildlife habitat that are more or less isolated from each other. In the absence of habitat linkages that allow movement between habitat islands, studies have concluded that some wildlife species, especially the larger and more mobile mammals, would not persist over time because fragmentation limits infusion of new individuals and erodes genetic diversity. Corridors mitigate the effects of this fragmentation by (1) allowing animals to move between remaining habitats, thereby permitting depleted populations to be replenished and promoting genetic exchange; (2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk of catastrophic events (such as fire or disease) that could lead to local extinction; and (3) serving as travel routes for individual animals as they move within their home ranges in search of food, water, mates, and shelter. Wildlife corridors are typically relatively small, linear habitats that connect two or more habitat patches that would otherwise be fragmented or isolated from one another.

Wildlife corridors are usually bounded by urban land areas or other areas unsuitable for wildlife. The corridor generally contains suitable cover, food, and/or water to support species and facilitate movement while in the corridor. Larger, landscape-level corridors (often referred to as "habitat or landscape linkages") can provide both transitory and resident habitat for a variety of species. Although it is commonly used as a synonym for wildlife corridor, a habitat linkage refers to a more substantial, or wider, land connection between two habitat areas. Habitat linkages allow for the periodic exchange of animals between habitat areas, which is essential to maintain adequate gene pools. This linkage is most notable among populations of medium-sized and larger animals.

A travel route is usually a landscape feature (such as a ridgeline, drainage, canyon, or riparian corridor) within a larger natural habitat area that is used frequently by animals to facilitate movement and provide access to necessary resources (e.g., water, food, cover, den sites). The travel route is generally preferred because it provides the least amount of topographic resistance in moving from one area to another. It provides adequate food, water, or cover for individuals moving between habitat areas and provides a relatively direct link between target habitat areas. Wildlife crossings are small, narrow areas that are relatively short in length. They allow wildlife to bypass an obstacle or barrier. Crossings typically are manmade and include culverts, underpasses, drainage pipes, bridges, and tunnels to provide access past roads, highways, pipelines, or other physical obstacles. Wildlife crossings often represent "choke points" along a movement corridor.

4.3.3 Regulatory Setting

Federal Regulations

Federal Endangered Species Act

As defined within the *Federal Endangered Species Act* (FESA) of 1973, an endangered species is any animal or plant listed by regulation as being in danger of extinction throughout all or a significant portion of its geographical range. A threatened species is any animal or plant that is likely to become endangered within the foreseeable future throughout all or a significant portion of its geographical range. Without a special permit, federal law prohibits the "take" of any individuals or habitat of federally listed species. Under Section 9 of the FESA, take is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct." The term "harm" has been clarified to include "any act which actually kills or injures fish or wildlife, and emphasizes that such acts may include significant habitat modification or degradation that significantly impairs essential behavioral patterns of fish or wildlife." Enforcement of FESA is administered by the U.S. Fish and Wildlife Service and the National Oceanic and Atmospheric Administration Fisheries Service.

Federal Migratory Bird Treaty Act

Pursuant to the *Migratory Bird Treaty Act* (MBTA) of 1918, as amended in 1972, federal law prohibits the taking of migratory birds or their nests or eggs (16 U.S.C. Section 703). The statute states:

> Unless and except as permitted by regulations made as hereinafter provided in this subchapter, it shall be unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, kill, attempt to take, capture, or kill...any migratory bird, any part, nest, or egg of any such bird...included in the terms of the [Migratory Bird] conventions…

The Act covers the taking of any nests or eggs of migratory birds, except as allowed by permit pursuant to 50 CFR, Part 21. Disturbances causing nest abandonment and/or loss of reproductive effort (i.e., killing or abandonment of eggs or young) may also be considered a "take." This regulation seeks to protect migratory birds and active nests.

In 1972, the MBTA was amended to include protection for migratory birds of prey (e.g., raptors). Six families of raptors occurring in North America were included in the amendment:

- Accipitridae (kites, hawks, and eagles)
- Cathartidae (New World vultures)
- Falconidae (falcons and caracaras)
- Pandionidae (ospreys)
- Strigidae (typical owls)
- Tytonidae (barn owls)

The provisions of the 1972 amendment to the MBTA protects all species and subspecies of the families listed above. The MBTA protects over 800 species including geese, ducks, shorebirds, raptors, songbirds,

and many relatively common species, including all species that were observed within the Planning Area (i.e., white-crowned sparrow, mourning dove, and red-wing blackbird).

Section 404 of the Clean Water Act

Section 404 of the *Clean Water Act* (CWA) requires that a permit be obtained from the U.S. Army Corps of Engineers (USACE) prior to the discharge of dredged or fill materials into any "waters of the United States or wetlands." Waters of the United States are broadly defined in the USACE's regulations (33 CFR 328) to include navigable waterways, their tributaries, lakes, ponds, and wetlands. Wetlands are defined as: "Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that normally do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas" (Federal Register 1982). Wetlands that are not specifically exempt from Section 404 regulations (such as drainage channels excavated on dry land) are considered to be "jurisdictional wetlands." In a recent Supreme Court Case, the Court acted to limit the regulatory jurisdiction of the USACE under Section 404 of the CWA as it applies to adjacent waters (USSC 2001). Specifically, the Court ruled that waters that are nonnavigable, isolated, and intrastate are not subject to the USACE jurisdiction (Guzy and Anderson 2001). The USACE is required to consult with the U.S. Fish and Wildlife Service, Environmental Protection Agency, and State Regional Water Quality Control Board (among other agencies) in carrying out its discretionary authority under Section 404.

