

4.3 BIOLOGICAL RESOURCES

Implementation of the proposed LOCP would focus infill development in undeveloped areas within the Urban Reserve Line (URL, Plan Area) on small, primarily disturbed lots dominated by non-native vegetation. Still, future development in the URL could potentially impact special status biological resources including special status plants and wildlife, Sensitive Resource Areas, and Environmentally Sensitive Habitat Areas. The existing policies in the General Plan, Estero Area Plan, and Coastal Zone Land Use Ordinance, and those proposed in the LOCP are intended to avoid impacts to special status biological resources to the maximum extent feasible. The Los Osos Habitat Conservation Plan (LOHCP) is also anticipated to be completed within the near future. The LOHCP will provide a streamlined process for future development activities that could affect federal-listed threatened and endangered species within and adjacent to the URL and Plan Area, and will ensure compliance with federal Endangered Species Act requirements for those covered species. With the policy framework embodied in the General Plan, Estero Area Plan, Coastal Zone Land Use Ordinance, and those anticipated in the LOHCP, most programmatic impacts associated with implementation of the LOCP would be considered less than significant. Impacts related to the protection of special status species and habitats are potentially significant but mitigable through implementation of the measures included in the LOCP.

4.3.1 Setting

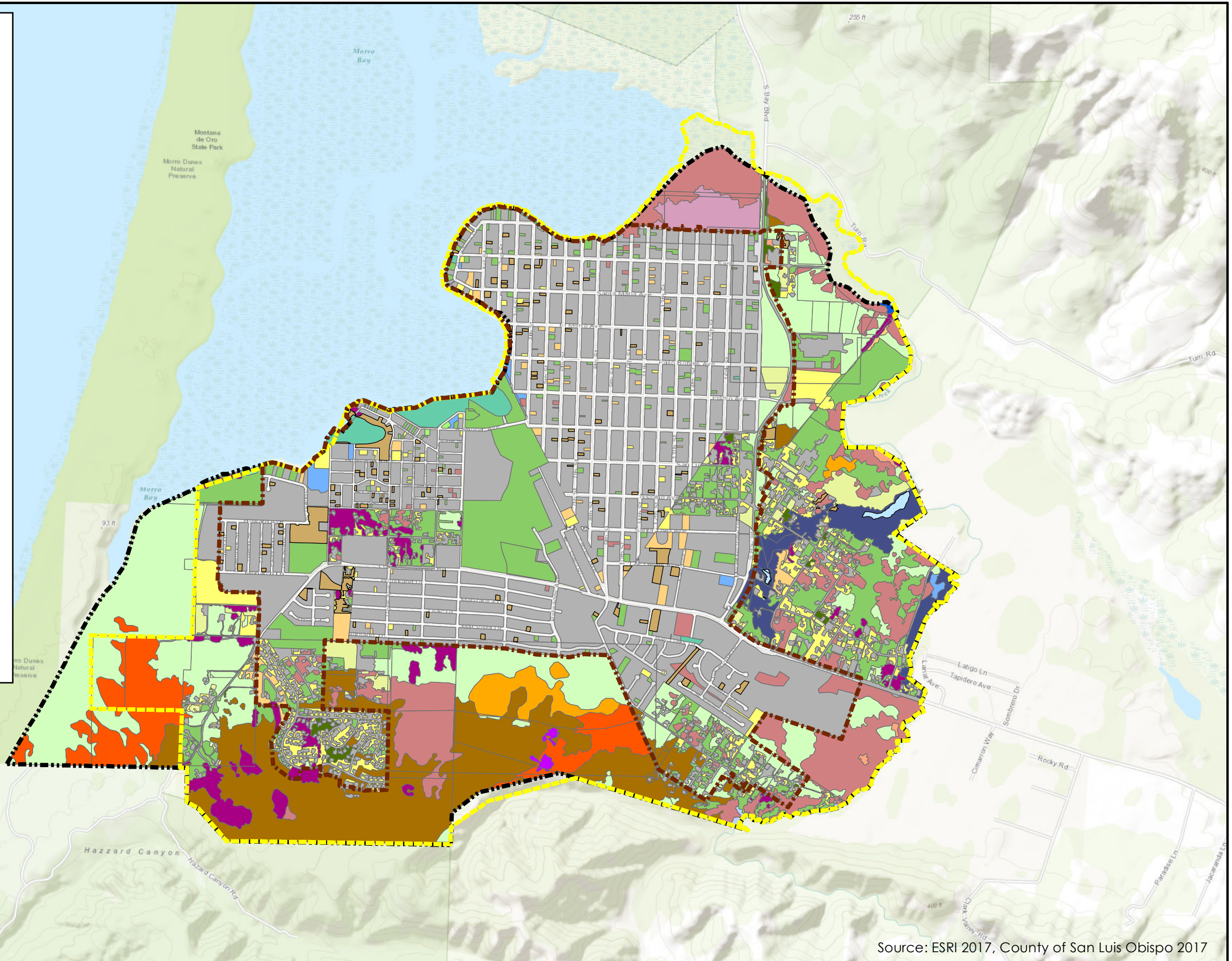
a. Physical Setting. The unincorporated community of Los Osos is located along the coast in the central portion of San Luis Obispo County, generally south of and adjacent to the Morro Bay estuary. Los Osos is approximately four (4) miles south of the City of Morro Bay, and approximately 10 miles west of the City of San Luis Obispo, at the western end of Los Osos Valley. The Irish Hills, a generally west to east trending mountain range, form the southern boundary of the community, and the Morro Bay estuary and Los Osos Creek form the northern and eastern boundaries, respectively. Los Osos is nestled along the southern shore of the Morro Bay estuary, a nationally significant resource that supports important plant communities, wildlife and recreational opportunities.

For the most part, the community of Los Osos was developed on old stabilized sand dunes, and the dominant vegetation communities originally consisted of an amalgamation of coastal scrub, maritime chaparral and oak woodlands growing on Baywood fine sand soils. Drainage features such as Los Osos Creek and the Morro Bay shoreline contain a mix of wetland types including freshwater emergent, salt and brackish marsh, and riparian vegetation communities. Other land cover types present include development, agricultural uses, and ruderal or disturbed areas. Figure 4.3-1 shows the aerial extent of the vegetation communities and land cover types identified within and adjacent to the Plan Area. Figure 4.3-2 provides an aerial overview map that illustrates the extent of wetland and riparian habitats in and adjacent to the Plan Area, as mapped in the National Wetland Inventory (NWI) maintained by the U.S. Fish and Wildlife Service.

Additional physical setting information related to land use may be found in both Section 2.0 (*Project Description*) and 3.0 (*Environmental Setting*) of this EIR. A detailed literature review of background environmental and biological reports coupled with field reconnaissance provided the basis for the analysis in this section.

Vegetation and Other Land Cover Types

- Coastal Sage Scrub**
 - Coyote Brush
 - California Sagebrush – Black Sage Series
 - California Sagebrush – Black Sage Series Disturbed
 - California Sagebrush – Black Sage Series Heavily Disturbed
- Central Maritime Chaparral**
 - Morro Manzanita California Sagebrush Series
 - Morro Manzanita Series
 - Morro Manzanita Wedgeleaf Ceanothus Series
 - Wedgeleaf Ceanothus - California Sagebrush Series
- Woodland**
 - Bishop Pine Series
 - Coast Live Oak Series
 - Eucalyptus Series
- Grassland**
 - California Annual Grassland Series
 - Non-Native Grassland
- Wetland**
 - Cattail Series
 - Pickleweed Series
 - Disturbed Wetland
- Riparian**
 - Black Cottonwood Series
 - Arroyo Willow Series
 - Arroyo Willow Black Cottonwood Series
 - Coast Live Oak - Arroyo Willow Series
- Other Land Cover**
 - Agricultural Land
 - Ruderal Disturbed
 - Landscaped Trees
 - Open Water
 - Developed
 - Largely Developed
 - Los Osos Urban Services Line
 - Los Osos Urban Reserve Line
 - Los Osos HCP Area

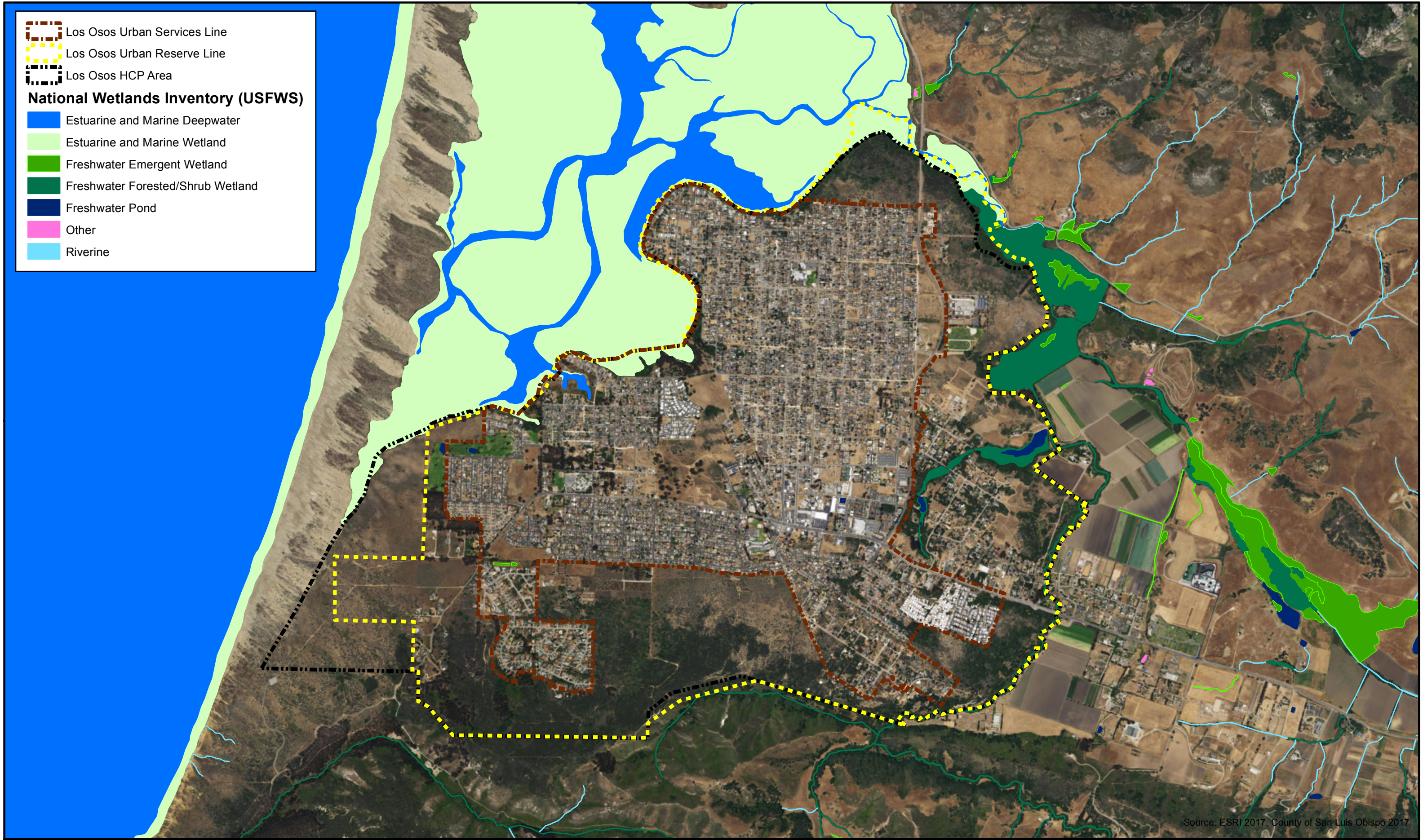


Source: ESRI 2017, County of San Luis Obispo 2017

-  Los Osos Urban Services Line
-  Los Osos Urban Reserve Line
-  Los Osos HCP Area

National Wetlands Inventory (USFWS)

-  Estuarine and Marine Deepwater
-  Estuarine and Marine Wetland
-  Freshwater Emergent Wetland
-  Freshwater Forested/Shrub Wetland
-  Freshwater Pond
-  Other
-  Riverine



Source: ESRI 2017, County of San Luis Obispo 2017

Background information reviewed included:

- *California Natural Diversity Database (California Department of Fish and Wildlife, 2018);*
- *Coastal Zone Land Use Ordinance Title 23 of the San Luis Obispo County Code (revised 2014);*
- *Estero Area Plan (County of San Luis Obispo, revised 2009);*
- *Habitat Management Plan for the Los Osos Wastewater Project (SWCA, 2012); and*
- *Los Osos Wastewater Project DEIR and Expanded Biological Resources Analysis (MBA, 2008).*

b. Vegetation Communities. The discussion of natural vegetation communities or habitat types that occur within the Plan Area generally follow those described in standard vegetation classification systems (Holland, 1986; Sawyer, Keeler-Wolf and Evens, 2009). The vegetation maps prepared by the County as part of the LOHCP and countywide vegetation mapping effort (CMCA, 2003; AIS, 2009; McGraw, 2017) were used as the basis for the LOCP analysis. The primary vegetative communities present include Grasslands (both California Annual Grassland and Non-Native Grassland), Coastal Sage Scrub (including areas of Central Dune Scrub), Central Maritime Chaparral, Woodlands (including Coast Live Oak Woodland and Eucalyptus Woodland), Wetlands, and Riparian areas (please refer to **Figures 4.3-1 and 4.3-2**). Other land uses within the Plan Area include ruderal (or disturbed), agriculture, and developed areas.

Grasslands

Within the Plan Area, grasslands occur primarily where coastal sage scrub, chaparral, and oak woodlands were cleared for use in agriculture, grazing, or for development. As a result, grasslands occur primarily as patches and fringe areas around and intermixed with other vegetation communities, and are generally dominated by non-native species.

California Annual Grassland. This habitat as described by Holland (1986) is characterized by a mix of native and exotic grasses and forb species, and can include perennial tussock-forming grasses such as purple needlegrass (*Stipa pulchra*) even though they are perennial species. Other species that may occur in the Plan Area within this plant community include creeping wild rye (*Elymus triticoides*), giant wildrye (*Elymus condensatus*), and six weeks fescue (*Vulpia microstachys*). Other herbaceous species such as native wildflowers and non-native forbs are also present. Sawyer, Keeler-Wolf, and Evens (2009) describe this community as the Purple Needle grass grassland. This vegetation community occurs sporadically in the Plan Area.

Most native bunchgrasses have been displaced throughout California by European annual grass species, or in the case of the sandy soils in Los Osos, by veldt grass (*Ehrharta calycina*), which is described further below under Non-native Grassland. Native perennial grass species are present in the Plan Area in areas with minimal disturbance, such as open areas in coastal sage scrub, maritime chaparral, oak woodland, and bay margin habitats in undeveloped lots and along drainage features.

Larger swaths of grassland habitat (both native and non-native) provide foraging and/or breeding habitat and movement corridors for wildlife species in the area. Mammals including coyote (*Canis latrans*), black-tailed deer (*Odocoileus hemionus*), Botta's pocket gopher (*Thomomys bottae*), American badger (*Taxidea taxus*), and California ground squirrel (*Spermophilus beecheyi*) occur within this habitat

type. Several of these species, such as the American badger, California ground squirrel, Botta's pocket gopher, and deer mice (*Peromyscus* spp.), are known to breed within this habitat type. Birds including raptors ("birds of prey") such as red-tailed hawk (*Buteo jamaicensis*), and American kestrel (*Falco sparverius*), along with other common bird species such as western kingbird (*Tyrannus verticalis*), western meadowlark (*Sturnella neglecta*), lark sparrow (*Chondestes grammacus*), black phoebe (*Sayornis nigricans*), Brewer's blackbird (*Euphagus cyanocephalus*), and goldfinches (*Carduelis* spp.) rely on open expanses of grasslands for foraging habitat and are common in the general area. Grasslands that are bordered by habitats containing trees are particularly important for raptors because the birds can use the large trees as nesting, roosting, and as observation points to locate potential prey within nearby grassland habitats.

Reptiles and amphibians common to California Annual Grasslands include the fence lizard (*Sceloporus occidentalis*), California alligator lizard (*Elgaria multicarinatus multicarinatus*), California kingsnake (*Lampropeltis getula*), ring-necked snake (*Diadophis punctatus*), and coast garter snake (*Thamnophis elegans terrestris*). In addition, in areas where California Annual Grasslands surround creeks or wetlands with seasonal pools of freshwater, amphibians including the western toad (*Bufo boreas*), Pacific tree frog (*Hyla regilla*) and reptiles including the southern Pacific pond turtle (*Actinemys marmorata pallida*) and two-striped garter snake (*Thamnophis hammondi*) may be present.

