

5.4 BIOLOGICAL RESOURCES

5.4.1 Introduction

The purpose of this section is to assess potential impacts to biological resources associated with the proposed Biorn CUP and LUO/LUE Amendment, located immediately north and adjacent to the Santa Maria River, west of Highway 101. This section includes a review of pertinent literature and field surveys, the results of coordination with resource agencies, discussion and analysis of related regulatory requirements, and an assessment of the impacts of the Proposed Project on biological resources.

For the purposes of describing the two components of this project, “plant site” refers specifically to the area affected by the CUP (the proposed asphalt plant facility), and “LUO/LUE area” refers to the entire area which will be affected by the LUO/LUE amendment (including the proposed asphalt plant facility).

5.4.2 Environmental Setting

5.4.2.1 Regulatory Setting

This section identifies those plans and policies administered by resource agencies pertaining to those biological resources that are known to exist and/or have the potential to occur within the LUO/LUE area.

Special-Status Species

Federal Authority. The Federal Endangered Species Act (FESA), administered by the U.S. Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration – Fisheries (NOAA Fisheries), provides protection to species listed as threatened or endangered. FESA also provides protection to those species proposed to be listed under FESA or critical habitats proposed to be designated for such species. In addition to the listed species, the Federal government also maintains lists of species that are neither formally listed nor proposed, but could potentially be listed in the future. Species on this list receive “special attention” from federal agencies during environmental review, although they are not protected otherwise under the FESA. The candidate species include taxa for which substantial information on biological vulnerability and potential threats exist, and are maintained in order to support the appropriateness of proposing to list the taxa as an endangered or threatened species.

Section 9 of the FESA prohibits the “take” of any member of a listed species. Take is defined as, “...to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” Harass is “an intentional or negligent act or omission that creates the likelihood of injury to a listed species by annoying it to such an extent as to significantly disrupt normal behavior patterns that include, but are not limited to, breeding, feeding, or sheltering.” Harm is defined as “...significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering.”

Projects that would result in the take of a federally listed or proposed species are required to consult with USFWS or NOAA Fisheries. The objective of consultation is to determine whether the project would jeopardize the continued existence of a listed or proposed species, and to determine what mitigation measures would be required to avoid jeopardy.

Consultations are conducted under Sections 7 or 10 of FESA depending on the involvement by the Federal government. Section 7 requires agencies to make a finding on all federal actions, including the approval by an agency of a public or private action, such as the issuance of a permit pursuant to Section 10/404 of the Clean Water Act, on the potential to jeopardize the continued existence of any listed or proposed species potentially impacted by the action. Section 10 is conducted when there is no Federal involvement in a project except compliance with FESA.

Under Section 7, the USFWS and NOAA Fisheries are authorized to issue Incidental Take Permits (ITP) for the take of a listed species that results from, but is not the purpose of, carrying out an otherwise lawful activity conducted by the Federal agency. The ITP includes measures to minimize the take. Under Section 10(a), the USFWS and NOAA Fisheries can issue ITPs for non-Federal projects.

The USFWS also administers the federal Migratory Bird Treaty Act (MBTA) of 1918 (16 USC 703-711). Under the MBTA, it is unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 CFR 10, including feathers or other parts of birds, nests, eggs or products, except as allowed by implementing regulations (50 CFR 21).

State Authority. The California Department of Fish and Game (CDFG) administer a number of laws and programs designed to protect fish and wildlife resources. Principal of these is the California Endangered Species Act of 1984 (CESA - Fish and Game Code Section 2050) that regulates the listing and take of threatened and endangered species. Under Section 2081 of CESA, CDFG may authorize the take of an endangered and/or threatened species, or candidate species by a permit or Memorandum of Understanding (MOU) for scientific, educational, or management purposes.

CDFG also maintains lists of “candidate species” which are species that the CDFG has formally noticed as under review for addition to the threatened or endangered species lists. California candidate species are afforded the same level of protection as listed species. CDFG also designates “species of special concern” which are species of limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational, or educational value. These species do not have the same legal protection as listed species, but may be added to official lists in the future. The species of special concern list is intended by CDFG as a management tool to call attention to declining populations and focus efforts on decreasing threats to long-term viability.

CDFG also administers other State laws designed to protect wildlife and plants, including those laws stated within Fish and Game Code Section 3511, 3503, 3503.5 and the California Native Plant Protection Act of 1977. Under Section 3511 of the Fish and Game Code, CDFG designates species that are afforded “fully protected” status. Under this protection, designated species can only be taken or possessed with a permit. Fish and Game Code 3503 states that it is unlawful to take, possess, or needlessly destroy the nests or eggs of *any bird*. Section 3503.5 of the Fish and Game Code states that it is “unlawful to take, possess, or destroy any

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

CDFG also manages the California Native Plant Protection Act of 1977 (Fish and Game Code Section 1900, et seq), which was enacted to identify, designate and, protect rare plants. In accordance with CDFG guidelines, California Native Plant Society (CNPS) 1B list plants are considered “rare” under the Act, and are evaluated in California Environmental Quality Act (CEQA) reports.

Local Authority. Special-status species of the LUO/LUE area are afforded protection by the County of San Luis Obispo under goals and polices contained in the County of San Luis Obispo General Plan and the South County Area Plan (2002). These documents provide a framework of policies designed to protect special-status species and sensitive habitat areas. Project-related adverse impacts on special-status species are considered significant for CEQA purposes.

Waters and Wetlands

Federal Authority. The Army Corps of Engineers (Corps) is responsible for the issuance of permits for the placement of dredged or fill material into waters of the United States (waters) pursuant to Section 404 of the Clean Water Act (33 USC 1344). As defined by the Corps at 33 CFR 328.3(a)(3), waters are those that are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; tributaries and impoundments to such waters; all interstate waters including interstate wetlands; and territorial seas. (Note: Based on the recent U.S. Supreme Court decision in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* [2001], and guidance from the U.S. Army Corps of Engineers and U.S. Environmental Protection Agency [2001], the Federal government no longer asserts jurisdiction over isolated waters and wetlands under Section 404 of the Clean Water Act based on the “migratory bird rule.” Further guidance on the issue of isolated wetlands and waters is expected (U.S. Army Corps of Engineers, 2001).

Wetlands are a special category of waters, and are defined at 33 CFR 328.3(b) as: “...*those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.*”

In non-tidal waters, the lateral extent of Corps jurisdiction is determined by the ordinary high water mark (OHWM), which is defined as the: “...*line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.*” (33 CFR 328[e]).

In addition, a wetland definition has been adopted by the USFWS to include both vegetated and non-vegetated wetlands, recognizing that some types of wetlands may lack vegetation (e.g., mudflats, sandbar, rocky shores, and sand flats), but still provide functional habitat for fish and

wildlife species (Cowardin, et al., 1979). These wetlands are defined as "...lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this classification, wetlands must have one or more of the following three attributes: (1) at least periodically, the land supports predominantly hydrophytes; (2) the substrate is predominantly undrained hydric soil; and (3) the substrate is non-soil and is saturated with water or covered by shallow water at some time during the growing season of each year." Some of the USFWS-defined wetlands are not regulated by the Federal government.

The upper (landward) limit of USFWS-defined wetlands are the boundary between land with predominantly hydrophytic cover and land with predominantly mesophytic or xerophytic cover; the boundary between soil that is predominantly hydric and soil that is predominantly non-hydric; or in the case of wetlands without vegetation or soil, the boundary between land that is flooded or saturated at some time each year and land that is not (Cowardin et al., 1979). The lower limit in inland areas is established at a depth of 6.6 feet below the water surface; unless emergent plants, shrubs, or trees grow beyond this depth, at which the deepwater edge of such vegetation is the boundary (Cowardin et al., 1979).

State and Local Authority. Pursuant to Section 1602 of the California Fish and Game Code, CDFG requires a streambed alteration agreement between CDFG and any State or local governmental agency or public utility before the initiation of any construction project that will: 1) divert, obstruct, or change the natural flow or the bed, channel, or bank of any river, stream, or lake; 2) use materials from a streambed; or 3) result in the disposal or deposition of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into any river, stream, or lake.

The California Fish and Game Commission adopted a modification of the USFWS definition of wetlands on March 9, 1987 as its principal means of wetland identification in conjunction with on-site inspections for implementation of the Fish and Game Commission's policy. Unlike USFWS, the CDFG definition only requires the presence of one wetland indicator for an area to qualify as a wetland. CDFG does not have a wetland regulatory program, but advises other state agencies on wetland issues.

The County of San Luis Obispo General Plan identifies a series of unique plant or animal habitats including the following: habitat of rare, endangered or threatened plant or animal species as classified by state and federal agencies and the California Native Plant Society (CNPS); wetlands and marshes; and sensitive natural communities as identified in the CDFG California Natural Diversity Data Base (CNDDDB).

The importance of wetlands has long been recognized in the San Luis Obispo County General Plan. However, there is no inventory of the wetland resources for the South County, so the identification and protection of these resources is appropriate when a development proposal is submitted on property that may include a wetland.

5.4.2.2 Methodology

The description and analysis of biological resources within the LUO/LUE area is based on a review of pertinent literature, field reconnaissance surveys, and one USFWS protocol-level California red-legged frog survey. The literature review included the examination of the following documents:

- A.J. Diani – Nipomo Asphalt Plant February 2003 Tree Survey Report, San Luis Obispo County, California (Bumgardner, 2003);
- A.J. Diani – Santa Maria Asphalt Plant Biological Resources Report, San Luis Obispo County, California (Bumgardner, 2002); and,
- USGS 7.5-minute topographical maps.

In addition, the CNDDDB was queried for records of special-status species that are known to occur within the region. The records search included the following nine 7.5-minute quadrangle maps: Santa Maria, Oceano, Nipomo, Huasna Peak, Twitchell Dam, Sisquoc, Orcutt, Casmalia, and Guadalupe. The categories of special-status species are listed in Tables 5.4-2 and 5.4-4. Special-status taxa that are known to occur, or have the potential to occur, in the LUO/LUE area were also identified through a review of relevant literature (California Native Plant Society, 2004; and Zeiner et al., 1988; 1990a, b), and previous biological studies in the area. Further, a list of federally threatened and endangered species potentially occurring within the area was requested from the USFWS. Although this document was not received prior to impact analysis, Padre biologists evaluated all federally listed species in San Luis Obispo County with the potential to occur within the immediate LUO/LUE area (see Table 5.4-3 and 5.4-5) based on habitat requirements and known habitat within the project site. Species included within the impact analysis were derived from the USFWS list titled: “*Federal Endangered and Threatened Species that may be affected by projects in San Luis Obispo County*” (website: <http://ventura.fws.gov>). Subsequent to survey efforts and impact analysis, an email confirmation was submitted by the USFWS on October 7, 2004, indicating that the California red-legged frog is the only federally listed special-status species known to occur in the area.

Field reconnaissance surveys were conducted at the LUO/LUE area for the purpose of identifying plant communities, determining typical species associated with these communities, identifying and assessing potentially impacted habitats, and to document occurrences of those federal and state list special-status species and habitats which have the potential to occur within the project area. However, the reconnaissance-level surveys were limited to only those parcels of land which the County was able to obtain landowner consent (see Figure 5.4-1). As such, a portion of the LUO/LUE area was not covered during the surveys, and analysis was based on remote sources.