The USACE grants two types of permits, individual and nationwide. Project-specific individual permits are required for certain activities that may have a potential for more than a minimal impact and necessitate a detailed application. The most common type of permit is a nationwide permit. Nationwide permits authorize activities on a nationwide basis unless specifically limited, and are designed to regulate with little delay or paperwork certain activities having minimal impacts. Nationwide permits typically take two to three months to obtain whereas individual permits can take a year or more. To qualify for a nationwide permit, strict conditions must be met. If conditions are met, permittees may proceed with certain activities without notifying the USACE. Some nationwide permits require a 30-day pre-construction notification period before activities can begin. Fill of certain isolated waters or wetlands that affect less than 0.5 acre of impact per project may be permitted with a pre-construction notification.

State Regulations

California Endangered Species Act

In addition to federal laws, the state of California has its own Endangered Species Act (CESA), enforced by the CDFG. The CESA program maintains a separate listing of species beyond the ESA, although the provisions of each act are similar.

California Fish and Game Code

Unlawful Take or Destruction of Nests or Eggs

Section 3503.5 of the Fish and Game Code of California specifically protects birds of prey. The Code states:

> It is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.

Section 3513 of the Fish and Game Code of California duplicates the federal protection of migratory birds. The Code states:

> It is unlawful to take or possess any migratory nongame bird as designated in the Migratory Bird Treaty Act or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Treaty Act.

California Department of Fish and Game Lake or Streambed Alteration Program

The CDFG, through provisions of the state of California Administrative Code, is empowered to issue agreements for any alteration of a river, stream, or lake where fish or wildlife resources may adversely be affected. Streams (and rivers) are defined by the presence of a channel bed and banks, and at least an intermittent flow of water. CDFG regulates wetland areas only to the extent that those wetlands are part of a river, stream, or lake as defined by CDFG.

Typically, wetland delineations are not required to obtain CDFG Agreements. The reason for this is that CDFG generally includes any riparian habitat present within the jurisdictional limits of streams and lakes. Riparian habitat includes willows, mulefat, and other vegetation typically associated with the banks of a stream or lake shoreline. In most situations, wetlands associated with a stream or lake would fall within the limits of riparian habitat. Thus, defining the limits of CDFG jurisdiction based on riparian habitat will automatically include any wetland areas.

California Environmental Quality Act—Treatment of Listed Plant and Animal Species

The FESA and CESA protect only those species formally listed as threatened or endangered (or rare in the case of the state list). However, Section 15380 of the CEQA Guidelines independently defines "endangered" species of plants or animals as those whose survival and reproduction in the wild are in immediate jeopardy and "rare" species as those who are in such low numbers that they could become endangered if their environment worsens.

California Coastal Act §30000 et seq.

Chapter 3 of the California Coastal Act contains policies to protect water quality and the biological productivity of coastal waters (30231); avoid and minimize dredging, diking, and filling sediments (30233); and mitigation of wetland impacts (30607.1).

In addition, under the California Coastal Act "environmentally sensitive area means any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments" (PRC Section 30107.5).

The California Coastal Act requires that jurisdictions protect Environmentally Sensitive Habitat Areas (ESHA). Specifically, PRC Section 30240 states that:

> a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas.
>
> b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas

The Coastal Act generally protects ESHAs where they exist; it also protects "against any significant disruption of habitat values". Section 30007.5 of the Coastal Act states that where there is a conflict between policies that it:

> … be resolved in a manner, which on balance is the most protective of significant coastal resources. In this context, the Legislature declares that broader policies which, for example, serve to concentrate development in close proximity to urban and employment centers may be more protective, overall, than specific wildlife habitat and other similar resource policies.

California Wetlands Conservation Policy (1993)

California wetlands policy is more restrictive than federal wetlands policy. The goal of California Wetlands Conservation Policy (1993) is to ensure no net loss of wetlands within the state. This policy, incorporated in an executive order by then Governor Pete Wilson, also encourages a long-term net gain in the state's quantity, quality, and permanence of wetlands acreage and values. Interpretation of this order indicates that any developer wishing to fill in wetlands for construction of new development must perform mitigation in the form of constructed wetlands elsewhere at ratios ranging from 2:1 to 10:1. In addition to the USACE, state regulatory agencies claiming jurisdiction over wetlands include the CDFG and the State Water Resources Control Board.

Porter-Cologne Water Quality Control Act

The *Porter-Cologne Water Quality Control Act* charges the State Water Resources Control Board (SWRCB) and the nine Regional Water Quality Control Boards (RWQCB) statewide with protecting water quality throughout California. Typically, the SWRCB and RWQCB act in concert with the USACE under Section 401 of the CWA in relation to permitting fill of federally jurisdictional waters. As discussed above, the Supreme Court recently acted to limit the regulatory jurisdiction of the USACE under Section

404 of the CWA (USSC 2001). This action did not limit the state's regulatory jurisdiction over Waters of the state (Guzy and Anderson 2001). Waters of the state are defined in Section 13050(e) of the *Porter-Cologne Water Quality Control Act* as "…any surface water or groundwater, including saline waters, within the boundaries of the state." Currently, an applicant would delineate the wetlands on their property utilizing methodology presented in the *1987 Corps of Engineers Wetland Delineation Manual* (Environmental Laboratory 1987) and the delineation would be verified by the USACE. In cases where an area meets the criteria to be considered a wetland, but the USACE does not have jurisdiction, the applicant is referred to the appropriate RWQCB. In these cases, the project must receive a permit for Waste Discharge Requirements or a Waiver of Waste Discharge Requirements from the RWQCB. Projects that affect Waters of State are required by the RWQCB to incorporate mitigation. Mitigation ratios are determined on a project specific basis during the permitting process and are based on the quality of the wetlands impacted by the project.

Regional

Natural Community Conservation Plan and Habitat Conservation Plan, County of Orange, Central and Coastal Subregion

The preparation of a comprehensive natural resources management conservation plan for Central and Coastal Orange County was completed in 1996. The Central and Coastal Orange County NCCP and Habitat Conservation Plan (HCP) and the associated Implementation Agreement covers thirteen cities. In July of 1996, the City became a signatory agency in the NCCP/HCP. The purpose of the NCCP/HCP is to create a multi-species multi-habitat reserve system and implementation of a long-term management program that will protect primarily coastal sage scrub and the species that utilize this habitat. At the same time that it protects this habitat and species, the NCCP/HCP is also intended to allow for economical use of the lands that meet the people's needs.