Non-native Grassland. The Non-native Grassland habitat type within the Plan Area, as described by Holland (1986), corresponds to the Annual Brome and Wild Oats Grasslands described by Sawyer, Keeler-Wolf, and Evens (2009). Included in this habitat discussion are extensive areas of veldt grass, an invasive perennial species that forms dense tussocks. Neither Holland or Sawyer et al. specifically describe veldt grass dominated areas, and thus are included as Non-native Grassland and heavily disturbed vegetation types shown on Figure 4.3-1. Non-native Grassland occurs throughout the Plan Area, including pastures and equestrian influenced areas. Non-irrigated pastures are comprised mainly of annual species that are described below, but also have extensive veldt grass cover. Non-native Grassland also forms the understory of many of the Oak Woodland areas in the Plan Area.

Non-native Grassland within the Plan Area is comprised primarily of non-native short to tall annual grasses and native and non-native broad-leafed forbs. Dominant grasses include soft chess (*Bromus hordeaceus*), ripgut grass (*Bromus diandrus*), slender wild oat (*Avena barbata*), and rat-tail fescue (*Vulpia myuros*). Extensive stands of veldt grass are also present, and are also included in the Coastal Sage Scrub habitats discussed below. Dominant forbs usually include red stem filaree (*Erodium cicutarium*), Italian thistle (*Carduus pycnocephalus*), and mustards (*Brassica nigra* and *Hirschfeldia incana*). Native flowering herbs include the California milkweed (*Asclepias californica*), turkey mullein (*Eremocarpus setigerus*), California poppy (*Eschscholzia californica*), and yarrow (*Achillea millefolium*). A few scattered coast live oak trees and coyote brush shrubs (*Baccharis pilularis*) can also be found within this vegetation community.

Although Non-native Grassland is comprised mainly of non-native plant species, it also includes assemblages of native species, and is an important habitat for many native animal species. The animal species described under the California Annual Grassland habitat type also occur in Non-native Grasslands. Special status species such as the Morro shoulderband snail (*Helminthoglypta walkeriana*) are often found in this vegetation community associated with veldt grass occurrences.

Coastal Sage Scrub. The Coastal Sage Scrub plant community within the Plan Area corresponds to a combination of the Central (Lucian) Coastal Scrub and Central Dune Scrub as described by Holland, and the California sagebrush community described by Sawyer, Keeler-Wolf and Evens (2009). The Habitat Map identifies four coastal sage scrub associations that are generally consistent with Holland's classification, including California Sagebrush-Black Sage Series (Disturbed and Heavily Disturbed) and the Coyote Brush Series. Within the Plan Area, this plant community is dominated by coyote brush and California sagebrush (*Artemisia californica*), and also includes other common associates such as mock heather (*Ericameria ericoides*), sticky monkey flower (*Diplacus = Mimulus aurantiacus*), and black sage (*Salvia mellifera*). Coastal Sage Scrub occurs primarily below 2,000 feet on the ocean side of the Santa Lucia Mountain Range. It occurs throughout the Plan Area as intact stands of dense shrub cover in the greenbelt, as scattered shrubs on undeveloped parcels, and undeveloped bay margin areas. In the western part of the Plan Area, Coastal Sage Scrub transitions into Central Dune Scrub comprised of dune lupine (*Lupinus chamissonis*), beach bur (*Ambrosia chamissonis*), mock heather, and deer weed (*Acmispon glaber*) with bare sand areas present around shrub occurrences. In many areas, Coastal Sage Scrub (including areas of Central Dune Scrub) is severely degraded due to the presence of veldt grass.

Coastal Sage Scrub communities provide foraging or breeding habitat and movement corridors for several wildlife species in the area. Mammals including coyote, woodrat (*Neotoma lepida intermedia*), California mouse (*Peromyscus californica*), and brush rabbit (*Sylvilagus bachmani*). Common birds including California thrasher (*Toxostoma redivivum*), scrub jay (*Aphelocoma californica*), blue-gray gnatcatcher (*Poliophtila caerulea*), and Bewick's wren (*Thryomanes bewickii*) rely on the dense foliage for foraging and breeding habitat and are common in the region. Reptiles common to coastal scrub that have been observed in the region include fence lizard, California alligator lizard, gopher snake (*Pituophus catenifer*), common kingsnake, and western rattlesnake (*Crotalus viridis*). The Coastal Sage Scrub communities present can provide high habitat quality due to their relatively robust structure and connectivity with other native habitat types, as well as the potential to support special status species such as the Morro shoulderband snail.

Central Maritime Chaparral. Central Maritime Chaparral is described as a variable sclerophyll scrub habitat characterized by a moderate to high percent cover of native shrubs typically dominated by manzanita (*Arctostaphylos* spp.) or ceanothus (*Ceanothus* spp.) species (Sawyer, Keeler-Wolf and Evens, 2009; Holland 1986). This community is restricted to areas within the summer coastal fog incursion zone, on windward uplands and coastal lowlands that are supported by well-drained and nutrient poor sandy substrates. Other native species characteristic of this community may include coast live oak, chamise (*Adenostoma fasciculatum*), holly leaf cherry (*Prunus ilicifolia*), coffee berry (*Rhamnus californica*), poison oak (*Toxicodendron diversilobum*), toyon (*Heteromeles arbutifolia*), and black sage, with scattered California sagebrush, coyote brush, mock heather, and sticky monkeyflower.

In the Plan Area, Central Maritime Chaparral is dominated by the federally endangered Morro manzanita (*Arctostaphylos morroensis*), a species endemic to the Los Osos ecosystem. Central Maritime Chaparral occurs primarily in the higher elevation portions of the Plan Area including on the north-facing slopes along the southern URL boundary. In relatively undisturbed areas such as on the Broderon Site and Morro Dunes Ecological Reserve, and undeveloped lots within the Plan Area, Morro manzanita, commingles with pygmy coast live oak trees (*Quercus agrifolia*) and coastal scrub habitat to form an

undulating vegetation mosaic of wind sculpted shrubs and trees. Individuals can also be found growing throughout the Plan Area on developed residential and commercial properties, roadside areas, and other unmaintained locations. Other species in Maritime Chaparral habitat include California sagebrush, black sage, wedge leaf ceanothus (*Ceanothus cuneatus*), mock heather, deerweed, and veldt grass, among others. The Central Maritime Chaparral habitat provides suitable habitat for common and sensitive plant and wildlife species associated with scrub-type communities in the local area.

Woodlands

The Plan Area contains remnant stands of native oak woodland, and large areas of planted non-native woodlands dominated by Eucalyptus. Also included on the vegetation communities map are landscaped trees and Bishop pine trees.

Coast Live Oak Woodland. The coast live oak is the dominant tree in this woodland habitat, and in the Los Osos Community Plan area, this community may also contain a mix of species more characteristic of coastal scrub or maritime chaparral. In many locations influenced by onshore winds and poorly developed sandy soils, the oak trees are dwarfed and form the pygmy oak forests, such as along the northern limits of the URL and USL along the Bay margin. Common understory species include non-native grasses, red-stem filaree, Italian thistle, and other non-native ornamentals such as garden nasturtium (*Tropaeolum majus*). Coast live oak woodland occurs primarily on north-facing slopes, but trees may also be interspersed with pockets of coastal scrub, maritime chaparral and Non-native (veldt grass) grassland in more level open areas.

Oak woodlands are inhabited by a large variety of animal species. Oaks provide nesting and roosting sites and cover for birds, bats, and many other mammals. Oak habitats offer shade in summer, shelter in winter, and provide food storage sites. Many bird species use dead and decaying oak trees as perches from which to search for prey and as resting spots. Decaying trees also contribute woody debris to the duff, which provides foraging areas for small mammals and microclimates suitable for amphibians, reptiles, and fungi. Acorns produced by oak trees are a valuable food source for many animal species, including acorn woodpecker (*Melanerpes formicivorus*), scrub jay, western gray squirrel (*Sciurus griseus*), and black-tailed deer. Other bird species that frequent oak woodlands include American kestrel, red-shouldered hawk (*Buteo lineatus*), Cooper's hawk (*Accipiter cooperii*), spotted towhee (*Pipilo maculatus*), Bewick's wren, western bluebird (*Sialia mexicana*), bushtit (*Psaltriparus minimus*), California towhee (*Pipilo crissalis*), dark-eyed junco (*Junco hyemalis*), oak titmouse (*Baeolophus inornatus*), wrentit (*Chamaea fasciata*), western wood pewee (*Contopus sordidulus*), and California quail (*Callipepla californica*). Mammals expected to occur in oak woodland habitats include black-tailed deer, coyote, California ground squirrel, Botta's pocket gopher, big-eared woodrat, raccoon (*Procyon lotor*), Virginia opossum (*Didelphis virginianus*) and deer mice. Mountain lion (*Puma concolor*) and bobcat (*Lynx rufus*) may also utilize oak woodlands in the greenbelt areas for foraging and movements. Other representative animal species of oak woodlands that occur in the Plan Area include arboreal salamander (*Aneides lugubris*), black-bellied slender salamander (*Batrachoseps nigriventris*), western skink (*Eumeces skiltonianus*), and common kingsnake.

Eucalyptus Woodland. Eucalyptus Woodland is not a natural plant community described in Holland (1986). The eucalyptus woodland present in the Plan Area is dominated by blue gum (*Eucalyptus*

globulus) trees planted as windrows, and corresponds to Eucalyptus groves in Sawyer, Keeler-Wolf, and Evens (2009). In general Eucalyptus Woodland has lower species diversity than most other habitats and often occurs as a monoculture of tall, dense eucalyptus trees with dense tree litter (i.e., branches, bark, and leaves). The closed canopy and dense tree litter reduces sunlight to the soil surface, thereby reducing understory shrub and herb growth. In addition, allelopathic (growth inhibiting) chemicals leached from tree litter during precipitation further inhibit growth of other plants. Eucalyptus Woodland provides suitable nesting and foraging habitat for various birds listed in other habitat type descriptions, and in certain specific locales contain turkey vulture and heron roosts, as well as provides overwintering habitat for the monarch butterfly (*Danaus plexippus*). In select areas where eucalyptus groves (including pine and cypress trees) support overwintering monarchs or contain raptor nests, they may be considered SRA and ESHA.

Wetlands. The term wetlands includes several types of habitats that vary based upon hydrology, salinity, slope aspect, and soils, that ultimately affect the distribution and composition of vegetation. Wetlands are shown in combination with other plant communities on Figure 4.3-1, and as mapped by the National Wetland Inventory (NWI), on Figure 4.3-2. Each of the various wetland habitats present in the Plan area contain plant species that are adapted to saturated soil conditions that are present for at least part of the year. In the general region, ponded surface water or soils that are saturated for at least two weeks during the growing season may be sufficient to form wetland habitat. This category includes seasonal pools that hold rainwater for a few weeks to a few months; areas surrounding intermittent streams or seeps; marshes that can occur within or adjacent to floodplains; and emergent wetland plant species that occur along the margin of the Morro Bay estuary.

The Cattail, Disturbed Wetland, and Open Water habitats correspond to Coastal and Valley Freshwater Marsh community described by Holland (1986). The Pickleweed Series corresponds to the Northern Coastal Salt Marsh, Coastal Brackish Marsh, and Vernal Marsh communities described by Holland (1986) and the Bulrush-Cattail and various Rush and Sedge associations described by Sawyer, Keeler-Wolf, and Evens (2009). Coastal and Valley Freshwater Marsh is characterized by the presence of emergent monocots up to five (5) meters tall. Species include bulrushes (*Scirpus acutus*, *S. americanus*, and *S. californicus*), cattails (*Typha latifolia*), and sedges (*Carex* spp.). Seasonal pools and wetland areas surrounding intermittent streams have emergent wetland vegetation such as Mexican rush (*Juncus mexicanus*), common spikerush (*Eleocharis macrostachya*), curly dock (*Rumex crispus*), toad rush (*Juncus bufonius*), rabbitfoot grass (*Polypogon monspeliensis*), and hyssop loosestrife (*Lythrum hyssopifolium*). Northern Coastal Salt Marsh and Coastal Brackish Marsh habitats along the Morro Bay interface are dominated by saltgrass (*Distichlis spicata*), pickleweed (*Salicornia* spp.), fleshy jaumea (*Jaumea carnosa*), and a mix of rushes and sedges. The above described wetland plant communities are identified as special status Natural Communities by the CDFW in the CNDDDB, and may be regulated by state and federal laws.

Wetlands provide habitat to a diverse group of wildlife, including those species described above in the grasslands discussion. Small ponded areas within these wetlands may provide habitat for aquatic invertebrates such as water striders (family Gerridae) and boatmen (family Carixidae), and more opportunistic amphibians such as the Pacific chorus frog (*Psuedacris regilla*). Seasonal ponded water would also be expected to be used as a drinking source for larger animals, and also a potential stop over or foraging site for ducks and great blue herons (*Ardea herodias*). The bay margins where salt and

brackish marshes are present provide foraging and overwintering habitat for numerous migratory birds such as black brant (*Branta bernicla nigricans*).

Riparian. The Riparian habitat types present within the Plan Area most closely corresponds to the Central Coast Arroyo Willow Riparian Scrub and Forest habitats described by Holland (1986). Riparian areas also contain elements of Central Coast Cottonwood-Sycamore Riparian Forest and Central Coast Live Oak Riparian Forest, and some areas are also consistent with the arroyo and red willow thickets and black cottonwood forest habitats described by Sawyer, Keeler-Wolf, and Evens (2009). Mature riparian vegetation occurs in a wide band along Los Osos Creek. Swaths of willow riparian habitat are also present scattered in swales, topographic depressions, and along bay margins. Understory vegetation in this community is usually an herbaceous cover of forbs, and broadleaved and emergent wetland plant species such as California mugwort (*Artemisia douglasiana*), California wild rose (*Rosa californica*), poison oak, California blackberry (*Rubus ursinus*), California man-root (*Marah fabaceus*), and non-native plants such as periwinkle (*Vinca minor*) and nasturtium. The CNDDDB lists many of these riparian areas as plant communities of special concern following the community designations provided by Holland (1986). Since willow and cottonwood dominated habitats are a type of wetland community, they are also considered SRA and ESHA.

Riparian communities are important for many wildlife species since the abundance of moisture and associated vegetation provide structure, materials, and food sources for nesting and roosting animals. Many species forage within the understory and use riparian habitat as cover and as a corridor for movement along the edges of open areas. Common inhabitants of riparian woodland habitats include amphibians and reptiles such as the Pacific tree frog and Coast Range fence lizard, and mammals such as raccoon, opossum, striped skunk (*Mephitis mephitis*), woodrat, and shrews (*Sorex* spp.) Riparian woodland habitat also supports a diverse number of resident and migratory bird species including raptors, house wren (*Troglodytes aedon*), ruby-crowned kinglet (*Regulus calendula*), warbling vireo (*Vireo gilvus*), Wilson's warbler (*Wilsonia pusilla*), common yellowthroat (*Geothlypis trichas*), black phoebe, goldfinches, and turkey vulture (*Cathartes aura*). Riparian communities preserve water quality by filtering sediment and some pollutants from runoff before it enters streams. These areas also protect stream banks from erosion and shade water, keeping it cool.

Other Land Cover

Ruderal (or Disturbed). Ruderal habitat occurs in areas that are regularly disturbed by human activities such as along dirt roads and road shoulders. Since this is not a native habitat, it is not described by Holland (1986) or Sawyer, Keeler-Wolf, and Evens (2009). Typically these are bare soils areas with scattered occurrences of non-native species such as black mustard (*Brassica nigra*), filaree (*Erodium* spp.), fennel (*Foeniculum vulgare*) and non-native grasses including veldt grass. Ruderal areas provide poor habitat for animal species; however, these areas can be used during dispersal and for movement during foraging in adjacent habitats. Within the Plan Area, ruderal habitat also includes consistently disturbed areas such as equestrian facility and trail areas.

Developed. Developed areas include urban centers, residential areas, roadways, and landscaped areas. Within developed portions of the Plan Area, vegetation consists primarily of ornamental species. Developed habitat areas are utilized by species adapted to human occupation such as rodents, fence

lizards, house finches (*Carpodacus mexicanus*), and northern mockingbirds.

c. Natural Drainage Feature and Jurisdictional Wetlands and Waters. Los Osos Creek is the primary drainage feature in the LOCP area. It directs surface runoff from the San Luis Range with headwaters in the Clark Valley and surrounding areas through the plan area in a generally east to west direction. It ultimately connects with the Morro Bay estuary in the northern part of the plan area. Vegetation along the creek consists of riparian and wetland habitats. The creek and its smaller tributary drainages perform important hydrologic functions including transport of nutrients and sediment to wetlands and estuaries, flood flow conveyance, surface and subsurface water storage, groundwater recharge, and nutrient removal through plant uptake.