Field surveys for wildlife were conducted by walking transects of opportunity through habitat types and recording species observed based on visual observation using 8X40 binoculars, auditory cues (calls and songs), and indirect signs (tracks, scat, skeletal remains, burrows, etc.). Furthermore, a USFWS protocol-level CRLF survey was conducted which covered the adjacent section of the Santa Maria River and Nipomo Creek, which transects the LUO/LUE area.

**Table 5.4-1
 Field Survey Dates**

Field Survey Type	Dates Conducted (2004)
Botanical	August 9 and 10
Wildlife	August 9, 10, and 17
California red-legged frog survey	August 9, 17

5.4.2.3 Physical Setting

Vegetation

The LUO/LUE area is located at the southern boundary of San Luis Obispo County, directly north and adjacent to the Santa Maria River. The site is situated within the Outer South Coast Range district of the Central Western California floristic province (Hickman, 1993). Comprehensive botanical field surveys were conducted by Padre biologists on August 9, 2004 and 10. During this time, Padre biologists compiled a list of plant species (see Appendix G) which occur within the boundary of the proposed asphalt plant facility, identified any special-status plant species occurring on-site, and mapped all plant communities within the LUO/LUE area (refer to Figure 5.4-1). For those areas which were not accessible due to a lack of land owner consent, plant communities were mapped using a combination of field observations from of-site vantage points and aerial photographs.

Based on the results of the botanical field surveys, a total of 45 vascular plant species were identified within the proposed asphalt plant location which is partially developed and currently used as a stockpile area for current operations. Overall, identified plant species consisted of 22 (49 percent) native taxa and 23 (51 percent) non-native naturalized taxa. The percentage of non-native taxa is greater than for the State as a whole (17.4 percent), reflecting the relatively high level of disturbance associated with existing land use and continuing operation of the facility. Lastly, because these surveys were conducted outside of the typical spring flowering season of this floristic province (April-May), it is expected that the number of plant species associated with the proposed asphalt plant location is higher than documented during the late summer field surveys.

Overall, the LUO/LUE area encompasses six generalized plant communities: Mixed Willow Series, Coyote Brush Series, California Sage Series, Riparian Scrub, Eucalyptus Series, Ornamental, and Ruderal (disturbed) habitat. Classification of these habitat types or vegetation communities is based primarily on Sawyer and Keeler-Wolf (1995) with modifications to more accurately characterize existing conditions in the field. The general location of these communities in relation to the project elements is depicted in Figure 5.4-1.

It should be noted that a large portion of the LUO/LUE area is developed and thus devoid of vegetation as indicated within Figure 5.4-1. Furthermore, historical construction activities and presence of concrete rubble within and near banks of the channel has resulted in the degradation of the channel banks, in-stream habitat, and reduced water quality from erosion, concrete washouts from concrete equipment, and surface water runoff. The following is a description of each of the plant communities occurring within the LUO/LUE area:



Basemap Source: County of San Luis Obispo

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Coyote Brush Series (CB). This community is dominated by coyote brush (*Baccharis pilularis*), a moderate-sized shrub (<2m) with mesophytic leaves and semi-woody stems growing from a woody base. Sub-dominant species intermingled with coyote brush consisted primarily of ruderal species such as poison hemlock (*Conium maculatum*) and mustard (*Hirschfeldia incana*). Arroyo willow (*Salix lasiolepis*) also occurred frequently in association within this community. Furthermore, deerweed was also found in association with coyote brush. Overall, the coyote brush habitat is present only within scattered locations, primarily within the northwest portion of the LUO/LUE area.

California Sage Series (CB). Within the project area, California sage series occurs only on top of the Nipomo Mesa. This community is heavily dominated by California sagebrush (*Artemisia californica*), a moderately-sized shrub (<2.5m) common within habitat areas along the California coast. Sub-dominant species intermingled with coyote brush consisted primarily of deerweed (*Lotus scoparius*) and scattered coyote brush (*Baccharis pilularis*). This habitat is surrounded by ruderal species such as Italian thistle (*Carduus pycnocephalus*) and veldt grass (*Ehrharta* ssp.).

Eucalyptus Series (EU). This community is dominated by stands of blue gum eucalyptus (*Eucalyptus globulus*). Plants of this genus were imported from Australia and originally planted in groves throughout many areas of coastal California as a potential source of lumber and for their uses as windbreaks. In addition, eucalyptus trees have also been used to provide a natural visual barrier between observers and structures such as industrial facilities. In areas where eucalyptus forms dense stands, growth of native plants within the immediate vicinity is inhibited due to allelopathic compounds of the bark and leaf litter as is the case within stands located within the LUO/LUE area.

Mixed Willow Series (MW). This community is co-dominated by narrow-leaved willow (*Salix exigua*) and arroyo willow, and occurs in the southern portion of the LUO/LUE area bordering the Santa Maria River channel. Seasonal flooding of this area and shallow groundwater provide suitable soil moisture to support this plant community. Sub-dominant species within these plant communities consist of mule fat (*Baccharis salicifolia*), coyote brush, and salt cedar (*Tamarix ramosissima*). In addition, a box elder (*Acer negundo* var. *californicum*) was identified within this plant community, which may occur in the area due to a historical flood event.

Ornamental (OR). This community is limited to the area surrounding the cottage located in the northeastern quadrant of the LUO/LUE area and the north fence line of the existing asphalt plant facility. Plants within these areas have been planted primarily for aesthetic purposes. Species observed include Monterey pine (*Pinus radiata*) and Monterey cypress (*Cupressus macrocarpa*).

Riparian Scrub (RS) (Holland 63000). This community is dominated by shrub-sized (<20 feet high) willows and toyon (*Heteromeles arbutifolia*), and occurs along the banks of Nipomo Creek and associated drainages located upstream. Nipomo Creek is an ephemeral stream that flows into the Santa Maria River, adjacent to the western boundary of the LUO/LUE area. Subdominant species within this habitat consists of

California blackberry (*Rubus ursinus*), cocklebur (*Xanthium strumarium*), and curly dock (*Rumex crispus*).

Ruderal (RU). Ruderal habitat is a term used to describe those areas that have been disturbed by past land-use practices and/or recent ground disturbance. For the purposes of this project Ruderal also represents those areas which have been recently graded/disturbed within the LUO/LUE area. These sites are typically dominated by weedy species within the LUO/LUE area and/or bordering access roadways. Typical plant species that have been identified within the LUO/LUE area which are considered ruderal (disturbance-adapted) include: poison hemlock (*Conium maculatum*), telegraph weed (*Heterotheca grandiflora*), jimson weed (*Datura wrightii*), castor bean (*Ricinus communis*), and horseweed (*Conyza canadensis*).

Wildlife

Wildlife surveys were conducted at the LUO/LUE area in August 2004. Detection methods included direct observation with binocular, examination and identification of tracks, scats, burrows/diggings, and carcasses/skeletal remains; and identification of vocalizations (calls and songs). Surveys were supplemented with previously published biological reports (Bumgardner 2002), regional and local species distribution references, and consultation with the USFWS and CDFG to determine which species occur or potentially occur on the LUO/LUE area. It should be noted that accurate assessment of wildlife populations would require extended periods of site research, trapping, and census taking. It is particularly difficult to detect nocturnal, rare or reclusive species to obtain accurate estimates of population size and geographical distribution. Other complications in the quantitative assessment of vertebrate (and invertebrate) populations include:

1. Many species may occur in the area only for short periods during migrations;
2. Many species of amphibians and reptiles become inactive during one or more seasons; and,
3. Seasonal or annual fluctuations in climate or weather patterns may confound observations.

The principal habitat types that would be potentially impacted by proposed project activities include those plant communities previously discussed: Coyote Brush Series, Eucalyptus Series, Mixed Willow Series, California Sage series, Ornamental, Riparian Scrub, and Ruderal. Typical wildlife species found in association with each of these cover types are discussed below:

Coyote Brush Series (CB). As previously stated, this community occurs in scattered locations throughout the LUO/LUE area. Specifically, the majority of coyote brush exists within the northwestern portion of the LUO/LUE area and is closely intermingled with ruderal and mixed willow habitat. Due to the moderate cover provided by coyote brush, this habitat type provides nesting and foraging habitat for a variety of smaller bird species such as California towhee (*Pipilo crissalis*), song sparrow (*Melospiza melodia*), bushtit (*Psaltirparus minimus*), Bewick's wren (*Thryomanes bewickii*), and white-crowned sparrow (*Zonotrichia leucophrys*). Shrubs within this habitat also provide shade

and shelter for several reptilian and mammalian species. Common reptiles include species such as western fence lizard (*Sceloporus occidentalis*), western rattlesnake (*Crotalus viridis*), common kingsnake (*Lampropeltis getulus*), and coast horned lizard (*Phrynosoma coronatum frontale*), a California special concern species. Mammalian species which have been observed and/or expected to occur within this habitat includes desert cottontail (*Sylvilagus audubonii*), black-tailed jackrabbit (*Lepus californicus*), long-tailed weasel (*Mustela frenata*), grey fox (*Urocyon cinereoargenteus*), bobcat (*Lynx rufus*), and small rodents.

California Sage Series (CS). This community occurs in a small area within the LUO/LUE area, located on top of the Nipomo Mesa. This habitat is dominated by California sagebrush with scattered deerweed and coyote brush along the northern perimeter of the habitat. Due to the dense cover provided by California sagebrush, this habitat type provides nesting and foraging habitat for a variety of smaller bird species such as those described in the Coyote Brush Series discussed above. Additionally, similar reptilian and mammalian species utilize the dense shrubs for shade and shelter.

Eucalyptus Series (EU). This community provides a substantial amount of foraging and roosting habitat for various bird species. The eucalyptus trees identified on-site served suitable as roosting sites for several large bird species such as great horned owl (*Bubo virginianus*), red-shoulder hawk (*Buteo lineatus*), barn owl (*Tyto alba*), red-tailed hawk (*Buteo jamaicensis*), American crow (*Corvus brachyrhynchos*), and turkey vulture (*Cathartes aura*). Eucalyptus also provides potential overwintering habitat for monarch butterfly (*Danaus plexippus*). These species is known to roost within the vicinity of the LUO/LUE area and may also utilize eucalyptus trees located on-site. Reptile species such as western fence lizard (*Sceloporus occidentalis*), ensatina (*Ensatina eschscholtzii*), and various snakes could find adequate shelter within the eucalyptus debris near the base of each tree. However, due to the lack of cover near the base of eucalyptus, this community provides little shelter and forage for mammalian species.

Mixed Willow Series (MW). Mixed willow habitat located within the southern portion of the LUO/LUE area has been heavily impacted due to off-road vehicle use within the Santa Maria River, encroachment from facility operations (concrete rubble), and occasional flooding, resulting in degradation of sub-canopy cover. Specifically, encroachment of concrete rubble has suppressed riparian vegetation necessary to maintain appropriate water temperatures, organic matter needed for aquatic insects (prey), and protective cover for aquatic species such as steelhead and arroyo chub during periods of heavy flow.