The NCCP/HCP is intended to focus on multiple species and habitats and address conservation of these species on a regional context. The three main target species are the coastal California gnatcatcher, cactus wren, and orange-throated whiptail. There are twenty-six other species that are also identified and afforded management protection under the NCCP/HCP. An additional ten species of plants and animals that are either federally listed or treated as if they were listed according to FESA Section 10(a) are addressed within the NCCP/HCP.

Several areas within the Planning Area fall within the reserve system of the NCCP/HCP. For the areas outside the reserve system, development restrictions of the NCCP/HCP do not apply to the city owned land, nor that of the individual landowners. However, since the Planning Area lies within the area of the NCCP/HCP, non participating landowners are provided with different mitigation options than those provided for participating landowners. Nonparticipating landowners may satisfy the requirements of the FESA and CESA in relation to the species covered under the NCCP/HCP one of three ways:

- On-site avoidance of take
- Satisfaction of the applicable FESA and CESA regulations through the regular permitting and consultation process (outside the NCCP/HCP)

- Payment of a mitigation fee to the nonprofit management organization established by the NCCP/HCP

As a signatory agency, the City is responsible for enforcing mitigation measures and other policies identified in the NCCP/Habitat Conservation Plan Implementation Agreement for properties located within the City Limit that are part of the NCCP Subregional Plan.

Local Regulations

The City's existing Conservation of Natural Resources Element of the General Plan contains policies for Bay and Ocean Water Quality, Air Quality, Beach Erosion, Mineral Resources, Archaeological and Paleontological Resources, and Energy Conservation. There are currently no policies addressing habitat protection, protection of federally protected wetlands or waters of the United States, or prevent interference with the movement of native resident or migratory species. The City's certified Coastal Land Use Plan (CLUP) contains extensive policy language addressing biological, habitat and resource protection. CLUP policies are applicable only in the Coastal Zone, which covers only a portion of the Planning Area. The Newport Beach Municipal Code includes Chapter 7.26 to protect Newport Bay as a habitat for migratory and other waterfowl by prohibiting the incubation and feeding of waterfowl.

4.3.4 Thresholds of Significance

The following thresholds of significance are based on Appendix G of the 2005 CEQA Guidelines. For purposes of this EIR, implementation of the proposed project may have a significant adverse impact on biological resources if it would result in any of the following:

- Have a substantial adverse effect, either directly or indirectly through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or 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

4.3.5 Project Impacts, Mitigation Measures, and Proposed Policies

Effects Not Found to Be Significant

The IS/NOP prepared for the proposed project did not identify any effects not found to be significant associated with biological resources. Therefore, all thresholds are addressed in this section.

Project Impacts

Threshold	Would development allowed under the proposed General Plan Update have a substantial adverse effect, either directly or indirectly through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or the CDFG or USFWS.

Impact 4.3-1 **Development allowed under the proposed General Plan Update could result in potential adverse impacts either directly or indirectly through habitat modifications, to candidate, sensitive, or special status plant and wildlife species.**

The proposed General Plan Update would allow infill development throughout the Planning Area, following existing land use patterns. The Update would concentrate new development and redevelopment in several specified subareas: Newport Center/Fashion Island, Balboa Village, Balboa Peninsula, West Newport Mesa, West Newport Highway, Mariners' Mile, and the Airport Area. In addition, while the proposed General Plan Update prioritizes the retention of the Banning Ranch property as open space, the Plan also considers the possible development of a mixed- density residential village with a small component of resident- and visitor-serving commercial should the property not be acquired for open space. As indicated previously, a variety of plant and animal species are present within the Planning Area, especially within the ESAs. Some of the sensitive wildlife species that have been observed within the Planning Area include, but are not limited to, California least tern (*Sterna antillarum browni*), yellow warbler (*Dendroica petechia brewsteri*), Belding's savannah sparrow (*Passerculus sandwichensis beldingi*), golden eagle (*Aquila chrysaetos*), light-footed clapper rail (*Rallus longitrostris levipes*), and western snowy plover (*Charadrius alexandrinus nivosus*).

Development under the proposed General Plan Update could also result in the removal of mature trees that may serve as perching or nesting sites for migratory birds and raptors in both developed and undeveloped areas. It is anticipated that any migratory birds or raptors using mature trees as perching or nesting sites could vacate the site upon the initiation of construction activities because the resulting increase in noise and activity levels could disturb nesting behaviors. As noted previously, several federal and state regulations, including the MBTA, FESA, and CESA, restrict activities that may result in the "take" (kill, harm, harass, etc.) of certain species, including active nests. During the project-level analysis of development proposed under the General Plan, project-specific mitigation, such as pre-construction surveys, may be necessary to ensure that development under the proposed General Plan Update does not result in the "take" of such species as a result of vegetation removal. The proposed General Plan

Update's Natural Resource Element, specifically Goal NR 10 and Policies NR 10.1 through NR 10.13, delineate the types and manner of mitigation measures that may be necessary during project-specific analysis and development.