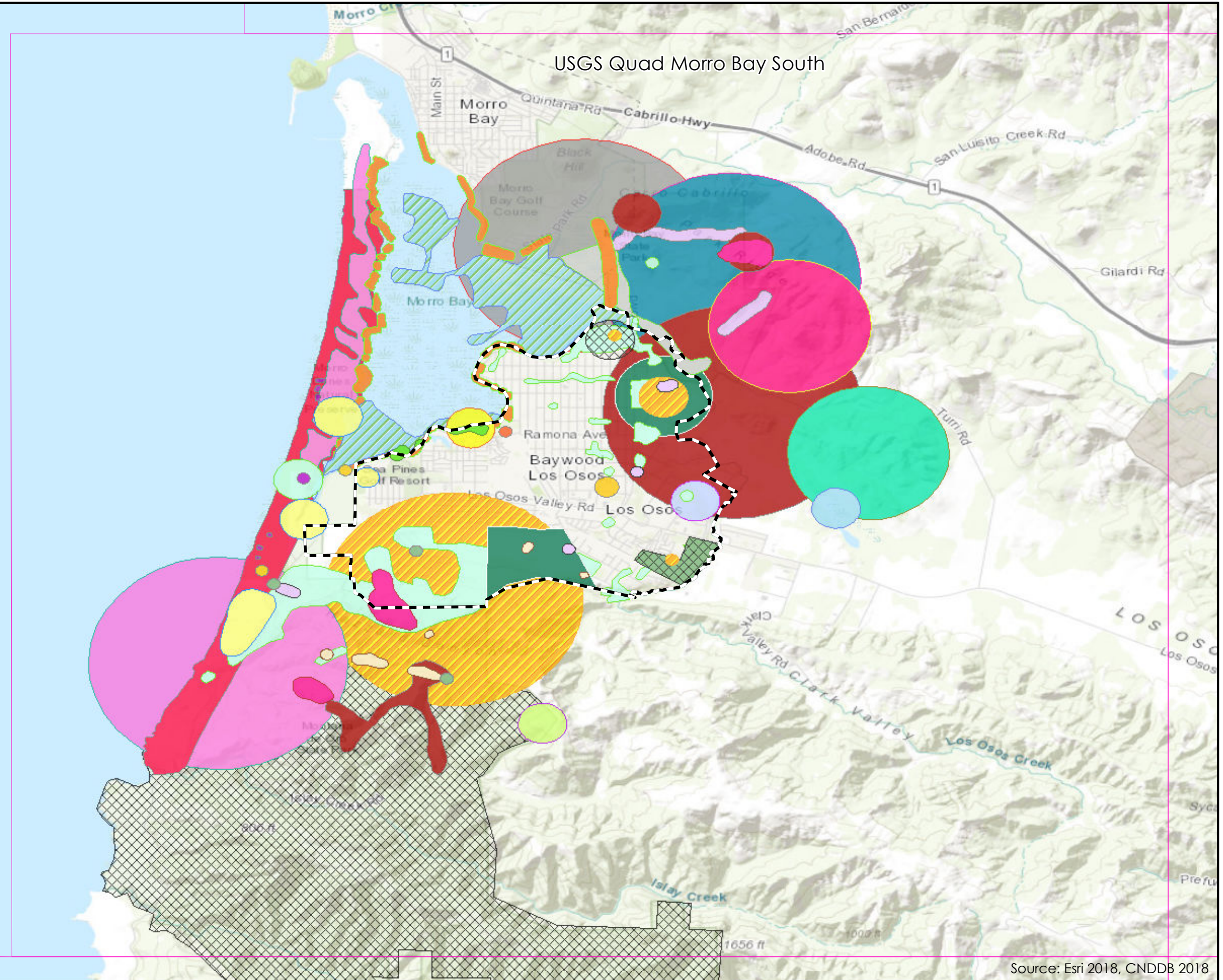
It is expected that the entire length of Los Osos Creek constitutes Waters of the U.S. It is also a coastal stream considered SRA and ESHA under current County policies. Clean Water Act and California Coastal Act policies pertaining to wetlands and coastal streams also would apply to the smaller drainage features and swales with riparian habitat scattered through the plan area. The outer extent of wetland habitat along the margin of Morro Bay would also be classified as a jurisdictional wetland habitat subject to Clean Water Act and California Coastal Act requirements.

d. Special Status Biological Resources. The Estero Bay and Morro Bay region supports numerous special status, or rare, plant communities, and species of plants and animals. Figures 4.3-3 and 4.3-4 illustrate the documented occurrences of these resources within and immediately surrounding the plan area. The following identifies those plant communities of special concern, U.S. Fish and Wildlife Service (USFWS) designated critical habitat, and special status plants and wildlife expected or potentially occurring within the plan area.

For the purpose of this report, special status species are those plants and animals listed, proposed for listing, or candidates for listing as Threatened or Endangered by the USFWS under the federal Endangered Species Act (ESA); those listed or proposed for listing as Rare, Threatened, or Endangered by the CDFW under the California Endangered Species Act (CESA); animals designated as “Species of Special Concern,” “Fully Protected,” or “Watch List” by the CDFW; and plants occurring on California Rare Plant Rank lists 1, 2, 3 and 4 developed by the CDFW working in concert with the California Native Plant Society. The specific code definitions are as follows:

- 1A = *Plants presumed extinct in California;*
- 1B.1 = *Rare or endangered in California and elsewhere; seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat);*
- 1B.2 = *Rare or endangered in California and elsewhere; fairly endangered in California (20-80% occurrences threatened);*
- 1B.3 = *Rare or endangered in California and elsewhere, not very endangered in California (<20% of occurrences threatened or no current threats known);*

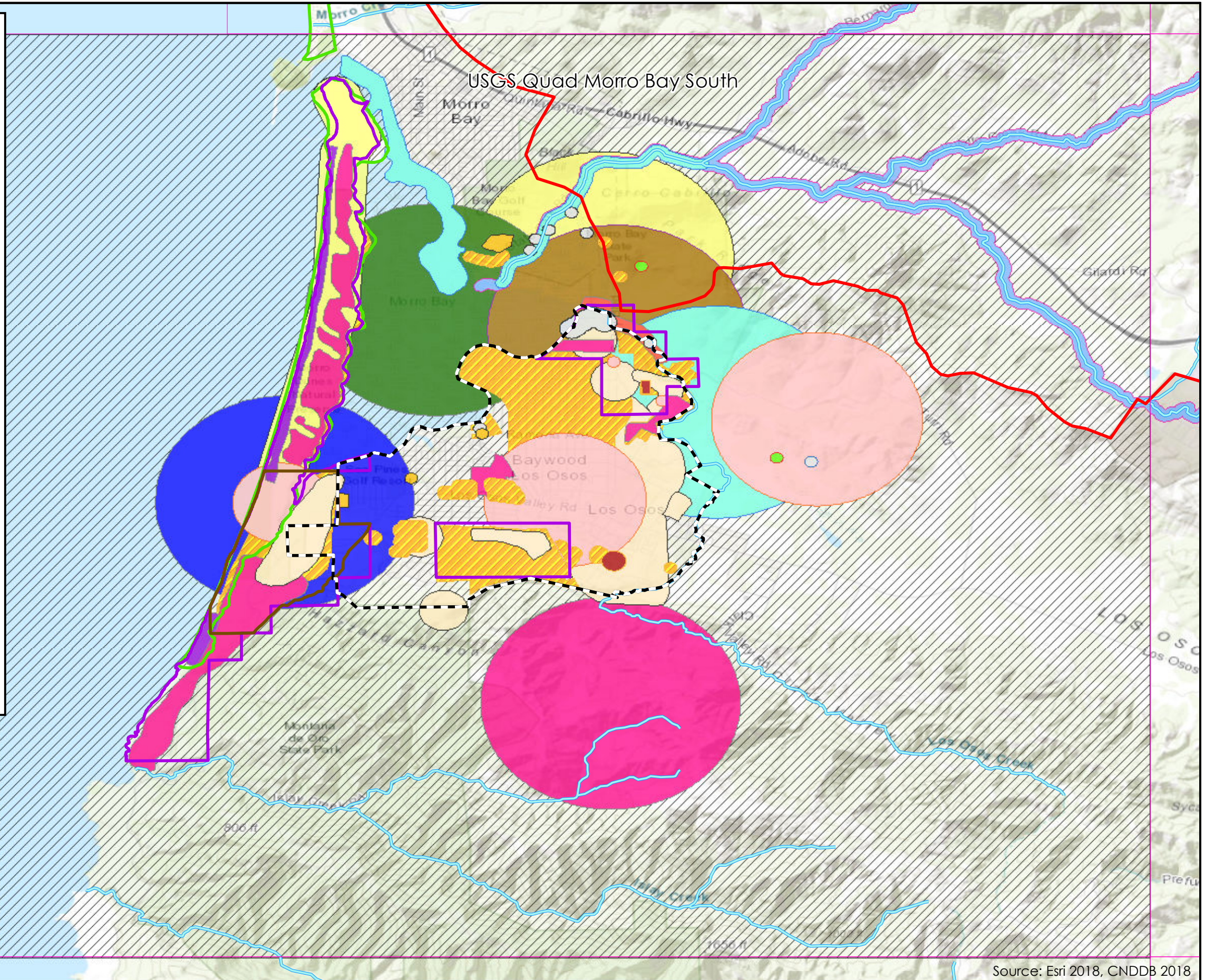
-  Los Osos URL
-  USGS 7.5' Quad
- CNDDB Flora Occurrence (CDFW November 2018)**
-  Arroyo de la Cruz manzanita
-  Beach spectaclepod
-  Blochman's dudleya
-  Blochman's leafy daisy
-  California seablite
-  Cambria morning-glory
-  Central Dune Scrub
-  Central Maritime Chaparral
-  Coast woolly-heads
-  Coastal Brackish Marsh
-  Coastal goosefoot
-  Coastal and Valley Freshwater Marsh
-  Coulter's goldfields
-  Hardham's evening-primrose
-  Indian Knob mountainbalm
-  Marsh sandwort
-  Mesa horkelia
-  Morro manzanita
-  Northern Coastal Salt Marsh
-  Oso manzanita
-  Pecho manzanita
-  Popcorn lichen
-  Salt marsh bird's-beak
-  San Luis Obispo owl's-clover
-  Southern curly-leaved monardella
-  Splitting yarn lichen
-  Twisted horsehair lichen
-  Valley Needlegrass Grassland



Source: Esri 2018, CNDDB 2018

Los Osos URL
 USGS 7.5' Quad
Critical Habitat (USFWS 2018)
 California red-legged frog
 Morro Bay kangaroo rat
 Morro shoulderband snail
 Western snowy plover
 Steelhead Trout

CNDDDB Fauna Occurrence (CDFW November 2018)
 American badger
 Big free-tailed bat
 Black legless lizard
 California black rail
 California brackishwater Snail
 California clapper rail
 California red-legged frog
 Coast horned lizard
 Cooper's hawk
 Globose dune beetle
 Monarch - California overwintering population
 Morro Bay blue butterfly
 Morro Bay kangaroo rat
 Morro shoulderband snail
 Obscure bumble bee
 Silvery legless lizard
 Steelhead - south-central California coast DPS
 Tidewater goby



Source: Esri 2018, CNDDDB 2018

- 2 = Rare, threatened or endangered in California, but more common elsewhere;
- 3 = Plants needing more information (mostly species that are taxonomically unresolved; some species on this list meet the definitions of rarity under CNPS and CESA); 4.2 = Plants of limited distribution (watch list), fairly endangered in California (20-80% occurrences threatened); and,
- 4.3 = Plants of limited distribution (watch list), not very endangered in California.

In addition, other state and global rankings are now used to identify special status species, and those resources with state rankings of S1-S3 or G1-G3 (including plant communities) may meet the special status species definition. Natural communities meeting the special status threshold are those listed in the CNDDDB (California Department of Fish and Wildlife, 2003; queried in 2016 and 2017).

The assessment of special status species occurrence within the plan area, and identification of habitat that could potentially support these species, was based on review of background reports and findings from previous studies conducted in the area, field observations of local experts coupled with our knowledge of the particular species’ biology, as well as the CNDDDB data.

Natural Communities of Special Concern and USFWS Designated Critical Habitat. The CNDDDB search identified occurrences of six (6) special status plant communities within the Plan Area and included central dune scrub, central maritime chaparral, coastal brackish marsh, coastal and valley freshwater marsh, northern coastal salt marsh, and valley needlegrass grassland (Table 4.3-1). Five of these special status natural communities were documented in the Plan Area as shown on Figure 4.3-4. In addition, some riparian habitats discussed above are a form of woody shrub and tree wetland type, and therefore would meet the special status plant community definition for Central Coast Arroyo Willow Riparian Scrub, and therefore this habitat type has been included in Table 4.3-1. Moreover, any habitat type, including non-native habitats could potentially meet the special status plant community definition if it were to support a rare, threatened or endangered species. For example, the Morro shoulderband snail is known to occur in iceplant mats and veldt grass dominated areas. In these situations, policies pertaining to the avoidance and protection of special status species would apply.

| Table 4.3-1. CDFW Natural Communities Of Special Concern in the Plan Area | |
|--|--------------------------------|
| Natural Communities Of Special Concern | Occurrence in Plan Area |
| Central Dune Scrub | Yes |
| Central Maritime Chaparral | Yes |
| Coastal Brackish Marsh | Yes |
| Coastal and Valley Freshwater Marsh | Yes |
| Northern Coastal Salt Marsh | Yes |
| Valley Needlegrass Grassland | No |
| Central Coast Arroyo Willow Riparian Scrub | Yes |

Pursuant to the County LCP and CZLUO policies, the plant communities described above constitute SRA and ESHA. Natural drainage features such as Los Osos Creek and the Morro Bay estuary are also

characterized as SRA and ESHA, and have additional regulatory protections constituting special status biological resources.

Critical habitat is designated by the USFWS as defined in Section 3 of the federal Endangered Species Act (FESA) as:

- (1) The specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the Act, on which are found those physical or biological features that are:
 - (a) Essential to the conservation of the species, and
 - (b) Which may require special management considerations or protection; and
- (2) Specific areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

USFWS Critical Habitat for the Morro Bay kangaroo rat (*Dipodomys heermanni morroensis*), Morro shoulderband snail (*Helminthoglypta walkeriana*), and steelhead trout (*Oncorhynchus mykiss*) are present within the Los Osos URL (see Table 4.3-1). Just outside the URL boundaries, critical habitat is designated for the California red-legged frog (*Rana draytonii*) and western snowy plover (*Charadrius nivosus*). Please refer to Figures 4.3-3 and 4.3-4 illustrating the extent of special status species occurrence and USFWS designated critical habitat in the plan area.

| Species | Occurrence in LOCP Area |
|--|-------------------------|
| Steelhead – South/Central California ESU | Yes |
| California red-legged frog | Yes |
| Western snowy plover | Yes |
| Morro shoulderband snail | Yes |
| Morro Bay kangaroo rat | Yes |

Special Status Plants. The CNDDDB contains records of 19 special status plants and three (3) lichens that are known to occur within the Plan Area. Species identified by the CNDDDB that are known to occur or could potentially occur in the Plan Area are shown in Table 4.3-3 below.

| Species | Status* Fed/CA/CDFW | Habitat Requirements | Potential to Occur in Plan Area |
|---|------------------------|---|---|
| LICHENS/BRYOPHYTES | | | |
| Popcorn lichen <i>Cladonia firma</i> | --/--2B.1 | Known in CA only from coastal dunes in the Morro Bay and Los Osos area. Often forms biological soil crusts with other lichens and mosses. | Yes. Potentially suitable coastal scrub, chaparral and oak woodland habitats present. |
| Splitting yarn lichen <i>Sulcaria isidiifera</i> | --/--1B.1 | Known from the Los Osos area growing on branches of coast live oak and maritime chaparral plants in sandy areas. | Yes. Potentially suitable coastal scrub, chaparral and oak woodland habitats present. |

Table 4.3-3. Special Status Plants in the Regional Vicinity of the Plan Area

| Species | Status* Fed/CA/CDFW | Habitat Requirements | Potential to Occur in Plan Area |
|--|------------------------|---|---|
| Twisted horsehair lichen <i>Bryoria spiralis</i> | --/1B.1 | Largest known population is on the Samoa Peninsula in Humboldt Co. Usually on <i>Picea sitchensis</i> , <i>Pinus contorta</i> var. <i>contorta</i> , <i>Pseudotsuga menziesii</i> , <i>Abies grandis</i> , and <i>Tsuga heterophylla</i> . | Yes. Potentially suitable coastal scrub, chaparral and oak woodland habitats present. |
| PLANTS | | | |
| Arroyo de la Cruz manzanita <i>Arctostaphylos cruzensis</i> | --/1B.2 | Perennial shrub; blooms from December to March; occurs between 60 and 310 meters on sandy soils; in broadleaved upland forest, coastal bluff scrub, closed-cone coniferous forest, chaparral, coastal scrub and valley and foothill grassland. Only found in Monterey and San Luis Obispo Counties. | Yes. Potentially suitable scrub, chaparral and grassland present. |
| Beach spectaclepod <i>Dithyrea maritima</i> | --/1B.1 | Rhizomatous, perennial herb; blooms March through May; found in sandy soils, usually near shore, in coastal dunes and coastal scrub habitats; ranges from 3 to 50 meters in elevation. | No. No suitable habitat present. |
| Blochman's dudleya <i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i> | --/1B.1 | Perennial herb; blooms April through June; found on rocky, often clay or serpentine soils in coastal bluff scrub, chaparral, coastal scrub, and valley and foothill grassland; ranges from 5 to 450 meters in elevation. | Yes. Potentially suitable grassland, coastal scrub and maritime chaparral habitats present. |
| Blochman's leafy daisy <i>Erigeron blochmaniae</i> | --/1B.2 | Rhizomatous perennial herb; blooms July through August; ranges from 3 to 45 meters in elevation and occurs in coastal dunes and coastal scrub. | Yes. Potentially suitable coastal scrub habitat present. |
| California seablite <i>Suaeda californica</i> | E/1B.1 | Perennial succulent shrub that grows along the margins of coastal salt marshes in a narrow elevational range from 0 to 5 meters; known to occur in the Morro Bay area | Yes. Potentially suitable salt marsh habitat present. |
| Cambria (San Luis Obispo County) morning-glory <i>Calystegia subacaulis</i> ssp. <i>episcopalis</i> | --/4.2 | Rhizomatous, perennial herb; blooms from April to May; occurs in chaparral, cismontane woodland, and sparse to dense grassland covering sloped or flat areas in clay-rich soils; ranges from 60-500 meters; restricted to outer South Coast ranges in SLO and Santa Barbara Counties. | Yes. Potentially suitable grassland, chaparral and oak woodland habitat present. |
| Coast woolly threads <i>Nemacaulis denudata</i> var. <i>denudata</i> | --/1B.2 | Annual herb that grows in coastal sand dunes in open spaces of the coastal strand; known to occur in the Montana de Oro area in sandy soils. | Yes. Potentially suitable coastal scrub and sand dune habitat present. |