However, dominant willow species within this area provide suitable nesting and foraging habitat for a variety of bird species. Additionally, this habitat provides suitable cover for mammalian species such as raccoon, black-tailed deer (*Odocoileus hemionus*), grey fox, black-tailed jackrabbit (*Lepus californicus*), striped skunk (*Mephitis mephitis*), coyote (*Canis latrans*), and dusky footed woodrat (*Neotoma fuscipes*).

Ornamental (OR). This habitat encompasses a very small portion of the LUO/LUE area. However, palm trees associated within the area near the cottage serve as nesting habitat for bird species such as mourning dove (*Zenaida macroura*). In addition, trees

planted for landscaping purposes (e.g., Monterey pine and Monterey cypress) also provide nesting bird habitat and cover.

Riparian Scrub (RS) (Holland 63000). The riparian scrub community provides the widest variety of wildlife habitat due to the various densities of vegetation associated with the canopy and sub-canopy of plant species in this community. In addition to the ample habitat for bird species, this plant community serves as a migration corridor for mammal species such as raccoon (*Procyon lotor*), striped skunk, and Virginia opossum; amphibian species such as California Red-legged frog, arroyo toad, and Pacific treefrog (*Pseudacris regilla*); and, reptile species such as two-striped garter snake, and southwestern pond turtle.

Ruderal (RU). The majority of the LUO/LUE area consists of ruderal habitat. This cover type consists almost entirely of disturbance-adapted annual weedy species. As such this community provides little cover for wildlife species. However, rodent species may forage on forbs and herbs within the area. This provides suitable foraging habitat for raptor species occurring within the LUO/LUE area. During recent surveys, great horned owl and barn owl were identified within the ruderal habitat of the LUO/LUE area, actively hunting for small mammal species. In addition, reptile species may occupy this habitat for the purposes of thermoregulation, foraging or escape from predators.

A complete listing of the wildlife species observed during field surveys and/or expected to occur within the LUO/LUE area is provided in Appendix G.

Special-Status Species

Several species known to occur within, or in the vicinity of the LUO/LUE area, are accorded “special-status” designation because of their recognized rarity or vulnerability to various causes of habitat loss or population decline. Some of these receive specific protection defined in federal or State endangered species legislation. Others have been designated as “sensitive” on the basis of adopted policies and expertise of State resource agencies or organizations with acknowledged expertise, or policies adopted by local governmental agencies such as counties, cities, and special districts to meet local conservation objectives. These species are referred to collectively as “special-status species” in this EIR, a collective term indicating some level of local, state or federal concern for populations or habitats.

Special-status Plant Species. Special-status plant species are either listed as endangered or threatened under the Federal or California Endangered Special Acts, or rare under the California Native Plant Protection Act, or considered to be rare (but not formally listed) by resource agencies, professional organizations, and the scientific community (see Table 5.4-2). Based on the literature search and nine-quadrangle CNDDDB query conducted for this project, 33 special-status plant species are known to occur within the region of the LUO/LUE area. Table 5.4-3 lists these species, their current status, habitat requirements, blooming period, presence of habitat, and the nearest known location relative to the LUO/LUE area.

For the purposes of this EIR, a focused botanical survey was conducted within the region of the proposed asphalt facility and a reconnaissance-level botanical survey was conducted within the portion of the area affected by the LUO/LUE amendment. As part of the botanical survey conducted on August 9 and 10, 2004, an analysis of the range and habitat preferences of those

regional species included in Table 5.4-3 was conducted to identify those special-status plant species that have the potential, however low, to occur within the LUO/LUE area based on existing habitat and site conditions. Based on this analysis, it was determined that black-flowered figwort (*Scrophularia atrata*) was the only special-status species from the list with the potential to occur within the LUO/LUE area. The following briefly presents the legal status and applicable ecological and range information for black-flowered figwort:

Black-flowered figwort (*Scrophularia atrata*). Black-flowered figwort is a federal species of concern and is a CNPS list 1B species. This species typically occurs in chaparral, coastal dunes, and riparian scrub habitat and is most commonly associated with rock outcroppings. Black-flowered figwort is a tall, perennial herb that blooms from April through June. Suitable habitat to support this species exists in several locations within the LUO/LUE area.

**Table 5.4-2
 Definitions of Special-Status Plant Species**

Special-Status Plant Species
➤ Plants listed or proposed for listing as threatened or endangered under the Federal Endangered Species Act (50 CFR 17.12 for listed plants and various notices in the Federal Register for proposed species).
➤ Plants that are candidates for possible future listing as threatened or endangered under the Federal Endangered Species Act (Federal Register Vol. 67, No. 114, pp. 40657-4067, June 13, 2002).
➤ Plants that meet the definitions of rare or endangered species under the CEQA (<i>State CEQA Guidelines</i> , Section 15380).
➤ Plants considered by the CNPS to be "rare, threatened, or endangered" in California (Lists 1B and 2 in California Native Plant Society, 2001).
➤ Plants listed by CNPS as plants about which we need more information and plants of limited distribution (Lists 3 and 4 in California Native Plant Society, 2001).
➤ Plants listed or proposed for listing by the State of California as threatened or endangered under the California Endangered Species Act (14 CCR 670.5).
➤ Plants listed under the California Native Plant Protection Act (California Fish and Game Code 1900 et seq.).
➤ Plants considered sensitive by other Federal agencies (i.e., U.S. Forest Service, Bureau of Land Management), state and local agencies or jurisdictions.
➤ Plants considered sensitive or unique by the scientific community or occurring at the limits of its natural range (<i>State CEQA Guidelines</i> , Appendix G).

**Table 5.4-3
 Special-Status Plant Species Potentially Occurring in the LUO/LUE area**

Scientific Name Common Name	Status	Habitat and Blooming Period	Habitat Present (P)/ Absent (A)	Nearest Known Location
<i>Agrostis hooveri</i> Hoover's bent grass	-- / -- / List 1B	Chaparral, cismontane woodland, valley and foothill grassland (April to July)	A	Oceano area (CNPS, 2001)

Scientific Name Common Name	Status	Habitat and Blooming Period	Habitat Present (P)/ Absent (A)	Nearest Known Location
<i>Aphanisma blitoides</i> Aphanisma	FSC / -- / List 1B	Coastal bluff scrub, coastal dunes, coastal scrub (March to June)	A	Headlands near Lion's Head, south of Point Sal (CNDDDB, 2004)
<i>Arctostaphylos purissima</i> La Purisima manzanita	-- / -- / List 1B	Chaparral, endemic to Santa Barbara County (November to May)	A	North of Lompoc, from the vicinity of Mission La Purisma, west to Vandenberg AFB (CNDDDB, 2004)
<i>Arctostaphylos rudis</i> Sand mesa manzanita	FSC / -- / List 1B	Chaparral, coastal scrub. Endemic from Santa Barbara and San Luis Obispo Counties (November to February)	A	Between Pomeroy and Black Lake golf course, Nipomo Mesa (CNDDDB, 2004)
<i>Arctostaphylos wellsii</i> Well's manzanita	-- / -- / List 1B	Chaparral, closed-cone coniferous forest. Endemic to San Luis Obispo County (December to April)	A	South of Los Burros Creek near Highway 1 (CNDDDB, 2004)
<i>Arenaria paludicola</i> Marsh sandwort	FE / SE / List 1B	Marshes and swamps (May to August)	A	Black Lake Canyon, west of Nipomo Mesa and south of Arroyo Grande (CNDDDB, 2004)
<i>Astragalus didymocarpus</i> var. <i>milesianus</i> Mile's milk-vetch	-- / -- / List 1B	Coastal scrub in clay soils (March to June)	A	Mouth of the Cuyama River, ridge west of Cuyama River (CNDDDB, 2004)
<i>Atriplex serenana</i> var. <i>davidsonii</i> Davidson's saltscale	-- / -- / List 1B	Coastal bluff scrub, coastal scrub (April to October)	A	Santa Maria River, along Highway 1 (CNDDDB, 2004)
<i>Calochortus obispoensis</i> San Luis mariposa lily	-- / -- / List 1B	Chaparral, cismontane woodland, valley and foothill grassland (May to July)	A	Carpenter Canyon, CA (CNPS, 2004)
<i>Calycadenia villosa</i> Dwarf calycadenia	-- / -- / List 1B	Chaparral, cismontane woodland, valley and foothill grassland, meadows and seeps (May to October)	A	Los Alamos, CA (CNDDDB, 2004)
<i>Caulanthus californica</i> California jewelflower	FE / SE / List 1B	Chenopod scrub, pinyon and juniper woodland, valley and foothill grassland (February to May)	A	Cuyama Valley, CA (CNDDDB, 2004)
<i>Chorizanthe rectispina</i> Straight-awned spineflower	FSC / -- / List 1B	Chaparral, cismontane woodland, coastal scrub (May to July)	A	East of Lompoc, Vandenberg AFB (CNDDDB, 2004)
<i>Cirsium loncholepis</i> La Graciosa thistle	FE / ST / List 1B	Coastal dunes, brackish marshes and coastal riparian scrub (May to August)	A	Immediately north of the Santa Maria River, about 1 mile west of the City of Guadalupe (CNDDDB, 2004)
<i>Cirsium rhotophilum</i> Surf thistle	FSC / ST / List 1B	Coastal dunes coastal bluff scrub. Endemic to Santa Barbara and San Luis Obispo Counties (April to June)	A	Oso Flaco Lake (CNDDDB, 2004)
<i>Clarkia speciosa</i> ssp. <i>immaculata</i> Pismo clarkia	FE / SR / List 1B	Chaparral, cismontane woodland, valley and foothill grassland (May to July)	A	Nipomo Mesa (CNDDDB, 2004)