The proposed General Plan Update has identified goals that would aid in (1) the protection of sensitive and rare terrestrial and marine resources from urban development; (2) the protection of eelgrass meadows for their ecological function as a nursery and foraging habitat within the Newport Bay ecosystem, balanced with maintenance of Newport Harbor as a recreational boating resource; (3) the protection of coastal dune habitats; (4) the proper disposal of dredge spoils to avoid disruption to natural habitats; (5) the protection, maintenance, and enhancement of Southern California Wetlands; (6) the protection and management of Upper Newport Bay commensurate with the standards applicable to our nation's most valuable natural resources; and (7) the protection of environmental resources in Newport Harbor while preserving and enhancing public recreational boating opportunities. Specifically, Policies NR 10.1 through NR 10.8 protect plant and wildlife species and habitat in the Planning Area by requiring: (1) cooperation with the state and federal resource protection agencies and private organizations to protect terrestrial and marine resources; (2) the compliance with the policies contained within the NCCP; (3) the protection, and prohibition of development in, nature preserves, conservation areas, and designated open space areas; (4) site-specific surveys and analysis prepared by a qualified biologist as a filing requirement for any development permit applications where development would occur within or contiguous to areas identified as an ESA; (5) that the siting and design of new development, including landscaping and public access, protect sensitive or rare resources against any significant disruption of habitat values; (6) the limiting of uses within an area containing any significant or rare biological resources to only those uses that are dependent on such resources, except where application of such a limitation would result in a taking of private property; (7) maintenance of a buffer of sufficient size around significant or rare biological resources and the use of native vegetation within buffers and the prohibition of invasive plant species within buffer areas; and (8) the shielding and direction of exterior lighting away from significant or rare biological resources.

These policies providing protection to habitats containing candidate, and special status plant and wildlife species are additions to the City's General Plan, in light of the fact that there are currently no such policies contained in the existing Conservation of Natural Resources Element. Therefore, the proposed General Plan Update would increase the level of protection of these plant and wildlife species within the City's regulatory framework.

Compliance with FESA, CESA, and CEQA, as well as implementation of proposed General Plan Update goals and policies discussed above, would reduce potential impacts on sensitive plant and wildlife species within the Planning Area. Policies under the proposed General Plan Update that require measures such as site-specific biological studies and compliance with the NCCP/HCP would ensure that proper assessment of potential impacts to candidate, sensitive, and special status species be made on a project-by-project basis. With compliance with these policies, impacts would be ***less than significant*** and no additional mitigation is required.

Threshold	Would development allowed under the proposed General Plan Update 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?

Impact 4.3-2 Development allowed under the proposed General Plan Update could result in adverse effects on riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations, or by the CDFG or USFWS.

The proposed General Plan Update would allow infill development throughout the Planning Area, following existing land use patterns. The Update would concentrate new development and redevelopment in several specified subareas: Newport Center/Fashion Island, Balboa Village, Balboa Peninsula, West Newport Mesa, West Newport Highway, Mariners' Mile, and the Airport Area. In addition, while the proposed General Plan Update prioritizes the retention of the Banning Ranch property as open space, the Plan also considers the possible development of a mixed- density residential village with a small component of resident- and visitor-serving commercial should the property not be acquired for open space. This would preclude most sites containing riparian habitats from being developed under the proposed General Plan Update. Riparian habitats are known to exist throughout the Planning Area, especially in Banning Ranch. As discussed in Section 4.3.3 (Regulatory Setting), the CDFG, under Section 1600 of the Fish and Game Code of California, is empowered to regulate impacts to lakes, streams, and associated riparian (streamside or lakeside) vegetation through the issuance of a Lake or Streambed Alteration Agreement (SAA). The CDFG considers most drainages to be "streambeds" unless it can be demonstrated otherwise. A stream is defined as a body of water that flows at least periodically or intermittently through a bed or channel with banks and supports fish or other aquatic life. This includes watercourses having a surface or sub-surface flow that supports, or has supported, riparian vegetation. CDFG jurisdiction typically extends from the stream bed to the edge of the riparian canopy, and any modification to the stream or its banks that would impact it or riparian vegetation would require a SAA. As many riparian communities (e.g., southern riparian scrub, southern willow scrub, and southern cottonwood) are listed as "rare" by the CDFG and California Native Plant Society (CNPS), additional protection is extended to some riparian communities by the CDFG under Section 15380 of the CEQA Guidelines. These guidelines independently define "endangered" species of plants or animals as those whose survival and reproduction in the wild are in immediate jeopardy and "rare" species as those who are in such low numbers that they could become endangered if their environment worsens. Therefore, a project normally will have a potentially significant effect on the environment if it will substantially affect a rare or endangered species of animal or plant or the habitat of the species. The significance of impacts to a species under CEQA must be based on analyzing actual rarity and threat of extinction despite legal status or lack thereof.

While there are no federal regulations that specifically mandate the protection of riparian vegetation, federal regulations set forth in Section 404 of the CWA address areas that potentially contain riparian-type vegetation, such as wetlands. However, the jurisdiction of Section 404 is generally less than that of the Section 1600 SAA, covering only riparian vegetation that is within the active channel itself.

In addition to the applicable state and federal regulations, the proposed General Plan Update has identified as goals: (1) the protection of sensitive and rare terrestrial and marine resources from urban development, and; (2) the protection, maintenance, and enhancement of Southern California Wetlands. Implementation of proposed General Plan Update Policies NR 10.1 through NR 10.7 would reduce or avoid impacts to riparian areas by ensuring cooperation with resource protection agencies, organizations, and conservation plans, and limiting or placing constraints on future development within identified ESAs or areas containing significant or rare biological resources. In addition, Policies NR 10.9 and NR 10.10 would specifically protect the existing or potential riparian habitats, and encourage restoration of the ESAs located within the Planning Area. Policies NR 13.1 and NR 13.2 would serve to protect wetlands and their riparian habitat, and require a survey and analysis of future development within a delineated wetland area under the proposed General Plan Update.

These policies providing protection to habitats containing candidate, and special status plant and wildlife species are additions to the City's General Plan, in light of the fact that there are currently no such policies contained in the existing Conservation of Natural Resources Element. Therefore, the proposed General Plan Update would increase the level of protection of these plant and wildlife species within the City's regulatory framework.