Table 4.3-3. Special Status Plants in the Regional Vicinity of the Plan Area

| Species | Status* Fed/CA/CDWF | Habitat Requirements | Potential to Occur in Plan Area |
|--|------------------------|---|---|
| Coastal goosefoot <i>Chenopodium littoreum</i> | --/1B.2 | Annual herb that grows on sandy flats in coastal dunes along wetland and salt marsh habitat. Typically found between 30 and 100 meters elevation, and is known from the Morro Bay estuary. | Yes. Potentially suitable coastal scrub and wetland habitat present. |
| Coulter's goldfields <i>Lasthenia glabrata</i> ssp. <i>coulteri</i> | --/1B.1 | Annual herb that grows in coastal salt marshes, playas, valley and foothill grassland, and vernal pools usually on alkaline soils from 1-1,400 meters. | Yes. Potentially suitable grassland, salt marsh and wetland habitat present. |
| Hardham's evening primrose <i>Camissoniopsis hardhamiae</i> | --/1B.2 | Annual herb found in chaparral, cismontane woodland habitats on decomposed carbonate or recently burned soils; 330-500 meter elevation. Typically blooms March to May. | Yes. Potentially suitable scrub and woodland habitat present. |
| Indian Knob mountainbalm <i>Eriodictyon altissimum</i> | E/E/1B.1 | Evergreen shrub; blooms March through June; ranges in elevation from 80 to 270 meters and occurs in maritime chaparral, cismontane woodland, and coastal scrub, usually on sandstone; often found in open disturbed areas. | Yes. Potentially suitable coastal scrub, maritime chaparral and oak woodland habitat present. |
| Marsh sandwort <i>Arenaria paludicola</i> | E/E/1B.1 | Stoloniferous, perennial herb; blooms May to August; occurs in freshwater marshes and swamps, bogs and fens, and some coastal scrub, ranging from 3 to 170 meters in elevation; common associates include <i>Typha</i> , <i>Juncus</i> , and <i>Scirpus</i> . | Yes. Potentially suitable wetland habitat present. |
| Mesa horkelia <i>Horkelia cuneata</i> ssp. <i>puberula</i> | --/1B.1 | Sandy or gravelly sites in chaparral, coastal scrub and cismontane woodland; 70 to 700 meter elevation range. | Yes. Potentially suitable scrub, chaparral and oak woodland habitat present. |
| Morro manzanita <i>Arctostaphylos morroensis</i> | T/1B.1 | Evergreen shrub; blooms December through March; ranges in elevation from 5 to 205 meters; typically found on sandy-loam or Baywood sands in chaparral, woodlands, coastal dunes and coastal scrub. | Yes. Potentially suitable scrub, chaparral and oak woodland habitat present. |
| Oso manzanita <i>Arctostaphylos osoensis</i> | --/1B.2 | Perennial shrub known to occur in chaparral and cismontane woodland on the porphyry buttes east of Morro Bay. | No. Suitable habitat not present. |
| Pecho manzanita <i>Arctostaphylos pechoensis</i> | --/1B.2 | Perennial shrub; blooms November to March; occurs on siliceous shale in closed-cone coniferous forest, chaparral, and coastal scrub habitats, ranging from 170 to 1100 meters in elevation. | No. Suitable habitat not present. |
| Salt marsh bird's-beak <i>Chloropyron maritimum</i> ssp. <i>maritimum</i> | E/E/1B.2 | Annual herb known to occur along margins of salt marsh habitat and coastal dunes. Limited to the higher zones of the Morro Bay estuary. | Yes. Potentially suitable salt marsh and wetland habitat present. |

Table 4.3-3. Special Status Plants in the Regional Vicinity of the Plan Area

| Species | Status* Fed/CA/CDFW | Habitat Requirements | Potential to Occur in Plan Area |
|--|------------------------|--|---|
| San Luis Obispo owl's clover <i>Castilleja densiflora</i> ssp. <i>obispoensis</i> | --/1B.2 | Annual herb; blooms in April; ranges from 10 to 400 meters in elevation and occurs in meadows, seeps, and valley and foothill grassland. | Yes. Potentially suitable grassland and seasonal wetland habitat present. |
| Southern curly-leaved monardella <i>Monardella undulata</i> | --/4.2 | Annual herb; blooms May through September; occurs on dunes and sandy soils in coastal strand, chaparral, northern coastal scrub, coastal sage scrub, at elevations below 300 meters. | Yes. Suitable coastal scrub and chaparral habitats present. |

*E = Endangered; T = Threatened; R = Rare CE = Candidate for Endangered Status; WL = Watch List; List 1B – Rare, threatened, or endangered in California and elsewhere; List 2 – Rare, threatened or endangered in California, but more common elsewhere; List 4 – Limited distribution (Watch List). Source: California Natural Diversity Database (California Department of Fish and Wildlife 2017); California Native Plant Society Online Inventory of Rare Plants, accessed 2017 and 2018 (online at www.cnps.org); Special Vascular Plants, Bryophytes, and Lichens List (California Department of Fish and Wildlife 2018).

To summarize the information above, the following special status plant species separated by habitat type could potentially occur within the Plan Area:

Grassland:

- Cambria morning glory (*Calystegia subacaulis* ssp. *episcopalis*; CRPR 4.2);
- Blochman’s dudleya (*Dudleya blochmaniae* ssp. *blochmaniae*; CRPR 1B.1); and
- San Luis Obispo owl’s clover (*Castilleja densiflora* ssp. *obispoensis*; CRPR 1B.2).

Coastal Scrub/Central Dune Scrub (including areas of Coastal Sage Scrub):

- Blochman’s dudleya;
- Blochman’s leafy daisy (*Erigeron blochmaniae*; CRPR 1B.2);
- Coast woolly heads (*Nemacaulis denudata* var. *denudata*, CRPR 1B.2);
- Coastal goosefoot (*Chenopodium littoreum*; CRPR 1B.2)
- Hardham’s evening primrose (*Camissoniopsis hardhamiae*; CRPR 1B.2);
- Mesa horkelia (*Horkelia cuneata* ssp. *puberula*, CRPR 1B.2); and
- Southern curly-leaved monardella (*Monardella sinuata*, CRPR 4.2).

Central Maritime Chaparral:

- Arroyo de la Cruz manzanita (*Arctostaphylos cruzensis*; CRPR 1B.2)
- Indian Knob mountain balm (*Eriodictyon altissimum*; California/Federal Endangered and CRPR 1B.1)
- Mesa horkelia; and
- Morro manzanita (*Arctostaphylos morroensis*; Federal Endangered and CRPR 1B.1)

Wetland/Riparian:

- California seablite (*Suaeda californica*; Federal Endangered and CRPR 1B.1);
- Coulter’s goldfields (*Lasthenia glabrata* ssp. *coulteri*; CRPR 1B.1);

- Marsh sandwort (*Arenaria paludicola*, California/Federal Endangered and CRPR 1B.1); and
- Salt marsh bird's beak (*Chloropyron maritimum*, California/Federal Endangered and CRPR 1B.2).

Lichens:

- Popcorn lichen (*Cladonia firma*, CRPR 2B.1);
- Splitting yarn lichen (*Sulcaria isidiifera*; CRPR 1B.1); and
- Twisted horsehair lichen (*Bryoria spiralifera*, CRPR 1B.1).

While identified in the CNDDDB search for the Plan Area, coastal foredune species such as beach spectaclepod (*Dithyrea maritima*; California Threatened and CRPR 1B.1) are not expected to occur. The Plan Area does not extend westward into the active coastal dunes along the immediate coast, and therefore, the beach spectaclepod or other species found in the more active coastal dunes would not be expected to occur in the Plan Area. Similarly, other species such as Oso and Pecho manzanitas are unlikely to occur due to their known habitat requirements and documented occurrences located to the east outside the Plan Area. It is possible, however that an unrecorded occurrence of a particular species may be present within the Plan Area, but unlikely based on the known range and occurrence information. In addition, the CNDDDB does not contain recorded occurrences of all special status plants that could potentially occur within the Plan Area, including species such as sand almond (*Prunus fasciculata* var. *punctata*, CRPR 4.2). This is a watch list species that typically does not meet the rarity thresholds defined in CEQA. It may be identified as a special status plant that is a component of SRA or ESHA requiring mitigation for impacts that would be developed on a case-by-case basis.

Special Status Wildlife. The CNDDDB contained recorded occurrence data for 17 special status animal species in the Plan Area, including six (6) invertebrates, one (1) amphibian, two (2) reptiles, two (2) fish, three (3) birds, and three (3) mammals. The CNDDDB identifies one species of bat, and there could potentially be others that forage and/or roost within the Plan Area. Bat species, for example, specifically the pallid bat (*Antrozous pallidus*), Townsend's big-eared bat (*Corynorhinus townsendii*), and various species of *Myotis* are highly sensitive to disturbance and human presence and therefore would not be expected to roost in the densely developed areas of town. In addition, while there are numerous eucalyptus groves in the plan area, only select stands are known or could potentially support the Monarch butterfly (*Danaus plexippus*). While the butterfly itself is not a special status species, its overwintering behavior and the habitat that supports it is of special ecological value. This species requires specific autumnal and over-wintering habitat attributes such as stands of eucalyptus, pine and Monterey cypress forming protected microclimates with just the right amount of sun exposure and protection from winds. These conditions are present in select areas of the Plan Area. Nesting birds are also protected, and raptor nests in particular are afforded further protection under California Fish and Game Code.

Table 4.3.4. Special Status Wildlife in the Regional Vicinity of the Plan Area

| Species | Status* Fed/CA/CDFW | Habitat Requirements | Potential Occurrence in Plan Area |
|--|------------------------|--|--|
| INVERTEBRATES | | | |
| California brackishwater snail <i>Tryonia imitator</i> | --/SA/-- | Found only in permanently submerged areas in coastal lagoons. | No. Suitable habitat not present. |
| Globose dune beetle <i>Coelus globosus</i> | --/SA/-- | Inhabits coastal sand dune habitat in foredunes and sand hummocks most common beneath dune vegetation. | No. Suitable habitat not present. |
| Monarch butterfly <i>Danaus plexippus</i> | --/SA/-- | Wind-protected tree groves of eucalyptus, Monterey pine and cypress with nectar and water sources nearby. | No. Suitable overwintering habitat not present. |
| Morro Bay blue butterfly <i>Plebejus icarioides moroensis</i> | --/SA/-- | Inhabits stabilized dunes and adjacent areas of coastal San Luis Obispo and NW Santa Barbara counties. | No. Suitable habitat not present. |
| Morro shoulderband snail <i>Helminthoglypta walkeriana</i> | E/--/-- | Known to occur in coastal sage scrub and dune scrub habitats on Baywood fine sands near Morro Bay. | Yes. Potentially suitable grassland, coastal scrub, and landscape habitat present. |
| Obscure bumble bee <i>Bombus caliginosus</i> | --/ SA / -- | The Pacific Coast from Santa Barbara County north to Washington state. Food plant genera include Baccharis, Cirsium, Lupinus, Lotus, Grindelia, and Phacelia. | Yes. Potentially suitable plant species are present. |
| FISH | | | |
| Steelhead – South/Central California ESU <i>Oncorhynchus mykiss irideus</i> | T/SSC/-- | Fresh water, fast flowing, highly oxygenated, clear, cool stream where riffles tend to predominate pools. | Yes. Seasonal habitat present in Los Osos Creek. |
| Tidewater goby <i>Eucyclogobius newberryi</i> | E/SSC/-- | Brackish water habitats along the California coast from San Diego county to Del Norte county. | Yes. Potentially suitable brackish water habitat present. |
| AMPHIBIANS/REPTILES | | | |
| California red-legged frog <i>Rana draytonii</i> | T/SSC/-- | Lowland and foothills in or near permanent or semi-permanent sources of deep water (at least 0.5 meter) with emergent wetland / riparian vegetation. May use a variety of upland habitats during the year for refugia and dispersal. | Yes. Potentially suitable creek and wetland habitat present. |
| Coast horned lizard <i>Phrynosoma blainvillii</i> | --/SSC/-- | Frequents a wide variety of habitat including sandy washes with scattered shrubs and open areas for sunning. Loose soils for burial. | Yes. Potentially suitable coastal scrub habitat with loose soils present. |
| Silvery/Black legless lizard <i>Anniella pulchra</i> | --/SSC/-- | Sandy or loamy soils in valley and foothill woodlands, chaparral, coastal scrub and coastal dunes. | Yes. Potentially suitable coastal scrub habitat with loose soils present. |

Table 4.3.4. Special Status Wildlife in the Regional Vicinity of the Plan Area

| Species | Status* Fed/CA/CDFW | Habitat Requirements | Potential Occurrence in Plan Area |
|---|------------------------|--|---|
| BIRDS | | | |
| California black rail <i>Laterallus jamaicensis coturniculus</i> | --T/-- | Freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that does not fluctuate and dense vegetation for nesting. | Yes. Potentially suitable salt marsh habitat present. |
| California clapper rail <i>Rallus longirostris obsoletus</i> | E/E/-- | Occurs in salt-water and brackish marshes traversed by tidal sloughs dominated by pickleweed. | Yes. Potentially suitable salt marsh habitat present. |
| Cooper's hawk <i>Accipiter cooperii</i> | --/WL/-- (nesting) | Wooded areas. Nests in tall trees and often hunts around human structures. | Yes. Potential roosting and nesting habitat present. |
| MAMMALS | | | |
| American badger <i>Taxidea taxus</i> | --/SSC/-- | Friable soils and open, uncultivated ground for denning. Preys on burrowing rodents such as ground squirrels. | No. Suitable habitat not present. |
| Big free-tailed bat <i>Nyctinomops macrotis</i> | --/SSC/-- | Occurs in low lying arid areas of Southern California. Needs high cliffs or rocky outcrops for roosting sites. Feeds primarily on large moths. | No. Suitable habitat not present. |
| Morro Bay kangaroo rat <i>Dipodomys heermanni morroensis</i> | E/E/-- | Coastal sage scrub on the south side of Morro Bay. Needs sandy soil on stabilized dunes with open scrub vegetation. | Yes. Potentially suitable habitat present. |

*E = Endangered; T = Threatened; R = Rare CE = Candidate for Endangered Status; SSC = California Species of Special Concern; FP = Fully Protected; WL = Watch List; SA – Special Animal; ‘—’ = no status. Source: California Natural Diversity Database (California Department of Fish and Wildlife 2017); Special Animals List (California Department of Fish and Wildlife 2017).

To summarize the information presented above, the following special status wildlife separated by vegetation community could potentially occur within the Plan Area:

Grassland:

- American badger (*Taxidea taxus*, species of concern);
- Coast horned lizard (*Phrynosoma blainvilli*, species of concern);
- Morro shoulderband snail (*Helminthoglypta walkeriana*, Federal Endangered); and
- Obscure bumble bee (*Bombus caliginosus*, species of concern).

Coastal Sage Scrub

- American badger;
- Coast horned lizard;
- Globose dune beetle (*Coelus globosus*, species of concern);
- Morro Bay blue butterfly (*Icaricia icarioides moroensis*, species of concern);
- Morro Bay kangaroo rat (*Dipodomys heermanni morroensis*);
- Morro shoulderband snail; and
- Silvery and black legless lizard (*Anniella pulchra*, species of concern).

Maritime Chaparral:

- American badger;
- Coast horned lizard;
- Morro Bay kangaroo rat;
- Silvery and black legless lizard; and to a lesser extent
- Morro shoulderband snail.