Scientific Name Common Name	Status	Habitat and Blooming Period	Habitat Present (P)/ Absent (A)	Nearest Known Location
<i>Cordylanthus rigidus</i> ssp. <i>littoralis</i> Seaside bird's-beak	FSC / SE / List 1B	Closed-cone coniferous forest, chaparral, cismontane woodland, coastal scrub, coastal dunes (May to October)	A	Base of Purisima Hills, near eastern border of Vandenberg AFB (CNDDDB, 2004)
<i>Cordylanthus maritimus</i> ssp. <i>maritimus</i> Salt marsh bird's beak	FE / SE / List 1B	Coastal dunes, marshes and swamps (May to October)	A	Cuesta-by-the Sea, Los Osos, CA (CNDDDB, 2004)
<i>Deinandra increscens</i> ssp. <i>foliosa</i> Leafy tarplant	-- / -- / List 1B	Valley and foothill grassland w/ sandy soils (June to September)	A	Highway 166, 1 mile east of Highway 1 (CNDDDB, 2004)
<i>Deinandra increscens</i> ssp. <i>villosa</i> Gaviota tarplant	FE / SE / List 1B	Coastal scrub, valley and foothill grassland, coastal bluff scrub, endemic to Santa Barbara County (May to October)	A	Vandenberg AFB; NW of Lion's Head, along both sides of Pt. Sal Road (CNDDDB, 2004)
<i>Delphinium parryi</i> ssp. <i>blochmaniae</i> Dune larkspur	FSC / -- / List 1B	Maritime chaparral and coastal dunes (April to May)	A	Nipomo Mesa along Highway 1 near junction with Willow Road (CNDDDB, 2004)
<i>Dithyrea maritima</i> Beach spectaclepod	FSC / ST / List 1B	Coastal dunes and coastal scrub (March to May)	A	Oso Flaco Lake, south of Oceano (CNDDDB, 2004)
<i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i> Blochman's dudleya	FSC / -- / List 1B	Coastal scrub, coastal bluff scrub, valley and foothill grassland (April to June)	A	Froom Ranch, west of intersection of Los Osos Valley Road and U.S. 101, just outside city limits of San Luis Obispo (CNDDDB, 2004)
<i>Erigeron blochmaniae</i> Blochman's leafy daisy	-- / -- / List 1B	Coastal dunes. Endemic to San Luis Obispo County (May to June)	A	Southwest of Santa Maria along Black Road, directly north of Betteravia Road (CNDDDB, 2004)
<i>Eriodictyon capitatum</i> Lompoc yerba santa	FE / SR / List 1B	Closed-cone coniferous forest, chaparral, endemic to Santa Barbara County (May to August)	A	Solomon Hills, Graciosa Ridge, Orcutt Oil Field (CNDDDB, 2004)
<i>Horkelia cuneata</i> ssp. <i>puberula</i> Mesa horkelia	-- / -- / List 1B	Chaparral, cismontane woodland, valley and foothill grassland (February to September)	A	Pismo Beach area (CNPS, 2001)
<i>Horkelia cuneata</i> ssp. <i>sericea</i> Kellogg's horkelia	FSC / -- / List 1B	Closed-cone coniferous forest, coastal scrub, chaparral (April to September)	A	Nipomo Mesa; 4 miles west of Nipomo (CNDDDB, 2004)
<i>Lupinus ludovicianus</i> San Luis Obispo County lupine	FSC / -- / List 1B	Chaparral, cismontane woodland. Endemic to San Luis Obispo County (April to June)	A	Summit between Arroyo Grande and Huasna (CNDDDB, 2004)
<i>Lupinus nipomensis</i> Nipomo Mesa lupine	FE / SE / List 1B	Coastal dunes. Endemic to San Luis Obispo County (March to May)	A	Southeast of Jack Lake, south of Oceano, Nipomo Mesa (CNDDDB, 2004)

Scientific Name Common Name	Status	Habitat and Blooming Period	Habitat Present (P)/ Absent (A)	Nearest Known Location
<i>Monardella crista</i> Crisp monardella	FSC / -- / List 1B	Coastal dunes, coastal scrub. Known only from Santa Barbara and San Luis Obispo Counties (April to August)	A	Dunes north of Santa Maria River and east of Guadalupe oil field (CNDDDB, 2004)
<i>Monardella frutescens</i> San Luis Obispo monardella	FSC / -- / List 1B	Coastal dunes, coastal scrub. Known only from Santa Barbara and San Luis Obispo Counties (May to September)	A	Dunes north of Santa Maria River and East of Guadalupe oil field (CNDDDB, 2004)
<i>Rorippa gambellii</i> Gambel's watercress	FE / ST / List 1B	Freshwater and brackish marshes (April to September)	A	Black Lake Canyon, Nipomo (CNDDDB, 2004)
<i>Scrophularia atrata</i> Black-flowered figwort	FSC / -- / List 1B	Closed-coned coniferous forest, chaparral, coastal dunes, riparian scrub usually in sand and diatomaceous shales (April to July)	P	Casmalia Hills, southwest of Guadalupe (CNDDDB, 2004)
<i>Suaeda californica</i> California seablite	FE / -- / List 1B	Chenopod scrub, pinyon and juniper woodland, valley and foothill grassland (February to May)	A	Cuesta-by-the-Sea, Los Osos, CA (CNDDDB, 2004)

As a result of the focused botanical survey, none of the species included within Table 5.4-3 were identified; however, one special-status plant species (Blochman's ragwort) was observed within the immediate vicinity of the active facility during surveys conducted by Padre. The following briefly presents the ecological and range information for this species:

Blochman's ragwort (*Senecio blochmaniae*). Blochman's ragwort is a CNPS list 4 species. This species typically occurs in coastal dunes and coastal floodplains. Blochman's ragwort is subshrub, perennial herb that blooms from May to October. A sparsely scattered population of this species (<50) was identified within the northern sand banks of the Santa Maria River channel, directly adjacent to the concrete rubble located within the existing facility.

For a complete listing of vascular flora observed within the proposed asphalt plant facility, please refer to Appendix G. In addition to the focused botanical survey of the proposed asphalt facility, Padre also conducted a plant community/habitat assessment of the LUO/LUE area. Habitats identified within this portion of the project area include: coyote brush series, eucalyptus series, mixed willow series, ornamental, ruderal, and riparian scrub. Please refer to Figure 5.4-1 for an overview of these habitat locations.

Special-status Wildlife Species. For the purposes of this project, special-status wildlife species are defined in Table 5.4-4. Based on the literature search, nine-quadrangle CNDDDB query, and field surveys conducted by Padre, 25 special-status wildlife species are known to occur within the region of the LUO/LUE area. Information regarding regulatory status and known location of these species relative to the LUO/LUE area is provided in Table 5.4-5. Additional discussion of special-status wildlife species is provided below.

**Table 5.4-4
Definitions of Special-Status Wildlife Species**

Special-Status Wildlife Species
➤ Animals listed or proposed for listing as threatened or endangered under the Federal Endangered Species Act (50 CFR 17.11 for listed animals and various notices in the Federal Register for proposed species).
➤ Animals that are candidates for possible future listing as threatened or endangered under the Federal Endangered Species Act (Federal Register Vol. 67, No. 114, pp. 40657-4067, June 13, 2002).
➤ Animals that meet the definitions of rare or endangered species under the CEQA (<i>State CEQA Guidelines</i> , Section 15380).
➤ Animals listed or proposed for listing by the State of California as threatened and endangered under the California Endangered Species Act (14 CCR 670.5).
➤ Animal species of special concern to the CDFG (Remsen, 1978 for birds; Williams, 1986 for mammals).
➤ Animal species that are fully protected in California (California Fish and Game Code, Section 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]).

**Table 5.4-5
Special-Status Wildlife Species Potentially Occurring within the LUO/LUE area**

Common Name Scientific Name	Status	Habitat Present (P)/Absent (A) in the vicinity of the LUO/LUE area	Nearest Known Occurrence(s)
Invertebrates			
Monarch butterfly* <i>Danaus plexippus</i>	SA	P	Preisker Park, north side of Santa Maria (CNDDDB, 2004)
Fish			
Arroyo chub <i>Gila orcutti</i>	CSC	P	Cuyama River (Padre 2001); Santa Maria River estuary (CNDDDB, 2004)
Steelhead - Southern California ESU <i>Oncorhynchus mykiss irideus</i>	FE, CSC	P	Historically known to occur in Santa Maria River
Tidewater goby <i>Eucyclogobius newberryi</i>	FE, CSC	A	San Antonio Creek, Vandenberg AFB (CNDDDB, 2004)
Reptiles			
Coast horned lizard <i>Phrynosoma coronatum</i>	CSC	P	Ranch Road, Orcutt (CNDDDB, 2004)
Southwestern pond turtle <i>Clemmys marmorata pallida</i>	FSC, CSC	P	Observed upstream of the LUO/LUE area (J. Claxton, pers. obs., 2004)
Two striped garter snake <i>Thamnophis hammondi</i>	CSC	P	San Antonio Creek, Vandenberg AFB (CNDDDB, 2004)
Amphibians			
Arroyo toad <i>Bufo californicus</i>	FE, CSC	A	Sisquoc River, Santa Maria Valley (CNDDDB, 2004)
California red-legged frog <i>Rana aurora draytonii</i>	FT, CSC	P	Wineman Road, tributary to Nipomo Creek (CNDDDB, 2004)
California tiger salamander <i>Ambystoma californiense</i>	FPT, CSC	A	Santa Maria Airport (CNDDDB, 2004)
Western spadefoot <i>Spea hammondi</i>	CSC	A	Santa Maria River (CNDDDB, 2004)
Birds¹			

Common Name Scientific Name	Status	Habitat Present (P)/Absent (A) in the vicinity of the LUO/LUE area	Nearest Known Occurrence(s)
Burrowing owl <i>Athene cunicularia</i>	CSC, M	P	Betteravia Road and Mahoney Road, Santa Maria (CNDDDB, 2004)
California brown pelican <i>Pelicanus occidentalis</i>	SE, FE, FP, M (nesting colony and communal roosts)	A	Santa Maria River estuary
California clapper rail <i>Rallus longirostris obsoletus</i>	FE, SE, FP, M	A	Morro Bay, CA (CNDDDB, 2004)
Cooper's hawk * <i>Accipiter cooperii</i>	CSC (nesting), M	P	Observed during Padre 2004 survey
California condor <i>Gymnogyps californianus</i>	FE, SE, FP, M	A	Ballinger Canyon, Ventura County, CA (CNDDDB, 2004)
Least Bell's vireo <i>Vireo bellii pusillus</i>	FE (nesting), SE (nesting), M	P	Hanson Aggregates, Sisquoc River (CNDDDB, 2004)
Loggerhead shrike * <i>Lanius ludovicianus</i>	FSC (nesting), CSC (nesting), M	P	Observed during Padre 2004 survey (J. Claxton, pers. obs., 2004)
Sharp-shinned hawk <i>Accipiter striatus</i>	CSC (nesting), M	P	Nipomo Mesa (CNDDDB, 2004)
Tricolored blackbird <i>Agelaius tricolor</i>	CSC (nesting colonies), M	A	Twitchell Reservoir (CNDDDB, 2004)
Western snowy plover <i>Charadrius alexandrinus nivosus</i>	FT (nesting), CSC (nesting), M	A	Oso Flaco Lake (CNDDDB, 2004)
Yellow warbler <i>Dendroica petechia</i>	CSC (nesting), M	P	Hanson Aggregates Sisquoc River (CNDDDB, 2004)
Yellow-billed cuckoo <i>Coccyzus americanus</i>	SE, FC (nesting), M	A	Unknown. Last recorded within the area in 1920 (CNDDDB, 2004)
White-tailed kite <i>Elanus leucurus</i>	FP (nesting), M	P	Observed during Padre 2004 survey (B. Dugas, pers. obs., 2004)

Mammals

Pallid bat <i>Antrozous pallidus</i>	CSC	P	Sisquoc River, 7 miles east of Santa Maria (CNDDDB, 2004)
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Status Codes:	FE	Federal Endangered (USFWS)
	FPT	Federal Proposed Threatened (USFWS)
	FT	Federal Threatened (USFWS)
	FSC	Federal Species of Special Concern (USFWS)
	FC	Federal Candidate Species (USFWS)
	SE	State Endangered (CDFG)
	ST	State Threatened (CDFG)
	CSC	California Species of Special Concern (CDFG)
	FP	Fully Protected under California Fish and Game Code
	SA	Special animal (CDFG)
	M	Protected under the Migratory Bird Treaty Act of 1918
	*	Species observed during recent surveys (Padre 2004)
	¹	Protected under Fish and Game Code 3503

Special-status wildlife species associated with coastal and/or marine habitats located west of the LUO/LUE area (e.g., brown pelican, California clapper rail, western snowy plover, tidewater goby, and California least tern) were not observed during the surveys and are not expected to occur within the site due to the lack of suitable habitat (i.e., coastal marine habitat). In addition, non-coastal species such as California condor, yellow billed cuckoo, and nesting colonies of tricolored blackbird would not occur within the LUO/LUE area due to lack of suitable habitat (e.g., mountainous savannahs, well-developed riparian forest, and wetlands). Furthermore, the

LUO/LUE area is located outside of the known range for special-status species such as unarmored threespine stickleback. Therefore, no further discussions of these species are necessary. However, for the purposes of impact analysis, the following briefly presents the applicable ecological and range information for those special-status wildlife species documented within the region of the proposed LUO/LUE area which have a likelihood of occurrence, however low, based on the presence of potentially suitable habitat:

Invertebrates

Monarch butterfly (*Danaus plexippus*). The overwintering habitats for the monarch butterfly are considered to be of special concern by CDFG. This species is known to roost in winter (usually in dense concentrations) within coastal groves of eucalyptus, cypress or pine trees. Autumnal roosts are abandoned early (November or December) by individuals seeking more favorable conditions, while permanent roosts begin forming in October and persist into February. There are several known monarch butterfly roosting areas located within coastal San Luis Obispo County. The nearest known roosting area to the LUO/LUE area is in Preisker Park, which is located directly across the Santa Maria River. Preisker Park is an autumnal site, with a maximum monarch count of 27 in 1999 (Althouse and Meade, 1999). Several eucalyptus windrows occur within the LUO/LUE area that may provide suitable overwintering habitat. No fall or winter biological field surveys have been completed; therefore, it is unknown if this species utilizes these windrows. However, these windrows are small and fragmented and much less suitable for Monarchs, as compared to Preisker Park. Therefore, it is unlikely Monarch overwinters within the LUO/LUE area.