An indirect impact to riparian habitat could result from the future development of existing vacant lands, including potential development in the Banning Ranch subarea. The placement of development next to riparian habitats would disturb wildlife that rely on these areas for shelter and food and could also result in the degradation of these areas through the introduction of feral animals and contaminants that are typical of urban uses. Because federal regulations do not specifically address protection of riparian vegetation under the Section 404 permitting process, and the fact that the CDFG Section 1600 SAA is a negotiated agreement, some unmitigated loss of riparian resources may occur. Therefore these regulations would not serve to fully protect and manage riparian habitat under future development However, the aforementioned proposed General Plan Update policies would serve to regulate indirect impacts future development could have on riparian habitats. Therefore, the impacts associated with riparian habitats within the Planning Area would be ***less than significant***.

Threshold	Would development allowed under the proposed General Plan Update 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.

Development allowed under the proposed General Plan Update would not result in a substantial adverse effect on federally protected wetlands and/or waters of the United States through direct removal, filling, hydrological interruption, or other means.

Section 404 of the Clean Water Act requires that a permit be obtained from the Corps prior to the discharge of dredged or fill materials into any "waters of the United States." Waters of the United States, as defined by regulation and refined by case law, include (1) the territorial seas; (2) coastal and inland waters, lakes, rivers, and streams that are navigable waters of the United States, including their adjacent

wetlands; (3) tributaries to navigable waters of the United States, including adjacent wetlands; (4) interstate waters and their tributaries, including adjacent wetlands; and (5) all other waters of the United States not identified above, such as some isolated wetlands and lakes, intermittent and ephemeral streams, and other waters that are not a part of a tributary system to interstate waters or navigable waters of the United States, the degradation or destruction of which could affect interstate commerce. In addition to any potential wetlands, the limits of Corps jurisdiction extends to the ordinary high water mark (OHWM) of streams and lakes, which is defined at 33 CFR 328.3(e) as:

> … that line on the shore established by the fluctuation of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

Wetlands are defined as "[t]hose areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that normally do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas." Section 404 Permits often require mitigation to offset losses of these habitat types. Wetlands that are not specifically exempt from Section 404 regulations (such as drainage channels excavated on dry land) are considered to be jurisdictional wetlands. The Corps is required to consult with the USFWS, Environmental Protection Agency (EPA), State Regional Water Quality Control Board (RWQCB), and the CDFG in carrying out its discretionary authority under Section 404.

Stream channels that do not meet the federal definition of a wetland may still be regulated by the Corps as "other waters of the United States" if they meet the definition provided above. In addition, they are generally regulated within California by Section 1600of the California Fish and Game Code.

As stated previously, the areas within the Planning Area containing wetland habitat include Upper Newport Bay, the developed channels, beaches, and hardscape of Lower Newport Bay (Newport Harbor), and the intertidal and subtidal landforms (sandy beaches, rocky intertidal, sandy subtidal, and subtidal reefs) along the coast of Newport Beach between the Santa Ana River and the boundary between the City and unincorporated Orange County. Additionally, Banning Ranch contains relatively high-quality wildlife habitat due to its size, habitat diversity, and continuity with the adjacent Semeniuk Slough and federally-restored wetlands.

Generally, development under the proposed General Plan Update would be confined to previously developed areas and would not be located within the vicinity of wetland areas. However, should certain development proposed under the General Plan be located within or adjacent to such wetland areas, state and federal laws and regulations would be implemented to protect resources from development through the Corps Section 404 permitting process, which is a discretionary rather than negotiated process, and the California Wetlands Conservation Policy (CWCP 1993). The CWCP is intended to ensure that no net loss of wetlands would occur within the state. This is an analogous policy to a federal Executive Order that also mandates no net loss of wetlands. With respect to the state's policy, it also encourages a long-term net gain in the quantity, quality, and permanence of wetlands acreage and values. Interpretation of this order indicates that any developer wishing to fill in wetlands for construction of new development must provide mitigation of in-kind habitat at ratios ranging from 2:1 to 10:1.

In addition to the state and federal regulation, proposed General Plan Update Policies NR 13.1 and NR 13.2 would protect, maintain, and enhance the City's wetlands. Policies NR 14.1 through NR 14.4 would maintain and enhance deep water channels and ensure they remain navigable by boats through the management of dredging and maintaining the capacity of wetlands and estuaries. Policies NR 15.1 through NR 15.3 would ensure the proper disposal of dredge spoils to avoid disruption to natural habitats through monitoring and management of sediment. As such, implementation of the above policies, which are not in the City's existing Conservation of Natural Resources Element, and strict adherence to the identified state and federal laws and regulations and the "no net wetland loss" policy currently in place, would ensure that implementation of the proposed General Plan Update would have ***no impact*** on jurisdictional waters and wetlands within the Planning Area.

Threshold	Would development allowed under the proposed General Plan Update 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.

Impact 4.3-3 Development under the proposed General Plan Update could interfere with the movement of native resident or migratory fish or wildlife species or corridors.

The proposed General Plan Update would allow infill development throughout the Planning Area, following existing land use patterns. The Update would concentrate new development and redevelopment in several specified subareas: Newport Center/Fashion Island, Balboa Village, Balboa Peninsula, West Newport Mesa, West Newport Highway, Mariners' Mile, and the Airport Area. In addition, while the proposed General Plan Update prioritizes the retention of the Banning Ranch property as open space, the Plan also considers the possible development of a mixed- density residential village with a small component of resident- and visitor-serving commercial should the property not be acquired for open space. Although the Banning Ranch site contains an assemblage of diverse habitats that have been historically disturbed, when this area is considered with the contiguous Semeniuk Slough and restored wetlands, it provides wildlife with a significantly large, diverse area for foraging, shelter, and movement. Development of the Banning Ranch subarea could lead to habitat fragmentation, which occurs when new development divides undisturbed habitat. The resulting fragmentation is particularly harmful to species that rely on large territories to draw food and cover. Without adequate continuous habitat, native species would be adversely affected by development occurring under the proposed General Plan Update. New urban use of previously undeveloped areas requires new roads or widening of existing roads, which block migration routes, separate wildlife from food sources, and otherwise fragment habitat.