Wetland/Riparian:

- California black rail (*Laterallus jamaicensis coturniculus*, State Threatened);
- California clapper rail (*Rallus obsoletus*, Federal/State Endangered);
- California red-legged frog (*Rana draytonii*, Federal Threatened);
- California brackish water snail (*Tryonia imitator*, species of concern);
- Steelhead (*Oncorhynchus mykiss irideus*, Federal Threatened); and
- Tidewater goby (*Eucyclogobius newberryi*, Federal Threatened).

Woodland:

- Monarch butterfly; and
- Nesting birds and raptors such as Cooper’s hawk (*Accipiter cooperii*).

Similar to the plant evaluation above, the majority of the rare animal species have highly specialized habitat requirements that are not expected to occur in the developed portions of the Plan Area, including small remnant lots surrounded by existing residential or urban development. Overall, the majority of the developed portions of the Plan Area are disturbed and do not provide appropriate habitat or vegetation structure to support these species. However, undeveloped lots supporting grassland, coastal scrub, oak woodland, maritime chaparral, eucalyptus, wetland or riparian habitats could potentially contain special status plant and wildlife species. Current LCP and CZLUO policies as well as those proposed in the LOHCP could in some circumstances require site-specific biological analysis for a proposed project to determine if special status species or potentially suitable habitat is present.

Morro shoulderband snail is a federally endangered mollusk found in coastal scrub habitats on Baywood fine sands throughout the Los Osos area, including within and adjacent to developed and ruderal areas. It also occurs in non-native grasslands where veldt grass has out-competed the coastal scrub habitat. The species is regularly observed in non-native habitats such as iceplant mats growing on sandy soils. It is currently not believed to occur on clay soils but could potentially occur at the interface between dune sands and clay/loam soil types. This species does not utilize open beach sands with patchy vegetation associated with foredune habitat along the immediate coast. Due to numerous documented occurrences in disturbed or previously developed locations that contain little or no native habitat, almost any action that would disturb vegetation or soil within the Plan Area has potential to result in take of this species.

Los Osos Creek and its various tributary drainages provide suitable aquatic habitat to support the California red-legged frog (*Rana draytonii*; CRLF), tidewater goby (*Eucyclogobius newberryi*), and southern steelhead (*Oncorhynchus mykiss irideus*). Also, other highly aquatic species not identified in the CNDDDB such as the western pond turtle (*Emys marmorata*) and the two-striped garter snake

(*Thamnophis hammondi*) may occur in the Los Osos Creek corridor and other freshwater wetland habitats within the Plan Area.

A number of avian species including raptors are known from the general area and could potentially utilize the Plan Area as foraging and nesting habitat. Large trees including Eucalyptus would also be expected to support breeding activities of various raptors. Ground nesting birds are also expected to occur along the Morro Bay margin and larger expansive grasslands. Other special status avian species known from the region such as Cooper's hawk (*Accipiter cooperii*) and red-shouldered hawk (*Buteo lineatus*) could potentially occur in the Plan Area at some point during the year.

Special status animals known to occur along the coastal strand, such as the globose dune beetle (*Coelus globosus*) and western snowy plover (*Charadrius alexandrinus nivosus*), are unlikely to occur within Plan Area zones proposed for future development. The legless lizard (*Anniella pulchra*) could potentially occur in coastal scrub/central dune scrub and iceplant dominated locations, even on small undeveloped lots in urban areas.

As stated above, the evaluation of special status species occurrence was based on a habitat suitability analysis. It did not include definitive surveys to determine their presence or absence, but did include review of biological reports and the CNDDDB records documenting recorded occurrence data from the area to conclude whether or not a particular species could be expected to occur. Based on this analysis, the special status wildlife species identified above are expected to occur in the Plan Area.

e. Wildlife Movement Corridors. Wildlife movement corridors or habitat linkages are critical to maintaining populations of plant and animal species. The fragmentation of large habitat areas into small, isolated segments reduces biological diversity, eliminates disturbance sensitive species, restricts gene flow between populations, and may eventually lead to local extinctions of entire floral or faunal assemblages. Many land use planning guidelines now recognize the importance of protecting wildlife movement corridors and seek to retain major linkages wherever possible. However, defining precise corridor alignments and specific spatial and resource requirements can be problematic.

Depending on the species, wildlife movement corridors can vary from relatively narrow paths for movement between breeding and foraging areas to areas at the scale of mountain ranges or valleys for dispersal and migration. Movement corridors can also either be continuous or discontinuous patches of suitable habitat. For example, fish require relatively continuous riverine habitat while amphibians and aquatic reptiles can move between aquatic habitats traversing through upland areas. They may remain in suitable terrestrial habitats for periods of several months to years. Juvenile frogs disperse away from aquatic breeding sites in all directions, apparently without regard to habitat corridors such as riparian areas, when in undeveloped landscapes. Therefore, while aquatic breeding habitats have received the most attention for protection in the past with respect to wildlife movement, there is an increasing amount of evidence that the protection of terrestrial migration and dispersal habitats is of at least equal importance for the conservation of these species.

Contiguous upland habitats are needed for movement of smaller animals, whereas highly mobile species such as birds and large mammals can often utilize discontinuous habitat patches. The majority of the Plan Area is developed with undeveloped parcels littered throughout. In addition, the mid-town area

contains open tracts of lands that many common wildlife may utilize. The large extensive greenbelt abutting state parks lands to the south and north also provide ample wildlife movement corridors for common and special status species adjacent to the Plan Area.

f. Regulatory Setting. The following describes the federal, state and local regulatory framework that addresses biological resources.

Federal Laws and Regulations

Federal Endangered Species Act. The U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) are the agencies that oversee the Federal Endangered Species Act (FESA). Under the FESA, these agencies are required to provide and maintain a list of native species whose existence are imperiled, and are thus provided with legal protections. These species are known as “listed” species. The NMFS is responsible for the protection of marine mammals, marine fishes, and anadromous fishes, whereas all other species are regulated by the USFWS. Listed species are categorized by a ranking system that indicates a species’ status of survival as threatened or endangered.

The USFWS and NMFS may “list” a species if it is endangered (at risk of extinction throughout all or a significant portion of its range) or threatened (likely to become endangered within the foreseeable future). Section 9 of the FESA prohibits the “take” of any wildlife species listed as endangered and most species listed as threatened. Take, as defined by the FESA, means “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” Harm and harass are further defined as any act that kills or injures the species, including significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering.

The FESA includes exceptions to Section 9 take prohibition that allow an action to be carried out, despite the fact that the action may result in the take of listed species, where conservation measures are included for the species as detailed in a Habitat Conservation Plan. Section 7 of the FESA provides an exception to the take prohibition for actions authorized permitted, funded, or otherwise carried out by a Federal agency (e.g., under the USACE Section 404 permit program). FESA Section 10 provides for permitting incidental take of listed species for actions by non-federal entities. To receive a FESA Section 10(a)(1)(B) incidental take permit (ITP) for a take of Federally listed fish and wildlife species “that is incidental to, but not the purpose of, otherwise lawful activities,” the permit applicant is required to provide:

- A complete description of the activity sought to be authorized;
- A Habitat Conservation Plan (HCP) that specifies:
 - The impact that will likely result from such taking;
 - What steps the applicant will take to monitor, minimize, and mitigate such impacts to the maximum extent practicable; the funding that will be available to implement such steps; and the procedures to be used to deal with unforeseen circumstances;
 - What alternative actions to such taking the applicant considered and the reasons why such alternatives are not proposed to be used; and,

- Such other measures that the Interior Secretary or Commerce Secretary may require as being necessary or appropriate for purposes of the HCP.

The USFWS or NMFS will issue an ITP if the Interior Secretary or Commerce Secretary, as the case may be, finds with respect to the ITP application and HCP that:

- the taking will be incidental;
- the applicant will, to the maximum extent practicable, minimize and mitigate the impacts of such taking;
- the applicant will ensure that adequate funding for the plan will be provided;
- the taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild; and,
- the measures, if any, required by the Secretary of Interior or Commerce Secretary, will be met

Section 9 also prohibits the “removal or reduction to possession” of any listed plant species “under Federal jurisdiction” (i.e., on Federal land, where Federal funding is provided, or where Federal authorization is required). The FESA does not prohibit take of listed plants on non-federal land, other than prohibiting the removal, damage, or destruction of such species in violation of state law. Consistent with section 7 (a)(2) of the FESA, however, Section 10 prohibits the issuance of an ITP that would appreciably reduce the likelihood of the survival and recovery in the wild (i.e., “jeopardize”) of any endangered or threatened species, including plants.

Federal Clean Water Act, Section 404, Discharge of Dredged or Fill Material in Waters of the U.S. The Clean Water Act (CWA) is the primary Federal law that protects the quality of the nation’s waters, including wetlands, lakes, rivers, and coastal areas. Section 404 of the CWA regulates the discharge of dredged or fill material into the waters of the United States, including wetlands. The CWA holds that all discharges into the nation’s waters are unlawful unless specifically authorized by a permit; issuance of such permits constitutes its principal regulatory tool. The U.S. Army Corps of Engineers (USACE) is authorized to issue Section 404 permits, which allow the placement of dredged or fill materials into jurisdictional waters of the United States under certain circumstances. The USACE issues two types of permits under Section 404: general permits (either nationwide permits or regional permits) and standard permits (either letters of permission or individual permits). General permits are issued by the USACE to streamline the Section 404 permitting process for nationwide, statewide, or regional activities that have minimal direct or cumulative environmental impacts on the aquatic environment. Standard permits are issued for activities that do not qualify for a general permit (i.e., that may have more than a minimal adverse environmental impact).

Federal Clean Water Act, Section 401—Water Quality Certification. Under the CWA Section 401, applicants for a Federal license or permit to conduct activities that may result in the discharge of a pollutant (including dredged or fill material) into waters of the United States must obtain certification from the state in which the discharge would originate. Therefore, all projects that have a Federal component and may affect state water quality (including projects that require Federal agency approval, such as issuance of a Section 404 permit) must also comply with CWA Section 401 and the California Porter-Cologne Water Quality Control Act. In California Section 401 certification is handled by the Regional Water Quality Control Boards. San Luis Obispo falls under the jurisdiction of the Central Coast

Regional Water Quality Control Board (CCRWQCB). The CCRWQCB must certify that the discharge will comply with State water quality standards and other requirements of the CWA.

Migratory Bird Treaty Act. The Migratory Bird Treaty Act of 1918, as amended (MBTA), implements various treaties and conventions between the U.S. and Canada, Japan, Mexico, and the former Soviet Union for the protection of migratory birds. Under the MBTA, taking, killing, or possessing migratory birds is unlawful, as is taking of any parts, nests, or eggs of such birds (16 U.S. Government Code [USC] 703). Take is defined more narrowly under the MBTA than under FESA and includes only the death or injury of individuals of a migratory bird species or their eggs. As such, take under the MBTA does not include the concepts of harm and harassment as defined under FESA.

Bald and Golden Eagle Protection Act. The Bald and Golden Eagle Protection Act prohibits the taking or possession of and commerce in bald and golden eagles, with limited exceptions. Under the Act it is a violation to "...take, possess, sell, purchase, barter, offer to sell, transport, export or import, at any time or in any manner, any bald eagle commonly known as the American eagle, or golden eagle, alive or dead, or any part, nest, or egg, thereof...". Take is defined to include pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, and disturb. Disturb is further defined in 50 CFR Part 22.3 as "to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior."

National Environmental Policy Act. The National Environmental Policy Act (NEPA) requires Federal agencies to include in their decision-making process appropriate and careful consideration of all environmental effects of a proposed action and of possible alternatives. However, NEPA applies only to proposed actions that are either on federal lands, involve federal funding, or for which a federal agency is acting as the lead agency. Otherwise, environmental review is addressed through the California Environmental Quality Act (CEQA) described in the next section. NEPA does not apply to the LOCP itself, because none of the above conditions apply. It is possible, however, that certain future projects under the LOCP could be subject to NEPA, if any of the above conditions apply.

If NEPA applies to a future project or projects under the LOCP, documentation of the environmental impact analysis and efforts to avoid or minimize the adverse effects of proposed actions must be made available for public notice and review. This analysis is documented in either an Environmental Assessment (EA) or an Environmental Impact Statement (EIS). Project proponents must disclose in these documents whether their proposed action will adversely affect the human or natural environment. NEPA's requirements are primarily procedural rather than substantive in that NEPA requires disclosure of environmental effects and mitigation possibilities, but includes no requirement to mitigate.

State Laws and Regulations

California Endangered Species Act. Administered by the California Department of Fish and Wildlife (CDFW), California ESA prohibits the take of listed species and also species formally under consideration for listing ("candidate" species) in California. Under CESA take means "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." (Fish and Game Code § 86.) Under this definition,

and in contrast to the ESA, CESA does not prohibit “harm” to a listed species where an action results in the loss or modification to habitat but does not result in mortality of a listed species. However, the killing of a listed species that is incidental to an otherwise lawful activity and not the primary purpose of the activity constitutes a take under CESA. CESA does not protect insects, but with certain exceptions prohibits the take of plants on private land.

Natural Community Conservation Planning Act (NCCP). The NCCP Act was enacted to implement broad-based planning to provide for effective protection and conservation of California’s wildlife heritage while continuing to allow appropriate development and growth. The NCCP Act does not focus only on listed species and is broader in its orientation and objectives than are the ESA or CESA. The NCCP Act encourages local, State, and Federal agencies to prepare comprehensive conservation plans that maintain the continued viability of species and biological communities impacted by human changes to the landscape. The NCCP Act provides for incidental take authorization, such that covered activities resulting in incidental take of listed species may be carried out without violating CESA. Permits issued under the NCCP Act can also be broad and may include both listed species and non-listed species.

California Fish and Game Code Sections 1600-1616—Master Streambed Alteration Agreement for Streambed Modifications. CDFW has jurisdictional authority over streams, lakes, and wetland resources associated with these aquatic systems under California Fish and Game Code Section 1600 et seq. CDFW has the authority to regulate work that will “substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris waste or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake” (Fish and Game Code § 1602.). An entity that proposes to carry out such an activity must first inform CDFW. Where CDFW concludes that the activity will “substantially adversely affect an existing fish or wildlife resource,” the entity proposing the activity must negotiate an agreement with CDFW that specifies terms under which the activity may be carried out in a way that protects the affected wildlife resource. CDFW can enter into programmatic agreements that cover recurring operation and maintenance activities or regional plans. These agreements are sometimes referred to as “master streambed alteration agreements.”

California Fully Protected Species. In the 1960s, before CESA was enacted, the California Legislature identified specific species for protection under the California Fish and Game Code. These fully protected species may not be taken or possessed at any time, and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of bird species for the protection of livestock. Fully protected species are described in Sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), and 5515 (fish) of the California Fish and Game Code.

California Fish and Game Code 3503 (Bird Nests). Section 3503 of the California Fish and Game Code makes it “unlawful to take, possess, or needlessly destroy the nests or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto.” Therefore, CDFW may issue permits authorizing take.

California Fish and Game Code 3503.5 (Birds of Prey). Section 3503.5 of the California Fish and Game Code prohibits the take, possession, or destruction of any birds of prey or their nests or eggs “except as

otherwise provided by this code or any regulation adopted pursuant thereto.” CDFW may issue permits authorizing take of birds of prey or their nests or eggs pursuant to CESA or the NCCP Act.

Native Plant Protection Act (NPPA). The NPPA was enacted in 1977 and allows the Fish and Game Commission to designate plants as rare or endangered. There are 64 species, subspecies, and varieties of plants that are protected as rare under the NPPA. The NPPA prohibits take of endangered or rare native plants, but includes some exceptions for agricultural and nursery operations; emergencies; and after properly notifying CDFW for vegetation removal from canals, roads, and other sites, changes in land use, and in certain other situations.

California Environmental Quality Act. The California Environmental Quality Act (CEQA) is similar to, but more extensive than NEPA in that it requires significant environmental impacts of proposed projects be reduced to a less-than-significant level through adoption of feasible avoidance, minimization, or mitigation measures unless overriding considerations are identified and documented that make the mitigation measures or alternative infeasible. CEQA applies to certain activities in California undertaken by either a public agency or a private entity that must receive some discretionary approval from a California government agency.

California Rare Plant Rank System. The California Native Plant Society (CNPS) is an organization, which evaluates the health of botanical resources in California and has developed a ranking system in conjunction with the CDFW to which differing degrees of sensitivity or rarity are assigned to different plant species. The plants with a California Rare Plant Rank of 1A are presumed extinct because they have not been seen or collected in the wild in California for many years. Plants with a California Rare Plant Rank of 1B are rare throughout their range with the majority of them endemic to California. California Rare Plant Rank 2 species are plants designated as rare, threatened, or endangered in California, but are more commonly found elsewhere. The plants that comprise California Rare Plant Rank 3 are united by one common theme; a lack of the necessary information to assign them to one of the other ranks or to reject them. California Rare Plant Rank 4 are plants of limited distribution where a watch list has been established to ensure their populations do not suffer further. The Threat Rank is an extension added onto the California Rare Plant Rank number and designates the level of endangerment by a 1 to 3 ranking with 1 being the most endangered and 3 being the least endangered; 0.1-Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat), 0.2-Fairly threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat) and 0.3-Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known).