Fish

Arroyo chub (*Gila orcutti*). The arroyo chub is a California species of special concern that occurs in a slow-moving or backwater sections of warm to cold streams with mud or sand substrates. Arroyo chubs are native to the Los Angeles, San Gabriel, San Luis Rey, Santa Ana, and Santa Margarita rivers and to Malibu and San Juan Creeks (CDFG, 2004). They have been successfully introduced in to the Santa Ynez, Santa Maria, Cuyama, and Mojave river systems and other smaller coastal streams (e.g., Arroyo Grande Creek) (CDFG, 2004). The most northern introduced population is in Chorro Creek, San Luis Obispo County. Arroyo chubs are scarce within their native range because the low-gradient streams in which they are the most successful have largely disappeared (CDFG, 2004). The nearest known documented occurrences of arroyo chub are Cuyama River (tributary to the Santa Maria River), 9.5 miles to the east and the Santa Maria estuary, 11 miles west of the LUO/LUE area. This species is known to occur in the Santa Maria River and may occur adjacent to the LUO/LUE area during periods of surface flow.

Steelhead – Southern California ESU (*Oncorhynchus mykiss irideus*). The Southern California ESU was listed as endangered by the NOAA Fisheries on August 18, 1997. Southern California steelhead is also a California species of special concern. Steelhead are an anadromous form of rainbow trout that reproduce in freshwater, but spend much of their life cycle in the ocean, where increased prey density provides a greater growth rate and size. Steelhead have been divided into 15 evolutionary significant units (ESU) based on similarity in life history, location, and genetic markers.

The Southern California ESU includes all naturally spawned populations of steelhead (and their progeny) in streams from the Santa Maria River (inclusive) to the southern extent of the species' range (U.S. – Mexico border). Historical information suggests that the Santa Maria River supported a steelhead run in the early 1900s. Currently, there is no evidence suggesting this species presence in the Santa Maria River for several decades. However, it is assumed this species has the potential to occur within the Santa Maria River adjacent to the LUO/LUE area, and within Nipomo Creek within the LUO/LUE area.

Reptiles

Coast horned lizard (*Phrynosoma coronatum frontale*). The coast horned lizard is a federal species of concern and a California species of special concern that occurs in a variety of open habitats that provide sites for basking, sandy or sandy-loam substrates for night-time burial, and a suitable prey base (the species feeds almost exclusively on native ants). It was historically distributed throughout the Central and Coast Range, but now occurs at scattered, disjunct locations within this range. The coast horned lizard produces clutches of 6 to 21 eggs from May to June and hatching typically occurs in August and September. Due to the presence of suitable habitat within the LUO/LUE area and surrounding habitats, coast horned lizard has the potential to occur within less disturbed portions of the LUO/LUE area.

Southwestern pond turtle (*Clemmys marmorata pallida*). The southwestern pond turtle is a federal species of special concern and a California species of special concern. It is an aquatic turtle inhabiting streams, marshes, ponds, and irrigation ditches within woodland, grassland, and open forest communities. However, it requires upland sites for nesting and over-wintering. Stream habitat must contain large, deep pool areas (six feet) with moderate-to-good plant and debris cover, and rock and cobble substrates for escape retreats. Southwestern pond turtle was observed in Nipomo Creek directly upstream of the LUO/LUE area during a reconnaissance-level survey conducted by Padre in July 2004. Therefore, it has been determined that this species has the potential to occur within the LUO/LUE area.

Two-striped garter snake (*Thamnophis hammondi*). The two-striped garter snake is a California species of special concern which is highly aquatic and is typically found near permanent fresh water streams associated with willow habitat. This species occurs historically and currently throughout southern California streams, including the central coast. Small mammal burrows are used as over-wintering sites for the snake (Jennings, 1994). Because suitable habitat exists throughout the Nipomo Creek watershed, this species has the potential to occur within the LUO/LUE area.

Amphibians

Arroyo toad (*Bufo californicus*). The southwestern arroyo toad is a federally listed endangered species and a California species of special concern. It was formerly found in rivers with near-perennial flow throughout southern California between San Luis Obispo and San Diego counties. Populations persist in Santa Barbara, Ventura, Los Angeles, Riverside, and San Diego counties. The majority of the remaining populations

in Santa Barbara and Ventura counties are located on the Los Padres National Forest (USFWS, 1994), and USFWS has designated the Sisquoc and upper Santa Ynez rivers as critical habitat for the toad (USFWS, 2001). These critical habitat locations are east and south of the LUO/LUE area, respectively. The nearest known occurrence of the species is within the Sisquoc River, 14 miles to the east-southeast. This species is not expected to occur in the vicinity of the LUO/LUE area due to the lack of stream pools from early April to early July required for breeding.

California red-legged frog (*Rana aurora draytonii*). The California red-legged frog (CRLF) is a federally listed threatened species and a California species of special concern. It formerly ranged from northern California south along the Pacific Coast, west of the Cascade Mountains and the Sierra Nevada, to northern Baja California at elevations from near sea level to 8,000 feet. Populations remain in the San Francisco Bay Area, along the California coast, and on the western edge of the Central Valley.

The CRLF occurs in different habitats depending on their life stage and season. All stages are most likely to be encountered in and around breeding sites, which include coast lagoons, marshes, springs, permanent and semi-permanent natural ponds, ponded and backwater portions of streams, as well as artificial impoundments such as stock ponds, irrigation ponds, and siltation ponds. This species prefers dense emergent and bank vegetation including willow (*Salix* sp.), cattail (*Typha* sp.), and bulrush (*Scirpus* sp.). The absence of these plant species within the site does not exclude the possibility that the site provides red-legged frog habitat, but the presence of one or all of these plants is an important indicator that the site may provide foraging or breeding habitat (USFWS, 1997). The largest CRLF densities are associated with deep-water pools with dense stands of overhanging willows and an intermixed fringe of cattails (Jennings and Hayes, 1994).

CRLF breed from November through March. The female lays between 2,000 to 5,000 eggs in clusters attached to emergent and submergent vegetation in ponds and backwater pools in creeks. The tadpoles remain in this habitat until they metamorphose in the summer between 11 and 20 weeks after hatching. Young frogs can occur in slow moving, shallow riffle zones in creeks or along the margins of ponds.

CRLF has been reported as occurring within the vicinity of the LUO/LUE area (see Figure 5.4-2). Specifically, the nearest known location of this species has been identified upstream of the LUO/LUE area within a tributary to Nipomo Creek (CNDDDB, 2004). A USFWS protocol-level survey was conducted within Nipomo Creek by Padre in August 2004 to determine the presence/absence of this species within the LUO/LUE area. This survey was limited to only those parcels of land which the County was able to obtain the consent of the landowner. As such, a portion of the LUO/LUE area was not covered during the protocol surveys. Although no CRLF were identified during the 2004 survey, Padre did observe suitable habitat for CRLF directly upstream of the LUO/LUE area, beneath Hutton Road and Highway 101. Due to the presence of suitable habitat upstream and known occurrences within the vicinity of the LUO/LUE area, there is a potential for CRLF occurrence within the LUO/LUE area.

California tiger salamander (*Ambystoma californiense*). On August 4, 2004, the USFWS down-listed the Santa Barbara County population of the California tiger salamander (CTS) to threatened status (50 CFR 17), but included the entire species

throughout its range (USFWS, 2004c). In addition to this species' federal status, CTS are also a California species of special concern.

Adult and juvenile CTS apparently spend most of their time below ground in the burrow systems of ground squirrels, pocket gophers, and other burrowing rodents. They emerge from these retreats at night during rain events between late autumn through early spring and travel to breeding pools. Most breeding pools are ephemeral (vernal). Use of permanent aquatic sites as breeding habitat is unlikely unless these features lack predators such as introduced fish and bullfrogs. Consequently, CTS's are considered obligate seasonal, or vernal, pool breeders. Man-made ponds can function as salamander breeding habitat as long as these ponds are kept free of fish and bullfrogs and possess suitable seasonal hydrologic characteristics. Adult salamanders remain at the breeding site for only a few days after breeding, then move back to their terrestrial retreats (small mammal burrows) located hundreds or thousands of feet from the pool.

The nearest known documented occurrence of this species was located within the vicinity of the Santa Maria Airport. Due to the lack of suitable habitat (vernal pools) in the project vicinity, California tiger salamander is not expected to occur within the LUO/LUE area.

Western spadefoot (*Spea hammondi*). This species is a California species of special concern. Spadefoot toad is not seen during most of the year, as it resides in burrows up to nine months of the year with infrequent nocturnal sojourns. They emerge during spring rains and breed in temporary pools. Western spadefoot toad occurs primarily in grassland habitats, although it is occasionally found in valley or foothill hardwood woodlands. The nearest known documented occurrence of this species was located west of the Santa Maria Airport. Due to the lack of suitable breeding pools, this species is not expected to occur within the LUO/LUE area.

Birds

Burrowing owl (*Athene cunicularia*). This species is a California species of special concern and federal species of special concern. Within California, the species is typically found throughout the Central Valley, in the San Francisco Bay Area, at scattered locations along the coast, and in portions of the desert regions. The species is a year-round resident in annual and perennial grasslands or other vegetation communities that support little to no tree or shrub cover. In California, the species is typically found in close association with California ground squirrels (*Spermophilus beecheyi*) where the ground squirrel creates burrows that are used by burrowing owls as year-round shelter and seasonal nesting habitat. However, burrowing owls also use human-made structures such as culverts, corrugated metal pipes, debris piles, or openings beneath pavement as shelter and nesting habitat. No burrowing owl burrow sites were observed within the LUO/LUE area during field surveys conducted by Padre Associates and the applicant's biologist. The nearest known documented occurrence of this species is located northwest of the Santa Maria Airport. Due to the lack of field evidence and minimal habitat available, this species is not expected to occur within the LUO/LUE area.