Nonetheless, implementation of applicable General Plan policies would ensure that substantial impacts to native, resident, or migratory wildlife species or corridors would not occur in areas of infill and redevelopment. Implementation of Policies NR 10.1 and NR 10.2 would ensure that all future development cooperates with federal, state, and private resource protection agencies/organizations, and complies with policies contained in the NCCP. Policies NR 10.3 and NR 10.4 would protect and prohibit development in nature preserves, conservation areas, and designated open space areas, and would require

a site-specific study be prepared where development would occur within or contiguous to such areas. Policies NR 10.5, NR 10.7, and NR 10.8 would prevent disruption, and ensure protection of sensitive habitat though siting and design requirements, along with sufficient buffer sizes and shielding from direct exterior lighting. Policies NR 12.1 through NR 12.3 would serve to protect coastal dune habitats, which serve as movement corridor for coastal wildlife species. Policies NR 13.1 and NR 13.2 would protect, maintain, and enhance the Planning Area's wetlands, another movement corridor for a variety of aquatic, terrestrial, and avian species. With implementation of the proposed policies, which are not in the existing Conservation of Natural Resources Element, new urban uses within the developed areas of the City would not have a substantial effect on the movement of native resident of migratory wildlife species or corridors. Impacts on these areas would be ***less than significant***.

Although implementation of the proposed General Plan Update policies previously described would reduce impacts, there could still be impacts to the movement of native resident or migratory wildlife species if habitat fragmentation from development of vacant areas and reuse occurs. As mentioned, the main area of concern is the Banning Ranch, which includes important habitat types and numerous special-status species and is largely underdeveloped. If this areas is not retained as open space, it could be developed as a mixed- density residential village with a small component of resident- and visitor-serving commercial. The magnitude of this development could adversely affect the existing wildlife habitats and interfere with its movement corridors. Many proposed General Plan Update policies would ensure that impacts on the movement of native resident of migratory wildlife species or corridors in Banning Ranch remain less than significant. These policies, as discussed above, include proposed General Plan Update Policy NR 10.10, which protects sensitive and rare species located on Banning Ranch; Policy NR 10.7, which would maintain buffers around significant or rare species; and Policy NR 10.8, which would shield and direct exterior lighting away from significant or rare species. The existing Conservation of Natural Resources Element does not contain similar policies. As a result, this impact would be ***less than significant***.

Threshold	Would development allowed under the proposed General Plan Update conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Implementation of the proposed General Plan Update would not conflict with any local policies or ordinances protecting biological resources.

Implementation of the proposed General Plan Update would be subject to all applicable federal, state, and local policies and regulations related to the protection of biological resources. Some of the local policies that future development under the proposed General Plan would be required to adhere to include Council Policy G-1 (Retention or Removal of City Trees) and Chapter 7.26 of the City's Municipal Code (Protection of Natural Habitat for Migratory and Other Waterfowl.) Council Policy G-1 was created to establish and maintain appropriate diversity in tree species and age classes to provide a stable and sustainable urban forest with an inventory that the City can reasonably maintain in a healthy and non-hazardous condition. Chapter 7.26 of the City's Municipal Code recognizes and strives to maintain the value of natural habitat for migratory waterfowl and other birds such as ducks, gulls, terns, and pelicans. In addition, Policy NR 10.1 states that future development shall cooperate with state and

federal agencies, and private organizations in the protection of the Planning Area's biological resources, and Policy NR 10.3 would protect, and prohibit development in, nature preserves, conservation areas, and designated open space areas in order to minimize urban impacts upon resources in identified ESAs. As the proposed General Plan Update includes policies to ensure that future development within the Planning Area would not conflict with any local policies or ordinances protecting biological resources, there would be ***no impact***.

Threshold	Would development allowed under the proposed General Plan Update conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Implementation of the proposed General Plan Update would not conflict with the provisions an adopted Habitat Conservation Plan.

The Orange County Central and Coastal NCCP is the applicable habitat conservation plan for the Planning Area, of which the City is a signatory agency. The proposed General Plan Update is consistent with the NCCP, because the NCCP is included as a part of the proposed General Plan Update policies. Policy NR 10.2 explicitly states that future development must comply with the policies contained within the Orange County Natural Communities Conservation Plan. In addition, Policy NR 10.1 states that future development shall cooperate with state and federal agencies, and private organizations, in the protection of the Planning Area's biological resources. This includes local, regional, or state habitat conservation plans. The existing Conservation of Natural Resources Element does not contain similar policies. Because the proposed General Plan Update has included policies to ensure compliance of future development within the Planning Area with the provisions of the NCCP, and approved local, regional, and state habitat conservation plans, there would be ***no impact.***

Cumulative Impacts

The geographical context for the analysis of cumulative biological impacts includes the Orange County Central and Coastal NCCP area. This analysis accounts for all anticipated cumulative growth within this geographic area, as represented by full implementation of the proposed General Plan Update as well as the cumulative development anticipated in the Orange County General Plan.

Because rare natural communities do not need to be formally listed as threatened or endangered under any state or federal regulations to be considered "sensitive", the proposed General Plan Update and future projects within the County would not prohibit development within areas that contain sensitive natural communities. However, the policies and goals outlined under the proposed General Plan Update, specifically those identified in Impact 4.3-3, recognize the importance and value of these areas and are aimed at protecting these resources. Because of this, the project's contribution to the cumulatively adverse effect on these communities would not be considerable. Therefore, because the proposed General Plan Update does not contribute considerably to the decline of sensitive natural communities, the proposed General Plan Update's contribution to this impact would not be cumulatively considerable, and would result in a ***less-than-significant*** impact.