County of San Luis Obispo

General Plan. The San Luis Obispo County General Plan (General Plan) outlines the development goals of the county and provides a basis for government decision making, as well as for informing the public about the rules that guide development within the county. The County Plan includes both ordinances and elements. The key elements that are relative to the protection of biological resources include the Land Use Element, as well as the Conservation and Open Space Element.

Estero Area Plan. Information regarding biological resources is included in the Estero Area Plan Update

in Section 6: Land Use, Section 7: Combining Designations, and Section 8: Planning Area Standards. These sections include Area Land Use information, the Combining Designations for Sensitive Resource Areas and Environmentally Sensitive Habitat Areas, and Development Standards.

Land Use Ordinances. Land use ordinances contain standards for development based on what the effects of an action or project will be on specific land uses. Specific ordinances relevant to a discussion of biological resources include:

- Title 23 - Coastal Zone Land Use Ordinance (CZLUO) (revised in January, 2006)

Local Coastal Plan. The community of Los Osos uses the San Luis Obispo County Local Coastal Program (LCP) as a planning tool to guide development in the coastal zone, in partnership with the California Coastal Commission. The LCP contains the ground rules for future development and the protection of coastal resources. The elements of the General Plan include the LCP, which applies to those areas within the Coastal Zone. For the purposes of preparing the LCP, the County is divided into four segments. Los Osos is located within the region covered by the Estero Area Plan.

Coastal Plan Policies. The County of San Luis Obispo Coastal Plan Policies forms part of the San Luis Obispo County Land Use Element of the General Plan (revised April 2007). Relevant to biological resources, these policies address Environmentally Sensitive Habitats in Chapter 6 and Coastal Watersheds in Chapter 9. The Coastal Plan Policies are implemented through the County of San Luis Obispo Coastal Zone Land Use Ordinances.

Coastal Zone Land Use Ordinance. The County assumes permit authority in the Coastal Zone based on the adopted and certified Coastal Zone Land Use Element (CZLUE) and the Coastal Zone Land Use Ordinance (CZLUO). Relevant to the study area and the proposed project, the CZLUO provides policy protecting categorical sensitive biological resources that include; Sensitive Resource Areas (SRAs) and Environmentally Sensitive Habitat Areas (ESHAs); Wetlands, Streams, and Riparian Vegetation; Terrestrial Habitat Protection; and Marine Habitats. These areas are high-priority areas for preservation and developments requiring a land use permit within or adjacent to these areas and are subject to Section 23.07.160 – Section 23.07.176 of the CZLUO. Tree Removal Standards are presented in Section 23.05.060 – Section 23.05.064 of the CZLUO.

SRAs are subject to the provisions of Sections 23.07.160 – Section 23.07.166 of the CZLUO. The CZLUO combining designations for SRAs are applied by the official maps of the Land Use Element of the Estero Area Plan Update to identify areas “with special environmental qualities, or areas containing unique or endangered vegetation or habitat resources.” ESHAs are subject to the provisions of Section 23.07.170 of the CZLUO. According to the CZLUO, an ESHA is a “type of SRA where 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 development.” Figure 4.3-5 shows the current known distribution of ESHAs within the Plan Area, however not all ESHAs have been mapped to date.

Wetlands, streams, and riparian vegetation are subject to the provisions of Section 23.07.172 – Section 23.07.174 of the CZLUO. Provisions protecting wetlands are intended “to maintain the natural ecological

functioning and productivity of wetlands and estuaries and where feasible, to support restoration of degraded wetlands.” Provisions protecting streams and riparian vegetation are intended “to preserve and protect the natural hydrological system and ecological functions of coastal streams.”

Terrestrial habitat areas are subject to the provisions of Section 23.07.176 of the CZLUO. Provisions protecting terrestrial habitats are intended “to preserve and protect rare and endangered species of terrestrial plants and animals by preserving their habitats. Emphasis for protection is on the entire ecological community rather than only the identified plant or animal.” Tree removal is subject to the provisions of Sections 23.05.060 – 23.05.064 of the CZLUO. The purpose of tree removal standards is “to protect existing trees and other coastal vegetation from indiscriminate or unnecessary removal consistent with Local Coastal Plan policies and pursuant to Section 30251 of the Coastal Act which requires protection of scenic and visual qualities of coastal trees.

Proposed Los Osos Community Plan. The proposed LOCP is not yet part of the existing regulatory framework. It will become part of the regulatory framework when adopted. Applicable policies, programs and standards included in the proposed LOCP are evaluated in the following Impact Analysis, to the extent they would adequately guide future development, and thus mitigate potential programmatic impacts related to this issue.

The draft LOCP is intended to build on and provide a more detailed regulatory framework for the Los Osos planning area, tiering from the adopted Estero Area Plan, most recently updated in 2009. The Estero Area Plan is part of the County’s General Plan and its Local Coastal Plan. All elements of a general plan must be consistent. Data, assumptions and projections ideally should be the same in each element of the plan. At the same time it is recognized that documents are generally static once adopted, even if conditions that they describe are continually changing. For that reason, there may be differences in information between documents, even if they are consistent from a policy perspective.

The following plans or other related documents are relevant to the Estero Area Plan, and therefore to the Los Osos Community Plan. They were reviewed in the Final EIR for the Estero Area Plan Update, which was certified in December 2003, at which time they were found to be consistent with that plan, to the extent such policies were relevant to the Estero Area Plan. These documents included, but were not limited to the following:

- Land Use Element and Local Coastal Plan, Framework For Planning;
- Coastal Zone Land Use Ordinance (Title 23); and
- Open Space Plan.

Once adopted, the Estero Area Plan was determined to be consistent with its guiding regulatory framework, including various federal and state regulations, including but not limited to the following:

- California Coastal Act of 1976;
- Regional Water Quality Control Board, Central Coast Basin Plan;
- California Department of Fish and Wildlife policies;
- U.S. Fish and Wildlife Service policies; and

- Clean Water Act.

The Estero Area Plan has since been updated, most recently in 2009. At that time, it was found to still be consistent with the policy framework described above.

As noted in the introduction of the Estero Area Plan:

“This area plan is consistent with the intent and policies of the California Coastal Act and the San Luis Obispo County Local Coastal Program (LCP). All other county plans, policies and programs that involve the Estero Planning Area and are subject to the LCP are to be consistent with and implement this plan. In addition, where applicable, all public and private development in this planning area is to be consistent with this plan.”

The Los Osos Community Plan must be consistent with the policy framework for the Estero Area Plan, since it is a more detailed regulatory document for Los Osos, which is a portion of the Estero planning area. It follows that if the Los Osos Community Plan can be found to be consistent with the Estero Area Plan, it will be by definition consistent with the other regulations described above. Many of these regulations are discussed in more detail within other sections of this EIR, and used in part as the basis for determining whether or not there would be any potential impacts with respect to those issues that are evaluated. Thus, the LOCP’s consistency with the overall regulatory framework for various resources is included elsewhere in this EIR.

For the reasons described above, this section of the EIR will focus on the LOCP’s consistency with biological resources related policies included in the Estero Area Plan and those associated with Sensitive Resource Area/Environmentally Sensitive Habitat Area requirements included in the Coastal Zone Land Use Ordinance and the Coastal Plan Policy Document. It will also focus only on relevant policy provisions of the Estero Area Plan that relate to Los Osos, including any maps and diagrams that relate to those policies. For the most part, these are found in Chapter 7 of the Estero Area Plan, which are the Planning Area Standards, but are found elsewhere throughout the document.

The key aspects of the draft LOCP that will be evaluated in this section of the EIR include, but are not limited to:

- Chapter 2 – Community Plan Policies;
- Chapter 4 – Environmental Resources; and
- Chapter 7 – Planning Area Standards.

To the extent necessary, other aspects of the LOCP will be evaluated as well, but in general, these portions of the plan are either background or setting information, or a recitation of relevant existing coastal policies that provide the basis for protection of biological resources.

Also note that the proposed LOCP is a regulatory document that is intended to expand upon the policy framework described above. This section describes the regulatory framework with respect to biological resources in the LOCP area, and when coupled with the existing County policies, provides a series of rigorous protection measures for the natural resources in the Plan Area.

4.3.2 Impact Analysis

a. Methodology and Significance Thresholds

Methodology. The analysis is based on a programmatic evaluation of the potential for future development under the LOCP to result in land use conflicts, or to conflict with the existing policy framework of the Estero Area Plan found to be consistent with applicable regulatory documents, including Coastal Act polices. Because of the programmatic nature of the LOCP, project-level analysis of the specific impacts of development on biological resources cannot be provided in this document. The level of impact analysis is maintained at the plan-level.

Significance Thresholds. According to the CEQA Guidelines' Appendix G Environmental Checklist, to determine whether impacts to biological resources are significant environmental effects, the following questions are analyzed and evaluated. An impact is considered significant if development facilitated by the Los Osos Community Plan would:

- *Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.*
- *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.*
- *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 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.*

b. Impacts and Mitigation Measures

Threshold: *Would the Community Plan have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

Impact BIO-1 Development under the Community Plan could have a substantial adverse effect on candidate, sensitive, or special-status species. This impact would be Class II, Significant but Mitigable.

Future development consistent with the General Plan has the potential to impact special-status plant and wildlife species present within the Plan Area. While the majority of special-status species occurrences are located in the open space, greenbelt and what will be identified in the Los Osos Habitat Conservation Plan (LOHCP) as Priority Conservation Areas surrounding urban uses, future development within grasslands, coastal sage scrub, maritime chaparral, oak woodland, wetland, riparian, as well as eucalyptus woodland, developed, and disturbed/ruderal habitats within the Plan Area would have the potential to impact a variety of special-status species that are protected under federal, state, and local laws and policies. Impacts to federal threatened or endangered species would ultimately be mitigated through participation in the LOHCP. Any impacts to state or federal listed species not covered in the LOHCP may require consultation with the applicable state and federal regulatory agencies such as CDFW, USFWS, and NOAA Fisheries, and additional mitigation may be required to offset specific project impacts.

The LOHCP is currently in preparation, and is expected to be finalized and approved in the near future. The LOHCP will cover four species that due to their small geographic range, narrow habitat specificity, and small and declining populations have been listed as either threatened or endangered under the federal Endangered Species Act (ESA). The species may also have special listing status under the California Endangered Species Act (CESA), and include: Morro Bay kangaroo rat (*Dipodomys heermanni morroensis*); Morro shoulderband snail (*Helminthoglypta walkeriana*); Morro manzanita (*Arctostaphylos morroensis*); and Indian Knob mountainbalm (*Eriodictyon altissimum*). Of these four species, Morro manzanita and Morro shoulderband snail are known to be present within the Plan Area, and both species could be impacted by future development even in existing developed areas. The LOHCP is being designed to be consistent with local, state, and federal laws and regulations, in order to streamline permitting and meet the criteria for issuance of incidental take authorization. It is expected that species and habitat protection measures, and further land acquisition of high quality habitat required in the LOHCP will provide mitigation for impacts to the species above as well as special status CEQA species such as the legless lizard not formally listed under FESA or CESA.

Given the known presence of state and federally listed species, and those rare plants that are CRPR 1B species and wildlife that are species of concern within the Plan Area, LOCP development impacts to these species could be considered significant. However, incorporation of proposed LOCP policies,

LOHCP requirements, and compliance with state and federal laws and policies are expected to reduce impacts to less than significant levels.

Existing policy language that pertains to the preservation of special status species and habitats that support them in the Plan Area include the following:

Coastal Plan Policies:

Environmentally Sensitive Habitats Policy 1. New development within or adjacent to locations of environmentally sensitive habitats shall not significantly disrupt the resource.

Environmentally Sensitive Habitats Policy 4. No division of parcels having environmentally sensitive habitats within them shall be permitted unless it can be found that the buildable area(s) are entirely outside the maximum standard setback required for that habitat.

Environmentally Sensitive Habitats Policy 5. The County shall continue programs and policies that support greenbelt and open space areas on the urban fringe of coastal communities.

Environmentally Sensitive Habitats Policy 6. The County shall participate in creating a program that would allow development to occur on sites in urban areas that contain sensitive species habitat, but do not represent long-term viable habitat, in exchange for participation in an off-site mitigation program.

Coastal Zone Framework for Planning

Strategic Growth Goal 1. Preserve open space, scenic natural beauty, and natural resources. Conserve energy resources. Protect agricultural land and resources.

Estero Area Plan:

Chapter 6, V.A.1. Slow the process of bay sedimentation. Keep Chorro and Los Osos Creeks and other watercourses free of excessive sediment.

Chapter 6, V.A.2. Implement provisions of the Total Maximum Daily Levels (TMDLs) as they are developed for Chorro Creek, Los Osos Creek, and the Morro Bay estuary consistent with Regional Board requirements.

Chapter 6, V.A.3. Support efforts to ensure a level of water quality in the bay that supports recreation, viable commercial fishing and shellfish mariculture industries, healthy eelgrass beds, and thriving fish and shellfish populations.

Chapter 6, V.A.4. *Promote a voluntary, cooperative, educational, and incentive-based approach to protect Morro Bay and its watershed.*

Chapter 6, V.A.5. *Where feasible, implement applicable provisions of the Comprehensive Conservation and Management Plan for Morro Bay published by the Morro Bay National Estuary Program through special programs, land use planning strategies, review of development proposals, and public education.*

Chapter 6, V.A.6. *Where appropriate, continue to obtain open space easements for sensitive wetlands and bayfront areas, and encourage other agencies and conservation organizations to obtain open space and conservation easements and fee title to these areas.*

Other relevant policies:

Policy BR 1.1. *Protect sensitive biological resources such as wetlands and wildlife movement corridors.*

EN-1. *Effectively manage endangered, threatened, and sensitive biological resources in and around the community of Los Osos.*

- A. *Mitigate impacts to sensitive habitat on the site of development so that contiguous areas of environmentally valuable habitat are preserved or restored. On smaller sites where this aim cannot be accomplished, give priority to using off-site mitigation as part of a mitigation banking or other program that preserves or restores contiguous areas of environmentally valuable habitat.*
- B. *Use an ecosystem approach whenever possible to preserve viable areas of sensitive habitat. Instead of focusing only on individual species, emphasize protection of highly sensitive biological communities, such as dune scrub, coastal sage scrub, and maritime chaparral.*
- C. *Encourage acquisition, preservation and management of lands in the Sensitive Resource Area combining designation, as well as other sensitive habitat areas. Allow passive recreation where compatible with habitat and resource protection. Following acquisition, change the land use categories of these areas to Open Space.*
- D. *Pursue protection and management of a greenbelt on either side of Los Osos Creek.*

Program EN-1.1: Habitat Conservation Plan. *The County should coordinate with the USFWS, CDFW, and the public to finalize the Habitat Conservation Plan for the Los Osos area. The HCP will preserve sensitive habitats in the Los Osos area using an ecosystem approach, while easing the regulatory burden on private landowners.*

- A. **Section 10 Permit.** Under Section 10 of the federal Endangered Species Act, the incidental take of a species may be allowed if a permit is obtained and a HCP is prepared. The HCP must specify what impacts will result from the taking and the measures the permit applicant will take to minimize and mitigate the impacts.
- B. **Streamlined Permitting.** In order to reduce the cost, time and difficulty for landowners seeding land use approvals, the County Planning and Building Department should create a streamlined permitting procedure for properties that lie within the Los Osos Ecosystem Sensitive Resource Area (SRA) combining designation. This should include establishment of an in-lieu fee for most future “infill” development in Los Osos. The fee would be used to acquire and manage sensitive habitat within the SRA.

Program EN-1.2: Recovery Plan. Facilitate implementation of the Recovery Plan developed by the USFWS for the Morro shoulderband snail, Morro manzanita, and Indian Knob mountainbalm. Encourage participation by landowners and conservation organizations.

Program EN-1.3: Habitat Monitoring. The County or another organization should monitor development and conservation activities in sensitive habitats in the Los Osos area in order to keep track of the cumulative effects of these activities.

Program EN-1.4: Protection and management of sensitive habitats. The County should work closely with public agencies and conservation organizations to protect and management sensitive habitat resources.

Program EN-1.5: Support conservation organizations. Support efforts of conservation organizations to protect sensitive habitats by means such as acquiring land or purchasing development rights.

Program EN-1.6: Morro Bay shoreline wetlands mapping. The County should review the accuracy of the mapped locations of the wetland designation along the Morro Bay shoreline, especially in the vicinity of Butte Drive, and initiate any needed general plan amendments to make revisions to the official maps.

EN-2. Manage urban runoff to reduce discharge of pollutants from the community of Los Osos into Morro Bay.

Program EN-2.1. Los Osos runoff control. The County Public Works Department should coordinate with and assist the Los Osos Community Services District in developing and implementing Best Management Practices to control runoff in Los Osos consistent with the State’s Nonpoint Source Pollution Plan and Phase II of the NPDES Storm Water Regulations.