Cooper's hawk (*Accipiter cooperii*). Cooper's hawk is a California species of special concern during nesting periods; primarily due to the loss of riparian nesting habitat. Preferred nesting habitat typically consists of dense stands of coast live oak, riparian or other forest habitat located near water. This species generally is solitary and feeds on small birds and mammals captured in surprise attack. Cooper's hawk is an uncommon permanent resident and fairly common fall transient along the central coast; one individual was identified within riparian habitat adjacent to the LUO/LUE area during the field surveys conducted by Padre. Based on this observation and the presence of suitable habitat within the LUO/LUE area, this species has the potential to occur within the LUO/LUE area for nesting and foraging purposes.

Least Bell's vireo (*Vireo bellii pusillus*). Least Bell's vireo is a state and federally listed endangered species. This bird nests in the edges of riparian scrub or riparian forests, approximately 9-198 m (30-650 ft) from the water's edge, and 1 to 2.5 m (3 to 8 ft) above ground. The nearest known documented occurrence of this species is from the Hanson Aggregate property, adjacent to the Sisquoc River (J. Greaves, person comm., 2004). This species has not been reported from Santa Maria River or Nipomo Creek. Mixed willow series along the Santa Maria River channel and Nipomo Creek is considered marginal habitat due to its limited width, adjacent development and fragmented nature. However, it is possible that this species occasionally forages within or adjacent to the LUO/LUE area.

Loggerhead shrike (*Lanius ludovicianus*). Loggerhead shrike is a federal species of special concern and a California special concern species during nesting periods. The species generally occurs in a variety of open grassland, oak savannah, shrub-land, and other similar habitats where it feeds primarily on large insects (e.g., grasshoppers). However, the species may also occasionally take small reptiles, birds, and mammals. Loggerhead shrikes nest during March to June with young becoming independent during July or August. The nest is generally well-concealed on a stable branch in a densely-foliaged shrub or tree. Because this species was observed on-site and based on the presence of suitable habitat within the LUO/LUE area, this species has the potential to utilize the LUO/LUE area for nesting and foraging purposes.

Sharp-shinned hawk (*Accipiter striatus*). The sharp-shinned hawk is a California species of special concern during nesting periods. This species typically builds nests within woodland habitat where they forage on small birds. Sharp-shinned hawks will also occasionally eat small mammals and insects. This species is a fairly common winter visitor and resident along coastal ridges foraging in woodland and semi-open habitats. Although suitable habitat for this species is fragmented (isolated eucalyptus windrows), this species has the potential to occur occasionally within the LUO/LUE area for the purposes of foraging.

Yellow warbler (*Dendroica petechia brewsteri*). The yellow warbler is a California species of special concern during nesting periods. Within San Luis Obispo County, this species is a fairly common summer transient of deciduous riparian habitats. This species typically nests within riparian woodland habitat of the coastal foothills from mid-April to early August. Yellow warbler forages within riparian woodland/scrub habitats by gleaning the bark of riparian vegetation for insects; however, the species will occasionally eat berries.

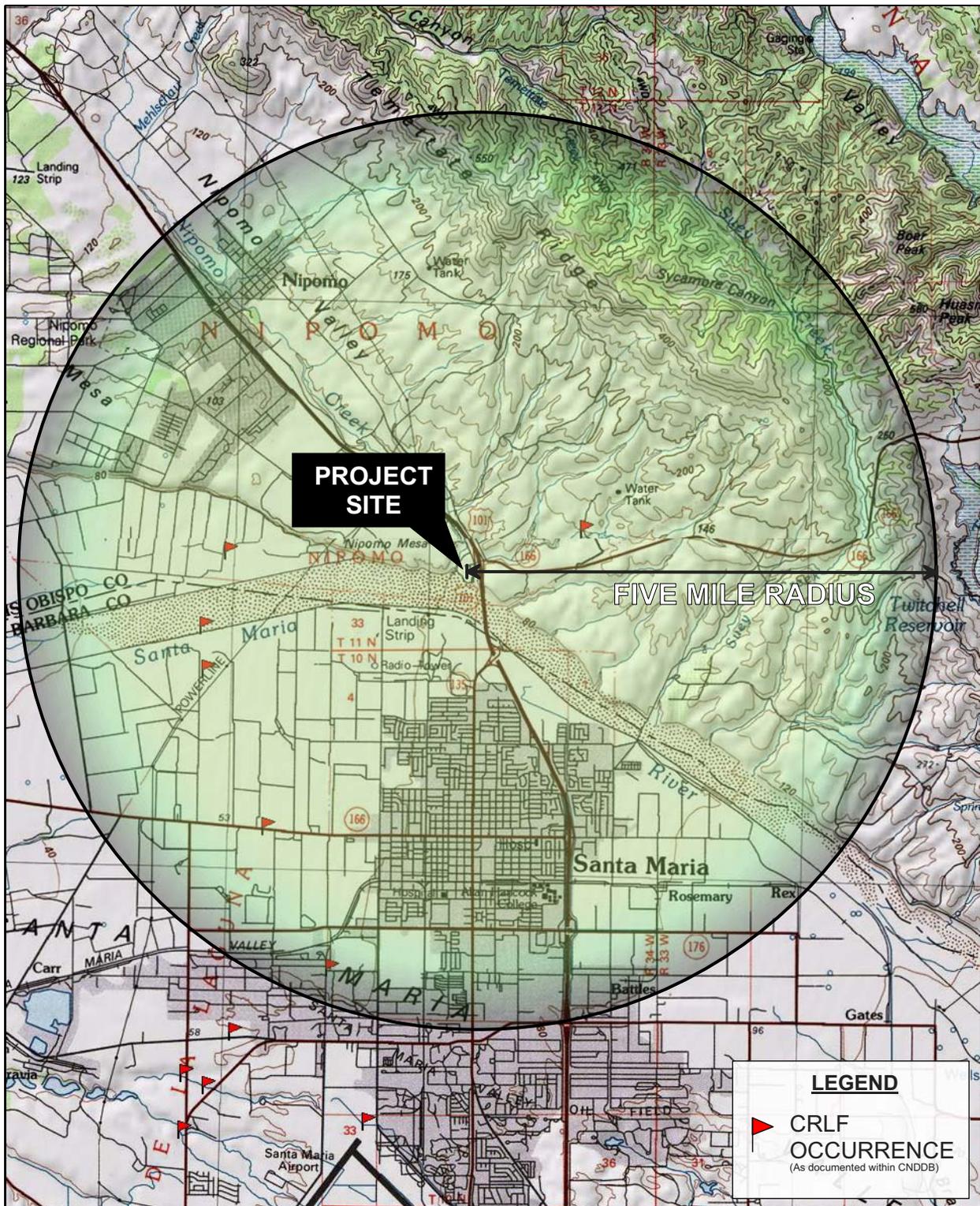
The nearest known occurrence of this species was located at Hanson Aggregates, near the Sisquoc River. Mixed willow series along the Santa Maria River channel and Nipomo Creek is considered marginal habitat due to its limited width, adjacent development and fragmented nature. However, it is possible that yellow warbler occasionally forages within or adjacent to the LUO/LUE area.

White-tailed kite (*Elanus leucurus*). The white-tailed kite is a California fully protected species during nesting periods. The white-tailed kite typically occurs in coastal and valley lowlands, usually associated with agricultural lands and open fields. Nests are constructed in treetops with dense foliage. This species is considered an uncommon resident of most of San Luis Obispo County; however, this species was observed within the LUO/LUE area. Suitable nesting habitat for white-tailed kite may occur along the Santa Maria River, near the LUO/LUE area. Therefore, this species has the potential to forage within the LUO/LUE area.

Tricolored blackbird (*Agelaius tricolor*). The tricolored blackbird is a California species of special concern. This species requires open water habitat areas surrounded by cattail marshland for the purposes of foraging and nesting. This habitat type occurs to the north of LUO/LUE area. The nearest known documented occurrence of this species is located near Twitchell Dam. Although suitable nesting habitat does not occur within the proposed LUO/LUE area, this species has the potential to occur within the LUO/LUE area as a migrant.

Mammals

Pallid bat (*Antrozous pallidus*). This pallid bat is a California species of special concern. The pallid bat has a range that extends from southern British Columbia to central Mexico, and east to Oklahoma and northern Texas. Suitable roosting habitat includes crevices in rocky outcroppings, caves, mines, hollow trees, and buildings. Maternal colonies typically bear young in appropriate habitats between March 1 and August 31. The nearest known documented occurrence of this species is a day roost consisting of crevices beneath the Garey Bridge, 10 miles east-southeast of the plant site. This species generally forages no more than 3 miles from its day roost (Zeiner et al., 1990); therefore, it is not expected to occur within the LUO/LUE area.



Source: TOPO! c 2001 National Geographic Holdings (www.topo.com)



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FIGURE 5.4-2

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Regulated Habitats

Sensitive Communities. The CNDDDB has inventoried natural communities and ranked them according to their rarity and potential for loss. Based on the CNDDDB query for the LUO/LUE area, central dune scrub, central foredune, coastal and valley freshwater marsh, and southern vernal pool are considered sensitive natural communities that have been documented within the vicinity of the LUO/LUE area. However, based on past and recent field surveys, these habitats do not exist within the LUO/LUE area and therefore will not be impacted as a result of the proposed project.

Critical Habitats. On January 22, 2004, the USFWS proposed designation of critical habitat for the Santa Barbara County population of the CTS. Critical habitat identifies specific areas that are essential to the conservation of this species and, areas that may require special management considerations or protection (i.e., aquatic and upland breeding habitats). Although the critical habitat designations have not been officially determined to date, the nearest known proposed critical habitat for tiger salamander is proposed critical habitat Unit 2 – Eastern Santa Maria. This unit is bordered by Stated Highway 101 on the west, Solomon Hills on the south, the Sisquoc River on the east, and the Santa Maria River floodplain on the north. The final determination of critical habitat for this species will be completed by the court ordered date of November 15, 2004 (FR Vol. 69, No. 149, August 4, 2004). Because the LUO/LUE area is outside of the proposed critical habitat for the Santa Barbara County population, this regulated habitat will not be impacted as a result of the project implementation.

Santa Maria River and its tributaries are known steelhead habitats and are considered an integral component of the southern steelhead ESU. On April 30, 2002 the U.S. District Court for the District of Columbia approved a NOAA Fisheries consent decree withdrawing critical habitat designations for 19 salmon and steelhead populations on the west coast, including those contained in the south central coast steelhead ESU (NOAA, 2003). However, a more thorough analysis of steelhead critical habitat is currently being conducted by NOAA Fisheries, which will result in the re-issuance of critical habitat designations for the southern steelhead ESU.

Wildlife Movement Corridors

Wildlife migration corridors are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations. Migration corridors may be local such as between foraging and nesting or denning areas, or they may be regional in nature. Migration corridors are not unidirectional access routes; however, reference is usually made to source and receiver areas in discussions of wildlife movement networks. "Habitat linkages" are migration corridors that contain contiguous strips of native vegetation between source and receiver areas. Habitat linkages provide cover and forage sufficient for temporary habitation by a variety of ground-dwelling animal species. Wildlife migration corridors are essential to the regional ecology of an area as they provide avenues of genetic exchange and allow animals to access alternative territories as fluctuating dispersal pressures dictate.