Cumulative development within Orange County could affect riparian habitats. Because there are no current regulations prohibiting development in riparian habitats, or requiring specific mitigation measures that would ensure no net loss on riparian vegetation, the loss of these areas could occur as a result of the proposed project. However, the proposed General Plan Update policies identified in Impact 4.3-3 would reduce the project's contribution to a level that is not considerable. Therefore, because the proposed General Plan Update does not contribute considerably to the decline of riparian habitats, the cumulative impact to these areas from the project is considered ***less than significant***.

Future development within the County could affect federally protected wetlands. However, there are state and federal regulations that prohibit the net loss of wetlands. Potential impacts to wetlands within the Planning Area would also be subject to proposed General Plan Update policies NR 13.1 and NR 132.2, which would protect, maintain, and enhance the City's wetlands. In addition, Policies NR 14.1 through NR 14.4 would maintain and enhance deep water channels and ensure they remain navigable by boats through the management of dredging and maintaining the capacity of wetlands and estuaries. Further, Policies NR 15.1 through NR 15.3 would ensure the proper disposal of dredge spoils to avoid disruption to natural habitats through monitoring and management of sediment. Implementation of these policies would minimize effects. As such, the project's contribution to the cumulative loss of wetlands is not considerable. Therefore, because the proposed General Plan Update does not contribute considerably to wetland loss, there would be ***no cumulative impact***.

New development in large, underdeveloped areas has the potential to interfere with the movement of native resident or migratory wildlife species. However, most development that would occur under the proposed General Plan Update would generally lead to the intensification of existing uses on sites throughout the Planning Area. The NCCP guides development in preventing adverse effect on the movement of, native resident or migratory wildlife species, or corridors within the County. In addition, the proposed General Plan Update policies identified in Impact 4.3-3 would ensure that the proposed General Plan Update's contribution to the cumulative impact to movement of native resident or migratory wildlife species, or corridors would not be significant. Therefore, because the proposed General Plan Update does not contribute a considerable amount to the interruption of migration and movement of wildlife, the cumulative impact to these resources from the project is considered be ***less than significant***.

Proposed General Plan Update Policies

The Natural Resources Element of the proposed General Plan Update includes policies that would address issues related to biological resources within the City of Newport Beach. The policies that are applicable to the project are included below.. The policies that are applicable to the project are included below. Policies identified below that are also contained in the Harbor and Bay Element are denoted with an "HB".

Natural Resources Element

Goal NR 10 Protection of sensitive and rare terrestrial and marine resources from urban development.

Policy NR 10.1 Terrestrial and Marine Resource Protection

Cooperate with the state and federal resource protection agencies and private organizations to protect terrestrial and marine resources

Policy NR 10.2 Orange County Natural Communities Conservation Plan

Comply with the policies contained within the Orange County Natural Communities Conservation Plan.

Policy NR 10.3 Development in Environmental Study Areas

Protect, and prohibit development in nature preserves, conservation areas, and designated open space areas in order to minimize urban impacts upon resources in identified Environmental Study Areas (ESAs).

Policy NR 10.4 Development Permit Applications

Require a site-specific survey and analysis prepared by a qualified biologist as a filing requirement for any development permit applications where development would occur within or contiguous to areas identified as an ESA.

Policy NR 10.5 New Development Siting and Design

Require that the siting and design of new development, including landscaping and public access, protect sensitive or rare resources against any significant disruption of habitat values.

Policy NR 10.6 Development in Areas Containing Significant or Rare Biological Resources

Limit uses within an area containing any significant or rare biological resources to only those uses that are dependent on such resources, except where application of such a limitation would result in a taking of private property. If application of this policy would likely constitute a taking of private property, then a non-resource-dependent use shall be allowed on the property, provided development is limited to the minimum amount necessary to avoid a taking and the development is consistent with all other applicable resource protection policies. Public access improvements and educational, interpretative and research facilities are considered resource dependent uses.

Policy NR 10.7 Use of Buffers

Maintain a buffer of sufficient size around significant or rare biological resources, if present, to ensure the protection of these resources. Require the

use of native vegetation and prohibit invasive plant species within these buffer areas.

Policy NR 10.8 Exterior Lighting

Shield and direct exterior lighting away from significant or rare biological resources to minimize impacts to wildlife.

Policy NR 10.9 Standards for Buck Gully and Morning Canyon

Prepare natural habitat protection regulations for Buck Gully and Morning Canyon for the purpose of providing standards to ensure both the protection of the natural habitats in these areas and of private property rights. Include standards for the placement of structures, native vegetation/fuel modification buffers, and erosion and sedimentation control structures.

Policy NR 10.10 Development on Banning Ranch

Protect the sensitive and rare resources that occur on Banning Ranch. If future development is permitted, concentrate development to protect biological resources and coastal bluffs, and design structures to not be intrusive on the surrounding landscape. Require the restoration of any important habitat areas that are affected by future development.

Policy NR 10.11 Interagency Coordination to Monitor Ecological Conditions

Coordinate with County and state resource agencies to monitor ecological conditions within the Newport Beach Marine Conservation Areas and Irvine Coast Marine Life Refuge and to implement management programs to protect these areas. Maintain public use of the refuges to the extent it is consistent with the preservation of intertidal and subtidal resources.

Policy NR 10.12 Giant Kelp Reforestation

Support reforestation programs for giant kelp.

Policy NR 10.13 Tide Pool Exhibits

Support the construction of tide pool exhibits away from ocean beaches to provide an educational alternative to the tide pools at Corona del Mar State Beach and Crystal Cove State Park.

Goal NR 11 Protection of eelgrass meadows for their ecological function as a nursery and foraging habitat within the Newport Bay ecosystem, balanced with maintenance of Newport Harbor as a recreational boating resource.

Policy NR 11.1 Eelgrass Protection

Avoid impacts to eelgrass (Zostera marina) to the extent feasible. Mitigate losses of eelgrass in accordance with the Southern California Eelgrass

Mitigation Policy. Encourage the restoration of eelgrass in Newport Harbor at appropriate sites, where feasible.