Program EN-2.2. Los Osos urban watershed management. To facilitate a communitywide drainage system that allows for off-site treatment and retention of stormwater consistent with Central Coast Post Construction Requirements, the Los Osos CSD, the County Public Works Department and/or the County Flood Control and Water Conservation District should prepare an urban watershed management plan for Los Osos and vicinity.

LU-1. Maintain a hard urban edge around the community of Los Osos, surrounded by a well-managed community greenbelt.

- A. Do not expand the Urban Reserve Line (URL) beyond what has been delineated in this plan.
- B. Do not expand existing Residential land use categories or increase residential densities outside of the Urban Service Line that is delineated in this plan.

Program LU-1.1: **Los Osos Greenbelt.** The County should support expansion, conservation, maintenance, and enhancement of the greenbelt as shown on Figure 4-1. The County should support efforts of public agencies, conservation organizations, and others to acquire easements and properties in fee within and outside of the Urban Reserve Line to expand the greenbelt along the eastern and southern fringe of the community. Easements could be acquired through means such as purchase, approval of land use permits for development projects, and mitigation banking.

LU-2. Concentrate or cluster development to protect contiguous environmentally sensitive areas, including the habitat of rare, endangered and other sensitive species, and other biologically important communities.

LU-3.(C) Protect sensitive habitats by locating development away from environmentally sensitive areas. Provide options, incentives and flexibility to accomplish this.

CZLUO (Title 23):

- 23.02.035 Additional information required for discretionary projects.
- 23.04.036 Cluster development on land subdivision projects.
- 23.05.043 Environmental determination required.
- 23.0.060 Tree removal (permit and standards).
- 23.06.100 Water quality (standards for preventing impacts coastal streams and Morro Bay).
- 23.06.102 Regional Water Quality Control Board review of projects and issuance of Waste Discharge Requirements.
- 23.07.160 Significant Resource Areas are defined.
- 23.07.170 Environmentally Sensitive Habitat Areas are defined

Mitigation Measures. In addition to the existing policies and regulations discussed above, the following mitigation measures are required to reduce Impact BIO-1 to a less than significant level.

BIO-1(a) LOCP Natural Resource Policies. The following language shall be added as a new policy in the LOCP:

Special Status Species Habitat Preservation and Enhancement. During the project permitting process, the County, including the entity overseeing LOHCP compliance, shall work with future applicants to encourage preservation or enhancement of habitat for special status species on parcels greater than 20,000 square feet that contain suitable habitat. This would be done in concert with LOHCP requirements to promote habitat preservation and enhancement efforts and regional habitat connectivity by ensuring that preserved or enhanced areas are connected to other preserved or enhanced areas and/or to other suitable habitat occurrences. Preservation of or enhancement of areas that are isolated should be discouraged unless they are determined to provide unique or unusually valuable habitat attributes. Isolated patches of native habitat on smaller lots less than 20,000 square feet are not expected to provide high quality habitat for special status CEQA species that is sustainable. Impacts to small patches of native habitat that could support low numbers of CEQA special status species such as CRPR plants or species of concern wildlife will be further mitigated through implementation of the LOHCP and payment of the mitigation fee. Habitat set aside outside urban areas will promote sustainable habitat for the range of special status species known to occur in the Plan area.

Plan Requirements and Timing. The Planning and Building Department shall include recommended policy to the LOCP prior to Plan adoption that states habitat preservation and enhancement opportunities will be evaluated during the initial phases of the building permit review process for lots greater than 20,000 square feet. Lots less than 20,000 square feet shall be adequately mitigated by payment of the mitigation fee associated with LOHCP implementation and no further biology study will be required.

Monitoring. Planning and Building shall ensure that the above language is included in the LOCP prior to adopting the plan. If habitat preservation and enhancement is incorporated as a project permit requirement, the Planning and Building Department shall ensure that the requirement is properly implemented during the normal building inspection and final review process. If subsequent monitoring of restoration areas is required, the County may require Applicants to retain an approved biologist to monitor and document restoration activities until the success criteria are met.

BIO-1(b) LOCP Natural Resources Implementing Programs. Because of the programmatic structure of the LOCP, and specific impacts for a given private or public project cannot be determined at this time. It is possible that both private and public

projects could potentially impact federal and/or state listed species. As such, the following language shall be added as a new program in the LOCP:

Los Osos Habitat Conservation Plan Compliance. To address the specific requirements for special status species and habitat identification, protection, preservation, enhancement, and mitigation that would apply to a given private or public project subject to the LOHCP, the County shall incorporate the final LOHCP into the LOCP, to ensure those requirements are fully addressed during development under the LOCP.

Plan Requirements and Timing. The County shall incorporate the LOHCP into the LOCP immediately after the LOHCP is finalized and approved.

Monitoring. The Planning and Building Department shall ensure that all applicable LOHCP requirements are properly implemented during the normal building inspection and final review process for all development projects within the LOCP.

BIO-1(c) Biological Resources Assessment, and Focused or Protocol-level Survey Requirements on Parcels Greater Than 20,000 Square Feet. The following language shall be added as a new policy in the LOCP:

For all projects on undeveloped lots greater than 20,000 square feet in size that require issuance of a County land use development permit, project applicants shall retain a County-approved biologist to conduct a project-specific biological resources assessment (BRA) to document the existing biological resources within the project footprint on which development is proposed, as well as an appropriate buffer, to determine the potential impacts to those resources as part of the environmental review process. The BRA shall conform to the requirements presented in the County guidance document, Guidelines for Biological Resources Assessments - Guidelines for Biological Consultants.

Plan Requirements and Timing. The Planning and Building Department shall add the recommended policy to the LOCP prior to Plan adoption, and ensure that project-specific biological resources are evaluated during the initial phases of the building permit review process.

Monitoring. Planning and Building shall ensure that the above language is included in the LOCP prior to plan adoption. As applicable, Planning and Building shall ensure that the policy requirements are properly implemented during the normal building inspection and final review process.

BIO-1(d) Special Status Plant Species Avoidance, Minimization, and Mitigation. The following language shall be added as a new policy in the LOCP:

If a BRA pursuant to Mitigation Measure BIO-1(c) conducted on undeveloped lots greater than 20,000 square feet in size identifies potentially suitable habitat for any federal listed, state listed or California Rare Plant Rank 1B species plant species, focused floristic surveys that are seasonally timed to coincide with the blooming period of all species identified as potentially present in the project-specific BRA shall be conducted. Surveys shall follow current USFWS and CDFW protocols. If special status plants are identified on a site, the project shall be re-designed to avoid impacting these plant species, to the maximum extent feasible. Rare plant occurrences that are not within the immediate disturbance footprint, but are located within 50 feet of proposed disturbance limits shall be protected such as having bright orange protective fencing installed at least 30 feet beyond their extent, or other appropriate distance as determined by a County-approved biologist, to protect them from direct and indirect impacts.

If special status plant species cannot be completely avoided, and will be impacted by development, all impacts shall be mitigated at the current County-required ratio for the species (number of acres of habitat/individuals restored to number of acres of habitat/individuals impacted). A habitat restoration plan (also referred to as a mitigation and monitoring plan) shall be prepared and submitted to the County, and to other state or federal agencies as appropriate. The restoration/mitigation plan shall include, at a minimum, the following components:

- Description of the responsible party(-ies), project site and impact area (by habitat type);*
- Goal(s) of the mitigation or restoration project including the types and area of habitat to be established, restored, enhanced, and/or preserved; specific functions and values of habitat type(s) to be established, restored, enhanced, and/or preserved;*
- Description of the proposed mitigation/restoration site (e.g., location, size, ownership status, existing functions and values, etc.);*
- Implementation plan for the mitigation/restoration site including rationale for expected success, responsible parties, schedule, site preparation and planting plan;*
- Maintenance activities during plan implementation and monitoring, including but not limited to weed abatement and adaptive management;*
- Monitoring plan for the mitigation/restoration site including no less than quarterly monitoring visits for the first year, and preparation of annual monitoring reports;*
- Success criteria based on goals and measurable objectives, target functions and values, target areas to be established, restored, enhanced, and/or preserved; and*
- An adaptive management program and contingency measures to address shortcomings and the overall effort in meeting success criteria.*

Plan Requirements and Timing. The Planning and Building Department shall add the recommended policy to the LOCP prior to Plan adoption. In addition, applicants with future projects on parcels greater than 20,000 square feet impacting special status plants or habitats shall submit the mitigation/restoration plan to Planning and Building Department for review and approval prior to issuance of grading permits.

Monitoring. Planning and Building shall ensure that the above language is included in the LOCP prior to plan adoption. As applicable, Planning and Building shall ensure that the policy requirements are properly implemented during the normal building inspection and final review process.

BIO-1(e) Special Status Wildlife Species Habitat Assessment, Surveys, Avoidance and Minimization. The following language shall be added as a new policy in the LOCP:

If a BRA pursuant to Mitigation Measure BIO-1(c) identifies potentially suitable habitat for a special status wildlife species on a parcel larger than 20,000 square feet, appropriate levels of surveys to determine the presence or absence of the species shall be conducted. For federal listed species such as the Morro shoulderband snail, protocol level surveys or the appropriate compliance requirements of the future LOHCP shall be conducted.

Specific habitat assessments and protocol surveys have been established for several special status species (i.e., California red-legged frog and Morro shoulderband snail) found within the Plan Area. If the results of the BRA determine that suitable habitat may be present for any such species, protocol habitat assessments or surveys shall be completed in accordance with applicable CDFW, USFWS, and County protocols prior to issuance of any construction permits. If consultation with the CDFW and/or USFWS determines that protocol habitat assessments or surveys are not required, such consultation shall be documented in writing by the agency prior to issuance of any construction permits. The project applicant shall be responsible for retaining a biological consultant that is qualified to conduct any required protocol habitat assessments or surveys.

Other special status wildlife that are not listed under CESA or FESA or covered in the LOHCP, shall have current mitigation requirements included in the developer's statement. For the Monarch butterfly, for instance, and projects located in eucalyptus woodland (including tree removal), a County-approved biologist shall conduct a habitat assessment to determine if suitable habitat for this species is present. If suitable habitat is present, then the biologist shall conduct seasonally-timed surveys to determine if Monarch butterflies currently use the site for overwintering activities. If an overwintering site is located, the County shall work with the applicant to protect the site and provide a sufficient buffer to avoid impacts to the species.

As part of a project's conditions of approval, the County-approved biologist shall conduct pre-construction clearance survey(s) of the site to avoid impacts to special status wildlife. The biologist shall be present during all initial ground disturbing and vegetation clearing activities. Ground disturbance shall be limited to the minimum necessary to complete the project, and the limits of disturbance shall be flagged for identification. Areas of special biological concern within or adjacent to the limits of disturbance shall have highly visible orange construction fencing installed between said area and the limits of disturbance. Once initial ground disturbing and vegetation clearing activities have been completed, the biologist shall conduct additional surveys as appropriate during project construction activities, based on species habits, weather conditions, and LOHCP or protocol survey requirements.

Plan Requirements and Timing. The Planning and Building Department shall add the recommended policy to the LOCP prior to Plan adoption.

Monitoring. Planning and Building shall ensure that the above language is included in the LOCP prior to plan adoption. As applicable, Planning and Building shall ensure that the proposed development avoids impacts to special status species and habitats to the greatest extent feasible and that the policy requirements are properly implemented during the normal building inspection and final review process.

BIO-1(f) Preconstruction Surveys for Nesting Birds. The following language shall be added as a new policy in the LOCP:

For construction activities occurring during the nesting season (generally February 1 to September 15), where tree, grassland or shrub removal or disturbance would be considered, focused surveys for nesting birds covered by the California Fish and Game Code and the Migratory Bird Treaty Act shall be conducted by a County-approved biologist no more than 14 days prior to vegetation removal. Vegetation is defined as trees, shrubs, or grasslands. Dependent on the size of the parcel and proposed development footprint, the surveys shall include the entire disturbance footprint plus observation of any large trees within a 300-foot buffer around the lot with binoculars. If active nests are located, all construction work shall be conducted outside a buffer zone from the nest to be determined by the qualified biologist. The buffer shall be a minimum of 50 feet for non-raptor bird species and up to 300 feet for raptor species. Larger buffers may be required depending upon the status of the nest and the construction activities occurring in the vicinity of the nest. The buffer area(s) shall be closed to all construction personnel and equipment until the adults and young are no longer reliant on the nest site. A County-approved biologist shall confirm that breeding/nesting is completed and young have fledged the nest prior to removal of the buffer. The results of the pre-construction survey shall be submitted to the County and construction shall not commence without authorization from the County.

Plan Requirements and Timing. The Planning and Building Department shall add the recommended policy to the LOCP prior to Plan adoption.

Monitoring. Planning and Building shall ensure that the above language is included in the LOCP prior to plan adoption. As applicable, the Planning and Building Department shall ensure that the policy is properly implemented during the normal building inspection and final review process.

Residual Impacts. With proposed mitigation, impacts would be less than significant.

Threshold: *Would development under the Community Plan have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

Impact BIO-2 Development under the Community Plan could have a substantial adverse effect on sensitive habitats, including riparian areas and wetlands not subject to Clean Water Act Section 404 jurisdiction. This is a Class II, Significant but Mitigable, impact.

Buildout in accordance with the LOCP has the potential to result in loss of sensitive habitat types (also referred to as special status vegetation, habitat types or plant communities). Potential impacts would include the loss of remnant native dune scrub or maritime chaparral habitats supporting special status species on individual lots greater than 20,000 square feet or in larger tracts that may be proposed for development in the Plan area. In many instances, the native habitats on the small undeveloped parcels 20,000 square feet or less in size are isolated and fragmented from larger stands, and therefore, do not represent high quality habitat that meets the definition of ESHA pursuant to the Coastal Act.

Development activities within the Plan Area would likely include the direct removal of special status habitat types by grading or brush clearing, including thinning for fuel management, and construction of permanent roads and structures. The Plan and existing policies and development standards include protection measures for SRA and ESHA, which includes native grassland, coastal (sage) scrub, maritime chaparral, oak woodlands, wetland, and riparian habitats.

A variety of plant communities within the Coastal Zone meet the definition of ESHA (Coastal Act Section 30107.5), including riparian areas, wetlands, maritime chaparral and special status species habitat such as areas of coastal sage scrub supporting Morro shoulderband snail. The California Coastal Commission (CCC), with technical assistance from the CDFW, is responsible for protecting ESHA within the Coastal Zone, and has required local agencies such as the County of San Luis Obispo to develop policies aimed at protecting and preserving these areas. For wetland habitats, the CCC and CDFW rely on the USFWS wetland definition and classification system developed by Cowardin et al. (1979) titled, *Classification of Wetlands and Deep Water Habitats of the United States*, as the methodology for wetland determinations. The CCC requires the presence of only one wetland parameter (e.g., wetland hydrology, hydric soils, or predominance of hydrophytic vegetation) for an area to qualify as a coastal wetland. Section 30121 of the California Coastal Act, the statute governing the CCC, broadly defines wetlands as:

“Lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, or fens.”

The 1981 CCC Statewide Interpretive Guidelines define riparian habitats as areas of riparian vegetation. Riparian habitats may encompass wetland areas, but may also extend beyond those areas. Riparian vegetation is defined as:

“an association of plant species which grows adjacent to freshwater watercourses, including perennial and intermittent streams, lakes, and other bodies of fresh water.”

Further protection is afforded to riparian and wetland vegetation communities whether or not they are subject to Section 404 of the Clean Water Act through a series of policies in the LOCP, including those that require setbacks from the Morro Bay margin and top-of-bank of creeks or existing edge of riparian vegetation, whichever is farther. Compliance with the Clean Water Act, state Porter Cologne Act and California Fish and Game Code 1600 et seq. provide another layer of protection for drainage features and wetland and riparian habitats.




Existing CZLUO policies and those referenced in the proposed LOCP call for consideration of potential additional biological resources and habitats for inclusion in the ESHA overlay if they meet the criteria of an ESHA. Please refer to Figure 4.3-5 illustrating the currently mapped ESHA within the Plan Area. This applies to certain vegetation communities that are not specifically proposed for ESHA designation in the proposed LOCP. Existing CZLUO policies call for this type of required project-by-project ESHA assessment, and will be applied to parcels larger than 20,000 square feet as detailed in BIO-1 mitigation measures associated with the BRA program. Inclusion of the above mitigation measures will require a biological investigation on larger parcels or those adjacent to the estuary or mapped drainage features to determine the presence of sensitive biological resources with respect to the existing ESHA Overlay. Therefore, successful implementation of the biological resources protection goals and objectives identified in the proposed LOCP and those requirements in the CZLUO and Estero Area Plan reduce potential impacts to special status habitat types including ESHA for new development in the Plan Area.