The Santa Maria River and associated tributaries (e.g., Nipomo Creek) are believed to be migration corridors for wildlife species moving within the region and coastal habitat areas to the west. These migration corridors are especially critical through areas where human activities

(i.e., urban development, agricultural development, etc.) would otherwise prohibit or impair the movement of species between habitat areas.

5.4.3 Impact Analysis

When development occurs in natural or semi-natural areas, the biological resources of the site and the surrounding area are affected. These effects may take the form of direct impacts, which include habitat loss and fragmentation, introduction of barriers to movement and dispersion, and conversion of native communities to developed conditions. Development may also result in indirect impacts that affect the quality of habitats on and surrounding the LUO/LUE area. These impacts may include the invasion of weedy or landscape plants into natural areas, noise disturbances, and declines in air and water quality. The existing LUO/LUE area includes areas that have experienced a range of past disturbance from low to high. Consequently, the character of the native communities varies considerably based on the levels of disturbance.

The mitigation measures presented in the following section are designed to avoid and/or minimize those impacts associated with the proposed project to a less than significant level.

5.4.3.1 Thresholds of Significance

Based on the mandatory findings of significance criteria at Section 15065 and Appendix G of the State CEQA Guidelines, an impact would be significant if any of the following conditions, or potential thereof, would result with implementation of the Proposed Project:

1. A substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFG, the USFWS, or the NOAA Fisheries;
2. A substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulation, or by the California Coastal Commission, CDFG, USFWS, or NOAA Fisheries;
3. 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;
4. A substantial interference with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery site;
5. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan;
6. A substantial reduction of habitat of a fish and wildlife species;
7. Cause the population of a fish or wildlife population to drop below self-sustaining levels;

8. Threaten to eliminate a plant or animal community; and/or,
9. Conflict with any local polices or ordinances protecting biological resources. For the purpose of this report, relevant goals and policies regarding sensitive resources from the San Luis Obispo County Land Use Ordinance (Title 22), South County Area Plan (2002), were used to assess conflicts with local policies. See Chapter 4.0 for detailed discussion of applicable policies and ordinances.

5.4.3.2 Short-Term Asphalt Plant Impacts

Impact BIO-1: Plant construction activities may adversely affect non-listed wildlife occupying adjacent habitats.

Discussion. The entire 5.7 acre plant site would be disturbed by construction-related activities. In addition, implementation of the proposed Landscape Plan would result in short-term construction activity within a 1.2 acre area south of the plant site. Overall, construction-related disturbance (noise, dust, heavy equipment and truck traffic) may prevent local wildlife species from foraging and breeding within the Santa Maria River, Nipomo Creek, and adjacent habitat during the construction period. However, these adverse effects would only affect a small proportion (less than 10 acres) of available riparian habitat for approximately 3 to 4 months. Periods of intense activity would likely be limited to a few weeks. Due to the existing disturbance associated with the concrete recycling operation currently operating at the plant site, local wildlife species are expected to have become acclimated to such disturbance. Due to the similarity of construction disturbance to existing activity at the plant site, small amount of habitat affected and the short duration of adverse impacts, no substantial loss of foraging or breeding opportunities is expected.

Construction activities adjacent to the Santa Maria River may reduce the quality of this potential wildlife movement corridor by introducing disturbance (noise, dust, human presence). However, only a small proportion of the 2,000-foot-wide Santa Maria River would be indirectly affected, allowing wildlife to avoid project-related disturbance by utilizing scrub habitat along the southern portion of the River. In addition, no work would occur after 7 p.m., when most wildlife movement occurs. Due to the small area affected, short duration and lack of nighttime disturbance, impacts to this movement corridor are considered less than significant.

Impact Category: Insignificant

Thresholds of Significance Criteria: 4, 6, 7, and 8.

Mitigation Measure: No mitigation required.

Residual Impacts: Less than significant.

Impact BIO-2: Plant construction activities could adversely affect avian and terrestrial special-status species, including nesting activities of protected nesting birds and sensitive species (e.g., California horned lizard).

Discussion: Raptor and migratory bird species protected under the Migratory Bird Treaty Act (16 USC 703-712), California Fish and Game Code Section 3503, and California Fish and Game Code Section 3503.5 may nest within the plant site or adjacent area affected by the Landscape Plan. These include ground nesters (western meadowlark and lark sparrow), small tree/shrub nesters (bushtit, American robin, northern mockingbird, loggerhead shrike, house finch, and lesser goldfinch) and several raptors which require large trees, such as eucalyptus for nesting purposes (turkey vulture, red-tailed hawk, red-shouldered hawk, great-horned owl, barn owl, white-tailed kite and Cooper's hawk). Short-term impacts to these species may occur from vegetation clearing, debris removal, dust deposition and noise disturbance associated with the construction activities. Vegetation removal and grading activities may destroy nests, nestlings, or hatchlings of these protected bird species, and would be considered a significant impact.

Coast homed lizard may be present within and/or adjacent to the project site during the construction phase of the project. This species prefers open sandy areas of the project site with a sufficient red-ant population. Suitable habitat for this species is predominately found along the sandy open areas within the southern boundary of the project site. Although, the density of this species within suitable habitat is not known, the average distance between capture points for a similar species (*Phrynosoma solare*) is 30 meters for males and 15 meters for females, or about 10 per acre (Baharav, 1975). It is likely, that historical disturbance within the plant site has resulted in a decreased population of coast horned lizard. As such, the number of individuals affected is expected to be very small. Increased mortality of this species would affect the distribution or survival of this species in the region overall. Therefore, impacts to this species are considered significant but mitigable.

Impact Category: Significant but Mitigable

Thresholds of Significance Criteria: 1, 4 and 6

Mitigation Measure BIO-2: The following measures shall be implemented to avoid and/or minimize potential impacts to avian and terrestrial special-status species to the extent feasible:

- A. Initial grading and demolition operations shall be conducted prior to, or after, the nesting season (February 15 to September 15) to avoid any potential impact to nesting birds. Therefore, construction activities should be conducted between the months of October and January to the extent feasible;
- B. If Measure A is infeasible, pre-construction surveys shall be conducted by a qualified biologist two weeks prior to the initiation of construction activities conducted between February 15 and September 15 to identify potential bird nesting sites:

- If active nest sites of common bird species protected under the Migratory Bird Treaty Act (e.g., northern mockingbird, house finch, etc.) and Fish and Game Code 3503 and 3503.5 are observed within 300 feet of the plant site, then the project shall be modified and/or delayed as necessary to avoid direct take of the identified nests, eggs, and/or young; and,
 - If active nest sites of raptors and/or species of special concern are observed within the vicinity of the plant site, construction shall be avoided or terminated until CDFG is contacted and an appropriate buffer zone around the nest site is established. Construction activities in the buffer zone shall be prohibited until the young have fledged the nest, or the nest is abandoned.
- C. A County-approved biologist shall conduct pre-activity surveys to determine presence/absence of California horned lizard within and adjacent to the project site. Surveys shall only be required during the active period of California horned lizards (generally April through September). If California horned lizards are identified adjacent to and/or within work areas, then hand rakes or an equivalent shall be utilized by the biologist to scarify the ground surface and encourage the horned lizards (and other wildlife) to vacate the immediate area prior to construction. Alternatively, sampling composed of drift fences shall be used to capture horned lizards. As necessary, the qualified biologist shall physically relocate California horned lizard to suitable habitat located outside the construction zone. Exact procedures and protocols for relocation shall be based up on pre-project consultation with CDFG; and,
- D. A County-approved biological monitor shall be on-site during all vegetation clearing and shall periodically monitor the project site during construction activities to inspect protective fencing, equipment staging areas, and physically relocate/remove any special-status wildlife species entering the construction zone (e.g., California horned lizard, etc.). All species-status shall be relocated to suitable habitat located outside the construction zone by a qualified biologist. Exact procedures and protocols for relocating shall be based upon pre-project consultation with CDFG.

Residual Impacts: Implementation of this mitigation measure will reduce potential impacts to less than significant levels.

Impact BIO-3: Construction activities could adversely affect aquatic and semi-aquatic special-status species within the Santa Maria River and Nipomo Creek.

Discussion: Special-status fish species associated with the Santa Maria River (arroyo chub and southern steelhead) have the potential to occur adjacent to the plant site during periods of high flow. Storm run-off following grading of the plant site may result in transport of concrete dust and earth materials into the Santa Maria River, which may increase turbidity, siltation and pH. These water quality effects may significantly impact steelhead and arroyo chub.

During periods of water presence within Santa Maria River and/or Nipomo Creek, special-status semi-aquatic species such as southwestern pond turtle and two-striped garter snake have the potential to occur within surrounding areas of the plant site. Although these species are not expected to occur with immediate vicinity of the plant site, these species may also be affected by storm run-off leaving the plant site.

Impact Category: Significant but Mitigable

Threshold of Significance Criteria: 1

Mitigation Measure BIO-3: See Mitigation Measure WR-10 in the Water Resources section of this EIR.

Residual Impacts: Implementation of this mitigation measure will reduce potential impacts to less than significant levels.

Impact BIO-4: Construction activities could result in short-term habitat loss to sensitive habitats (e.g., Santa Maria River, Nipomo Creek, and mixed willow habitat).

Discussion: Surrounding sensitive habitats include the riparian corridors of Santa Maria River, Nipomo Creek, and mixed willow series, a sensitive plant community and wetlands under the definition adopted by CDFG and USFWS. Short-term impacts to these sensitive habitats may result from heavy equipment operation and increase human presence throughout the plant site. This could result in direct adverse impacts to sensitive habitat vegetation

Impact Category: Significant but Mitigable

Thresholds of Significance Criteria: 2

Mitigation Measure BIO-4: The following measures shall be implemented to avoid and/or minimize potential impacts to sensitive habitats to the extent feasible:

- A. All equipment staging areas, construction-crew parking areas, and construction access routes shall be established in previously disturbed or developed areas;
- B. Prior to any earth disturbance, exclusionary fencing shall be erected at the boundaries of all construction areas to avoid equipment and human intrusion into adjacent habitats, with emphasis on protection of sensitive habitats (e.g., Santa Maria River, Nipomo Creek, mixed willow habitat);
- C. In the event that impacts would occur to the bed or banks of Santa Maria River or Nipomo Creek, the appropriate permits shall be obtained by the governing regulatory agency (e.g., Army Corps of Engineers, CDFG, RWQCB) as necessary; and,
- D. Construction (e.g., clearing and grubbing of vegetation, rough grading, etc.) of any area within a buffer zone of 25 feet from the top of bank of Santa Maria River, Nipomo Creek, or their tributaries shall be prohibited with the exception of activities

related to restoration efforts approved by the County of San Luis Obispo. Where the requirements of any regulatory agency having jurisdiction are different, the more restrictive regulations shall apply. The required 25-foot buffer shall be illustrated on final project plans and adhere to during the construction period.

Residual Impacts: Implementation of this mitigation measure will reduce potential impacts to less than significant levels.