Policy NR 11.2 Interagency Coordination on Establishing Eelgrass Restoration Sites

Cooperate with the County of Orange, the U.S. Army Corps of Engineers, and resource agencies to establish eelgrass restoration sites.

Policy NR 11.3 Eelgrass Mitigation

Allow successful eelgrass restoration sites to serve as mitigation sites for City projects and as a mitigation bank from which eelgrass mitigation credits will be issued to private property owners for eelgrass removal resulting from dock and channel dredging projects.

Goal NR 12 Protection of coastal dune habitats.

Policy NR 12.1 Exotic Vegetation Removal and Native Vegetation Restoration

Require the removal of exotic vegetation and the restoration of native vegetation in dune habitat.

Policy NR 12.2 Dune Habitat Protection

Design and site recreation areas to avoid impacts to dune habitat areas, and direct public access away from these resources through methods such as well-defined footpaths, boardwalks, protective fencing, and signage.

Policy NR 12.3 Beach Sand Removal

Limit earthmoving of beach sand in dune habitat areas to projects necessary for the protection of coastal resources and existing development.

Goal NR 13 Protection, maintenance, and enhancement of Southern California wetlands.

Policy NR 13.1 Wetland Protection

Recognize and protect wetlands for their commercial, recreational, water quality, and habitat value.

Policy NR 13.2 Wetland Delineation

Require a survey and analysis with the delineation of all wetland areas when the initial site survey indicates the presence or potential for wetland species or indicators. Wetland delineations will be conducted in accordance with the definitions of wetland boundaries established by California Department of Fish and Game, and/or United States Fish and Wildlife Service.

Goal NR 14 Maintain and enhance deep water channels and ensure they remain navigable by boats. (Goal HB13)

Policy NR 14.1 Newport Bay Dredging

Support and assist in the management of dredging within Newport Bay. (Policy HB13.1)

Policy NR 14.2 Interagency Coordination for Federal Navigational Channels

Cooperate with the U.S. Army Corps of Engineers in their maintenance and delineation of federal navigational channels at Newport Harbor in the interest in providing navigation and safety. (Policy HB13.2)

Policy NR 14.3 Permit Processing

Secure blanket permits or agreements through the U.S. Army Corps of Engineers and the California Coastal Commission to expedite permit processing for residential and commercial dock owners in the Bay. (Policy HB13.3)

Policy NR 14.4 Wetland or Estuary Capacity

Require that any project that includes diking, filling or dredging of an estuary must maintain the capacity of the wetland or estuary as required by state and federal law.

Policy NR 14.5 New Structure Design

Require that all structures permitted to encroach into open coastal waters, wetlands, and estuaries be sited and designed to be consistent with the natural appearance of the surrounding area.

Goal NR 15 Proper disposal of dredge spoils to avoid disruption to natural habitats.

Policy NR 15.1 Monitor dredging projects within the region to identify opportunities to reduce disposal costs and utilize dredge spoils for beach nourishment.

Policy NR 15.2 Regional Sediment Management

Participate in regional sediment management by maintaining records of the number of channelized streams, miles of channelization in streams, volumes of sediment extracted from stream channels and debris basins, and the grain size distribution of the extracted sediments.

Policy NR 15.3 Interagency Coordination for Future Dredging Projects

Work with appropriate agencies to secure sediment disposal site(s) for future dredging projects.

Goal NR 16 Protection and management of Upper Newport Bay commensurate with the standards applicable to our nation's most valuable natural resources. (Goal HB7)

Policy NR 16.1 Funding Support for Upper Newport Bay Ecosystem Restoration Project

Support and secure federal funding for Upper Newport Bay ecosystem restoration to restore the Upper Newport Bay to its optimal ecosystem. (Policy HB7.1)

Policy NR 16.2 Management of Upper Newport Bay State Marine Park

Support and implement unified management of the Upper Newport Bay State Marine Park (formerly Ecological Reserve) by collaborating with Orange County, the California Department of Fish and Game, non-profit corporations with resource management expertise and volunteer organizations to improve resource management, implement resource enhancement projects and expand opportunities for public access, recreation, and education. (Policy HB7.2)

Policy NR 16.3 Management of Upper Newport Bay Nature Preserve

Assume responsibility from the County to manage, operate and maintain the Upper Newport Bay Nature Preserve, including the Peter and Mary Muth Center, such that natural resources and public education programs are enhanced, using a combination of public agency and private sector personnel as well as volunteers. (Policy HB7.3)

Policy NR 16.4 Public Uses within Upper Newport Bay State Marine Park

Maintain public use of the Upper Newport Bay State Marine Park (formerly Ecological Reserve) to the extent such use is consistent with the preservation of sensitive resources. (Policy HB7.4)

Policy NR 16.5 Water-Related Education and Research within Upper Newport Bay

Promote facilities in and around Upper Newport Bay to adequately serve as water quality and estuarine education and research programs. (Policy HB 7.5, HB8.22)

Land Use Element

Policies Pertaining to Both Land Use Options (Goals 6.3 and 6.4)

Policy LU 6.5.4 Relationship of Development to Environmental Resources

Development should be located and designed to preserve and/or mitigate for the loss of wetlands and drainage course habitat. It shall be located to be contiguous and compatible with existing and planned development along its eastern property line, preserving the connectivity of wildlife corridors, and set

back from the bluff faces, along which shall be located a linear park to provide public views of the ocean, wetlands, and surrounding open spaces.

Impacts and Mitigation Measures

No mitigation measures are necessary, as the proposed General Plan Update policies fully mitigate the impacts.

Level of Significance After Policies/Mitigation Measures

Compliance with existing federal, state, and local regulations, implementation of the identified proposed General Plan Update policies would limit impacts associated with biological resources within the Planning Area to a ***less-than-significant*** level. Cumulative impacts would also be ***less than significant***.

4.3.6 References

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