Mitigation Measures. In addition to the existing policies and regulations discussed above, the following mitigation measures shall be included in the LOCP to reduce Impact BIO-2 to a less than significant level:





- BIO-1(a). [Special Status Species Habitat Preservation and Enhancement \(see Impact BIO-1\)](#)
- BIO-1(b). [Los Osos Community Habitat Conservation Plan Compliance \(see Impact BIO-1\)](#)

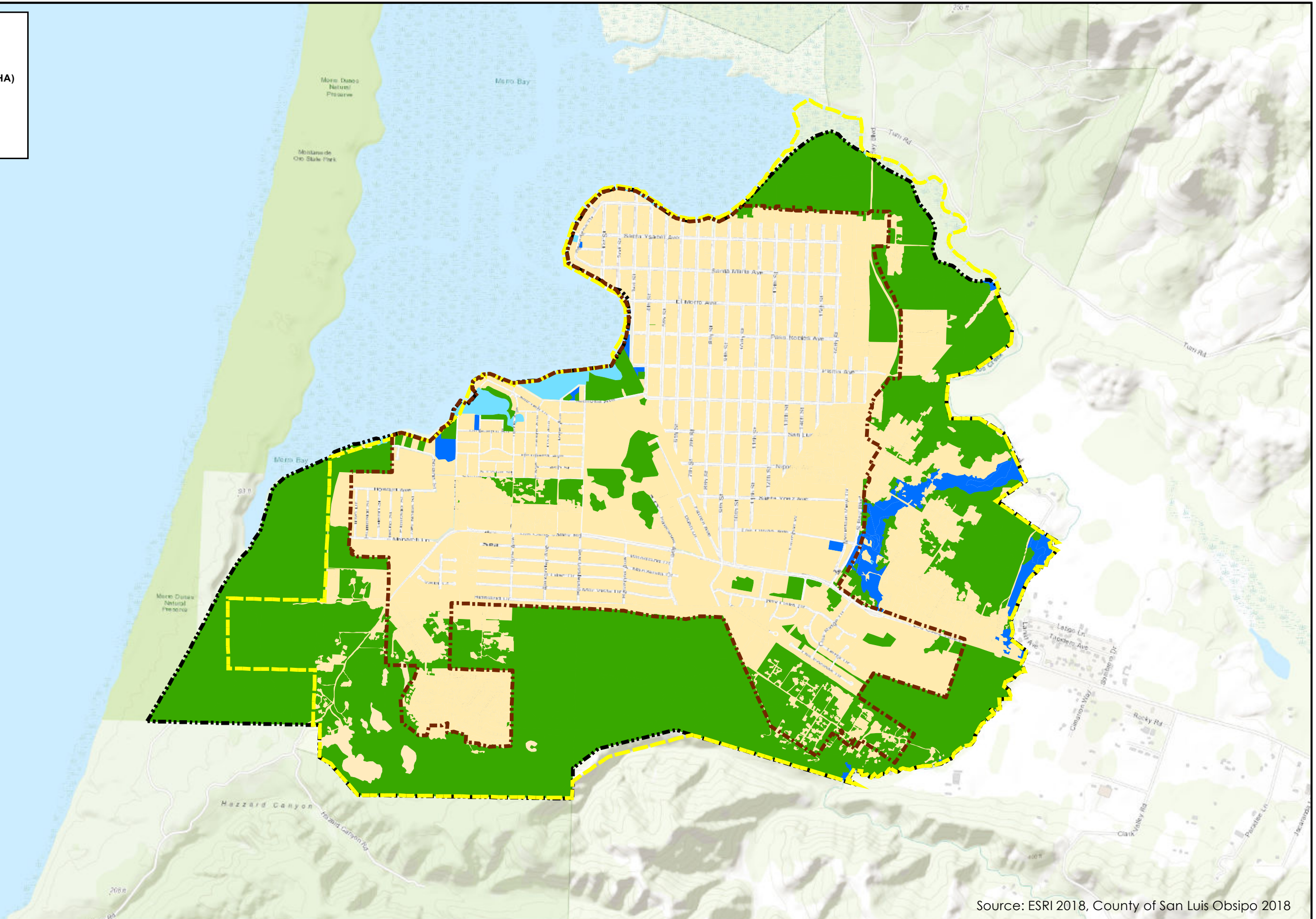
In addition, mitigation measures identified below would also further reduce impacts to special status vegetation communities including those meeting the definition as ESHA:

- BIO-3(a). [Jurisdictional Waters Identification, Avoidance, Permitting, and Mitigation \(see Impact BIO-3\)](#)
- BIO-3(b). [Construction Best Management Practices \(see Impact BIO-3\)](#)
- BIO-4(a). [Lighting Design \(See Impact BIO-4\)](#)

-  Los Osos Urban Services Line
-  Los Osos Urban Reserve Line
-  Los Osos HCP Area

Environmentally Sensitive Habitat Areas (ESHA)

-  Non-ESHA
-  Riparian ESHA
-  Terrestrial ESHA
-  Wetland ESHA



Source: ESRI 2018, County of San Luis Obispo 2018

Plan Requirements and Timing. The Planning and Building Department shall add the recommended policy to the LOCP prior to plan adoption.

Monitoring. Planning and Building shall ensure that the above language is included in the LOCP prior to plan adoption. As applicable, the Planning and Building Department shall ensure that the policy is properly implemented during the normal building inspection and final review process.

Residual Impacts. With proposed mitigation, impacts would be less than significant.

Threshold: *Would the Community Plan 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?*

Impact BIO-3 Development under the Community Plan could have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act. Impacts would be Class II, significant but mitigable.

The U.S. Army Corps of Engineers (Corps), under provisions of Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act, has jurisdiction over “waters of the United States” and authorization to issue permits for the discharge of dredge or fill material into “waters of the U.S.” “Waters of the U.S.” are defined to include: all waters used in interstate or foreign commerce, including all waters subject to the ebb and flow of the tide; all interstate waters and wetlands; all other waters such as intrastate lakes, rivers, streams, mudflats, sandflats, wetlands, sloughs, wet meadows, playa lakes, or natural ponds, that could affect interstate or foreign commerce; all impoundments of waters otherwise defined as “waters of the U.S.”; tributaries of waters otherwise defined as “waters of the U.S.”; territorial seas; and wetlands adjacent to “waters of the U.S.”

Waters generally not considered to be Corps-jurisdictional include non-tidal drainage and irrigation ditches excavated on dry land, artificially-irrigated areas, artificial lakes or ponds excavated on dry land used for irrigation or stock watering, small artificial water bodies such as swimming pools, and water filled depressions (51 Fed. Reg. 41, 217 1986).

The Plan Area borders the Morro Bay Estuary, and includes a portion of Los Osos Creek within its boundaries. The LOCP area also includes several small, unnamed seasonal or ephemeral drainages that direct runoff into Morro Bay, areas of coastal salt marsh habitat along bay edges, and several low-lying areas near the bay that become inundated during extremely high tides and storm conditions. Morro Bay is a tidal water of the U.S. that is directly connected to the Pacific Ocean, and all Plan Areas within the high tide line, all Plan Areas adjacent to the high tide line that support hydrophytic vegetation, and Los Osos Creek and all tributary channels within the Plan Area fall under the jurisdiction of the Corps as either wetlands or other waters of the U.S.

Mitigation Measures. In addition to the policies and laws discussed above, the following mitigation measures are required to reduce Impact BIO-3 to a less than significant level.

BIO-3(a) Jurisdictional Waters Identification, Avoidance, Permitting, and Mitigation. The following language shall be added as a new policy in the LOCP:

If future development in the Plan Area is proposed within or adjacent to wetlands, marshes, drainages, riparian habitats, Los Osos Creek, unnamed tributary drainages, the Morro Bay estuary, or other areas that may fall under the jurisdiction of the Corps, CDFW, RWQCB, and California Coastal Commission, a County-approved biologist shall complete a jurisdictional delineation using the most current state and federal methodologies. The jurisdictional delineation shall determine the extent of wetlands or non-wetland waters subject to each of these agencies and shall be conducted in accordance with the requirements set forth by each agency. The result shall be a preliminary jurisdictional delineation report that shall be submitted to the County, Corps, RWQCB, CDFW, and CCC as appropriate, for review and approval. If jurisdictional areas are identified on a site, the project shall be designed to avoid impacting those areas. All unavoidable impacts to Corps jurisdictional waters and wetlands shall be mitigated at the ratio (area restored / created / enhanced to area lost), approved in the final Section 404 permit for the project. Additional mitigation at different ratios may be required to meet CDFW, RWQCB, or California Coastal Commission regulations. Mitigation shall occur on-site or as close to the impacted habitat as possible. A mitigation and monitoring plan consistent with current state and federal requirements shall be developed by a County-approved biologist.

Plan Requirements and Timing. The Planning and Building Department shall add the recommended policy to the LOCP prior to Plan adoption.

Monitoring. Planning and Building shall ensure that the above language is included in the LOCP prior to plan adoption. As applicable, the Planning and Building Department shall ensure that the policy is properly implemented during the normal building inspection and final review process.

BIO-3(b) Construction Best Management Practices. The following language shall be added as a new policy in the LOCP:

All development in the Plan Area proposed within or adjacent to wetlands, marshes, drainages, riparian habitats, the Morro Bay estuary, Los Osos Creek and unnamed tributaries, or other jurisdictional areas must implement standard practices and measures to control and prevent erosion, sedimentation, or contamination of these areas. Best management practices shall follow current County requirements, and must include the following measures:

- *Access routes, staging, and construction areas shall be limited to the minimum area necessary to achieve the project goal and minimize impacts to other waters including locating access routes and construction areas outside of jurisdictional areas to the maximum extent feasible.*

- *To control sedimentation during and after project implementation, appropriate erosion control materials shall be deployed to minimize adverse effects on jurisdictional areas in the vicinity of the project.*
- *Project activities within the jurisdictional areas should occur during the dry season (typically between June 1 and November 1) in any given year to the extent practicable, or as otherwise directed by the regulatory agencies.*
- *During construction, no litter or construction debris shall be placed within jurisdictional areas. All such debris and waste shall be picked up daily and properly disposed of at an appropriate site.*
- *All project-generated debris, building materials, and rubbish shall be removed from jurisdictional areas and from areas where such materials could be washed into them.*
- *Raw cement, concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances which could be hazardous to aquatic species resulting from project-related activities, shall be prevented from contaminating the soil and/or entering jurisdictional areas.*
- *All refueling, maintenance, and staging of equipment and vehicles shall occur at least 50 feet from bodies of water where possible, and in a location where a potential spill would not drain directly toward aquatic habitat (e.g., on a slope that drains away from the water source). Reduced distances shall be approved by the County. Prior to the onset of work activities, a plan must be in place for prompt and effective response to any accidental spills. All workers shall be informed of the importance of preventing spills and of the appropriate measures to take should an accidental spill occur.*

Plan Requirements and Timing. The Planning and Building Department shall add the recommended policy to the LOCP prior to Plan adoption.

Monitoring. Planning and Building shall ensure that the above language is included in the LOCP prior to plan adoption. As applicable, the Planning and Building Department shall ensure that the policy is properly implemented during the normal building inspection and final review process.

Residual Impacts. With proposed mitigation, impacts would be less than significant.

Threshold: *Would the Community Plan 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 wildlife nursery sites?*

Impact BIO-4 Development under the Community Plan would not interfere substantially with the movement of resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites. Still, indirect impacts could potentially occur with proposed buildout of the LOCP area. Impacts would be Class II, significant but mitigable.

Due to the urban nature of the Plan Area, new development will consist of infill within and immediately adjacent to existing commercial and residential uses. Animal species actively moving within the Plan Area would consist primarily of common nocturnal mammal species such as raccoon, skunk and opossum that inhabit urban areas due to the presence of readily available food sources. The Plan Area borders open space areas that provide wildlife movement opportunities and migratory corridors, but no impacts to those areas would occur. Development within portions of the Plan Area that are adjacent to natural habitats outside the Plan Area would have potential to impact wildlife species through an increase in noise, traffic, lighting, and human presence, but these incremental increases over currently existing conditions are unlikely to impede movement, migration, or other wildlife activity.

Mitigation Measures. With the incorporation of the mitigation measures outlined above for the protection of sensitive vegetation communities including riparian and wetland habitats, and proposed LOCP policies and programs for mid-town development, the following mitigation would reduce potential impacts to wildlife movement corridors to a less than significant level.

BIO-4(a) Lighting Design. The following Policy shall be added to the LOCP.

Outdoor lighting installed as part of any project shall be designed to be minimally disruptive to wildlife. This may be accomplished through the use of hoods to direct light away from natural habitat areas within or adjacent to the Plan Area, using low intensity lighting and as few lights as possible to achieve the goals of a project.

Plan Requirements and Timing. The Planning and Building Department shall add the recommended policy to the LOCP prior to Plan adoption.

Monitoring. Planning and Building shall ensure that the above language is included in the LOCP prior to adopting the plan. As applicable, the Planning and Building Department shall ensure that the policy is properly implemented during the normal building inspection and final review process.

Residual Impacts. In addition to the measures included under impacts BIO-1, -2, and -3 above, implementation of mitigation measure BIO-4 would reduce impacts to wildlife movement in the LOCP area to a less than significant level.

Threshold: Would the Community Plan conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Impact BIO-5 Development under the Community Plan would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. There would be no impact.

The Los Osos Community Plan tiers from the adopted Estero Area Plan, most recently updated in 2009. The Estero Area Plan is part of the County’s General Plan and Local Coastal Plan. The LOCP will be consistent with all local policies and ordinances protecting biological resources, and all state and federal policies and ordinances. Implementation of proposed and existing local policies, as well as compliance with state and federal laws and policies and the requirements of regulatory and oversight agencies as appropriate, would be sufficient to ensure that no impacts would occur.

Mitigation Measures. No mitigation measures are required.

Threshold: Would the Community Plan conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Impact BIO-6 Development under the Community Plan would not conflict with any provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan. Impacts would be Less than Significant (Class III).

The LOCP does not fall within the jurisdiction of an adopted habitat conservation plan or natural community conservation plan, and therefore would not conflict with any such provisions. As discussed previously, the LOCP would be required to incorporate the relevant provisions of the proposed Los Osos Habitat Conservation Plan (LOHCP) into its regulatory framework once that document is adopted. Impacts would be less than significant (Class III) and no mitigation would be required.

Mitigation Measures. No mitigation measures are required.

c. Cumulative Impacts. Full implementation of the proposed LOCP would include build out of areas within existing development boundaries and additional development in the Plan Area. This overall increase in developed area is the basis for the biological resource impacts identified in this section. The development identified under the LOCP would further reduce natural habitat acreages within the Los Osos area, and convert adjacent sparsely developed or undeveloped areas to more intensive uses, thereby altering the fundamental ability of the Plan Area to support natural habitats and species. In general, implementation could result in the removal of natural habitat, a decrease in native plant and

wildlife occurrences, and increase the urban/wildland interface resulting in an increase of disturbed habitat adjacent to the URL.

This assessment of the significance of cumulative impacts to biological resources is based upon:

- *The cumulative contribution of the impacts from other approved and proposed development to biological resources in general in the Plan Area vicinity;*
- *The loss of special status habitats and species;*
- *Contribution of the Plan to urban and suburban expansion into natural areas; and,*
- *Fragmentation and isolation of natural habitats and plant and animal populations within the Plan Area by future projects in the vicinity.*

The identified impacts to biological resources resulting from LOCP implementation have been addressed individually in the discussion above. When combined, these impacts reflect the cumulative impact of the proposed LOCP. As noted in the individual impact discussions, implementation of both the existing General Plan policies and those proposed under the LOCP, as well as compliance with state and federal regulations, will ensure that the biological impacts associated with the LOCP are cumulatively less than significant.

d. Subsequent Environmental Review for Future Development Projects in the Community Plan Area. Pursuant to CEQA Guidelines Section 15183, additional CEQA review is not required for projects that are consistent with the development density established by existing zoning, community plan or general plan policies for which an EIR was certified, except as might be necessary to examine whether there are project-specific effects which are peculiar to the project or its site. **Table 4.3-5** describes conditions under which future development in the study area would require additional CEQA review, pursuant to Section 15183.

| Table 4.3-5. Conditions Under Which Future Development in the Community Plan Area Would Require Additional CEQA Review | |
|--|--|
| Condition | Impact to Address |
| <i>The future project is inconsistent with underlying General Plan and zoning designations.</i> | BIO-1 through BIO-6 |
| <i>The future project is inconsistent with Community Plan policies or design guidelines.</i> | BIO-1 through BIO-6 |
| <i>The future project would result in an impact peculiar to the project or parcel in any issue area. An effect is not considered peculiar if uniformly applied development policies or standards previously adopted by the County would substantially mitigate the environmental effect.</i> | Impact that is peculiar to the project or parcel |
| <i>The future project would result in an impact or impacts not analyzed above, including off-site or cumulative effects.</i> | Impact other than BIO-1 through BIO-6 |
| <i>The future project would result in an impact or impacts analyzed above, but at a higher level of severity as a result of substantial new information not known at the time the EIR was certified.</i> | Worsened BIO-1 through BIO-6, as applicable |