5.4.3.3 Long-Term Asphalt Plant Impacts

Potential long-term impacts to biological resources associated with the operation and maintenance of the proposed asphalt plant would include:

Impact BIO-5: Grading of the plant site would result in the permanent loss of mixed willow series, a sensitive plant community and wetlands under the definition adopted by CDFG and USFWS.

Discussion: The entire 5.7 acre plant site would be disturbed by construction activities to varying degrees. However, most of the site contains concrete rubble and associated materials, such that the loss of vegetation and wildlife habitat would be limited to approximately 0.46 acres. This habitat loss would include approximately 0.04 acres of coyote brush series, 0.32 acres of mixed willow series, and 0.10 acres of eucalyptus series.

Mixed willow series is considered rare and worthy of status tracking by the California Natural Diversity Data Base. In addition, willows are hydrophytic vegetation and the mixed willow series meets the wetland vegetation criterion of the Corps of Engineers Wetland Delineation Manual. This plant community is relatively rare in the region due to episodic flood events and agricultural development. Long-term impacts associated with habitat loss are considered significant but mitigable.

Impact Category: Significant but Mitigable

Thresholds of Significance Criteria: 2 and 8.

Mitigation Measure: BIO-5: The following measures shall be implemented to avoid and/or minimize potential impacts to mixed willow habitat to the extent feasible:

- A. Willows removed as a result of project-related construction activities shall be replaced at a 10:1 ratio on-site. Restoration of mixed willow habitat shall be conducted by a qualified individual with experience in native plant restoration. Such restoration shall be maintained for a minimum 5 years to ensure successful establishment. If restoration is not successfully after 5 years, additional planting shall be conducted;
- B. Mitigation Measure BIO-4(B); and,

C. Mitigation Measures BIO-4(C).

Residual Impacts: Implementation of this mitigation measure will reduce potential impacts to less than significant levels.

Impact BIO-6: Grading of the plant site would result in the permanent loss of special-status plant species.

Discussion. The only special-status plant species observed within the asphalt plant site during surveys conducted by Padre was Blochman's ragwort. This plant has been designated as a List 4 species by the California Native Plant Society, which denotes a plant of limited distribution or infrequent throughout a broader area in California, and vulnerability or susceptibility to threat appears low at this time. Therefore, this species is not considered rare or endangered for the purposes of CEQA under Section 15380 of the State CEQA Guidelines. The project would result in the loss of a small number of individuals of this species, and is not expected to substantially affect the distribution or survival of this species in the region. Therefore, impacts are considered less than significant.

Impact Category: Insignificant

Thresholds of Significance Criteria: 1

Mitigation Measure: BIO-6: Although impacts to Blochman's ragwort are considered to be less than significant, the following measures shall be implemented to avoid and/or minimize potential impacts to this special-status plant to the extent feasible:

A. Protective fencing shall be installed around populations of Blochman's ragwort to prevent loss of this special-status plant species.

Residual Impacts: Implementation of this mitigation measure will reduce potential impacts to insignificant levels.

Impact BIO-7: Long-term habitat loss would result in adverse effects to special-status wildlife species.

Discussion. Special-status wildlife species potentially present within the asphalt plant site includes coast horned lizard, Cooper's hawk, least Bell's vireo, loggerhead shrike, sharp-shinned hawk, yellow warbler, white-tailed kite and tri-colored blackbird. These species (if present) would be expected to forage and possibly breed within remaining riparian habitat along the Santa Maria River, along the southern plant site boundary and within the area affected by the proposed Landscape Plan.

Implementation of the proposed project would also result in a loss of habitat for the coast horned lizard, including the suitable habitat located within the southern boundary of the project site. This would include a loss of 0.32 acres of mixed willow series and 0.04 acres of coyote brush series due to construction-related impacts; in addition, loss of

habitat would include 1.2 acres of proposed landscape area. Although, the density of this species within suitable habitat is not known, the average distance between capture points for a similar species (*Phrynosoma solare*) is 30 meters for males and 15 meters for females, or about 10 per acre (Baharav, 1975). It is likely, that historical disturbance within the plant site has resulted in a decreased population of coast horned lizard. As such, the number of individuals affected due to long-term habitat loss is expected to be very small. Long-term mortality of this species and loss of suitable habitat would cumulatively affect the distribution or survival of this species in the region overall. Therefore, impacts to this species are considered significant but mitigable.

Cooper's hawk and loggerhead shrike were observed foraging in the vicinity of the plant site and may nest here. Least Bell's vireo, sharp-shinned hawk, yellow warbler, white-tailed kite and tri-colored blackbird may also forage on-site. Loss of habitat would be very small (0.46 acres) and is considered less than significant.

Impact Category: Significant but Mitigable

Thresholds of Significance Criteria: 1

Mitigation Measure: BIO-7: The following measures shall be implemented to avoid and/or minimize significant long-term impacts to those special-status species due to habitat loss:

A. Mitigation Measures BIO-5(C).

Residual Impacts: Implementation of this mitigation measure will reduce potential impacts to less than significant levels.

Impact BIO-8: Implementation of Mitigation Measure REC-2 may result in impacts to riparian vegetation and wildlife adjacent to Santa Maria River.

Discussion. In accordance with the County's adopted Trails Plan, Mitigation Measure REC-2 would require the applicant to grant a permanent easement to the County for a proposed trail corridor (25-foot wide minimum). The conceptual location of the trail easement is shown in Figure 5.11-1. The actual location of the trail and the offer to dedicate will be reviewed and approved by County Parks prior to the applicant receiving a building permit. Existing riparian may be impacted during construction and operation of the proposed trail. In addition, special-status wildlife species, such as the coast horned lizard, Cooper's hawk, least Bell's vireo, loggerhead shrike, sharp-shinned hawk, yellow warbler, white-tailed kite and tri-colored blackbird, that forage and breed within the riparian vegetation, may be impacted.

Impact Category: Significant but Mitigable

Thresholds of Significance Criteria: 1

Mitigation Measure: BIO-8:

- A. Prior to construction of the trail, County Parks shall have pre-activity surveys for special-status wildlife species (e.g., California red-legged frog, southwestern pond turtle, two-striped garter snake, etc.) conducted by a qualified biologist, according to regulatory agency protocols. In the event that these species are identified, then the appropriate regulatory agencies (USFWS and/or CDFG) shall be contacted prior to trail construction activities to determine appropriate buffers from project activities and any additional appropriate project-specific mitigation measures to be implemented; and,
- B. Following construction of the trail, County Parks shall establish interpretive signage to encourage users to stay within trail boundaries and to increase environmental awareness of the sensitivity of riparian habitat and special-status species.

Residual Impacts: Implementation of this mitigation measure will reduce potential impacts to less than significant levels.

5.4.3.4 LUO/LUE Amendment Impacts

The following impact analysis is based on the “worst case scenario” described within the introduction of this chapter.

Impact BIO-9: The proposed change in land use could result in direct and indirect impacts to existing habitats and wildlife within, and/or adjacent to, the LUO/LUE area.

Discussion: The proposed LUO/LUE Amendment would result in all existing land use categories (RS) and (CS) to be changed to the IND land use category (54.0 acres total). For the purposes of this analysis, potential impacts which could occur under the “worst-case” permissible land use for the existing land use categories (RS and CS) will be compared to those potential impacts which could occur under the “worst-case” land use for the proposed land use category (IND).

It is assumed that the “worst-case” permissible land use to occur under RS would be a Residential Care Facility, for CS it would be a Metal Industries, Fabricated, and for the proposed land category IND is would be Chemical Products Manufacturing. There are other land uses permissible within only the industrial land use category that may generate greater impacts, but were eliminated from further consideration because it was determined that these uses would not be allowed at the LUO/LUE area due to their incompatibility with existing uses.

Assuming the “worst-case” permissible land use for all land use categories, future build-out under the existing land use categories (RS and CS) or the proposed land use (IND) both have the potential to ultimately result in complete vegetation removal within the LUO/LUE area. The existing area of each plant community within the LUO/LUE area is provided in Table 5.4-6. Note that mixed willow series and riparian scrub are considered

wetlands under the CDFG and USFWS definition, and the Nipomo Creek channel likely supports wetlands under the Corps definition. It is assumed that a large portion of the riparian scrub habitat and wetlands would not be impacted unless Nipomo Creek and its tributary are channelized.

Table 5.4-6. Plant Communities/Habitat of the LUO/LUE Area

Habitat type	Approximate Acreage
Coyote Brush Series (CB)	3.50
Eucalyptus Series (EU)	2.90
Mixed Willow Series (MW)	6.75
Ornamental (OR)	0.39
Riparian Scrub (RS) ¹	2.79
Ruderal (RU)	31.38
Total	44.71*

¹ A large majority of this habitat would not be affected unless Nipomo Creek and tributaries were channelized.

* The remaining 6.29 acres are currently considered developed (see Figure 5.4-1).

Because both the existing land uses and proposed land use have the potential to ultimately result in complete removal of vegetation outside of the banks of Nipomo Creek and its tributary, it has been determined that the proposed LUO/LUE amendment would not result in any additional impacts to vegetation, wildlife habitat and wetlands within the LUO/LUE area.

However, the “worst-case” permissible land use under the proposed land use category (IND) would increase potential impacts to wildlife species, in comparison to those potential impacts which could occur under RS and CS. Specifically, the potential for a Chemical Products Manufacturing land use within any portion of the total 54.0 acres could result in a number of additional impacts in comparison to the “worst-case” permissible existing land use, including:

- Environmental Hazards – In the event that a chemical products manufacturing facility was developed within the proposed Industrial land use category there would be an increased presence of chemicals within subject area and risk of upset. As such, there would also be a potential for surrounding habitats and/or wildlife to be directly and/or indirectly exposed to these chemicals, which could result in injury, harm, or death. Exposure to these chemicals could result from direct contact, inhalation, ingestion, or indirectly from surface water runoff.

In addition, the presence of a chemical products manufacturing facility could result in other environmental hazards such as an increased potential for fires and explosions which may substantially affect surrounding habitats and wildlife species.

- Contaminated Surface Water Runoff – Development of a chemical products manufacturing facility may result in an increased amount of contaminated surface water runoff, in comparison to Residential Care Facility or Metal Industries land use. While biological systems have an assimilative capacity to absorb or break down pollution, this capacity is often exceeded, resulting in poor water quality and loss of biological diversity and abundance.

It is anticipated that the potential impacts discussed above would be prevented or mitigated by the federal, state, and local regulations as they relate to environmental hazards and storm water runoff. Please refer to Section 5.4 – Hazards and Hazardous Materials and Section 5.14 – Water Resources and Flooding.

Due to access constraints identified during the biological survey conducted by Padre, it should be noted that a large portion of the LUO/LUE area which would be affected by the land use ordinance amendment was not surveyed by Padre biologists. However, based on the presence of suitable habitat within the LUO/LUE area, it has been determined that the above-mentioned LUO/LUE amendment impacts (Environmental Hazards and Contaminated Surface Water Runoff) could adversely affect aquatic and semi-aquatic special-status species such as southern steelhead, arroyo chub, California red-legged frog, southwestern pond turtle and two-striped garter snake.

Potential impacts to aquatic species including special-status species (southern steelhead, arroyo chub and California red-legged frog) would be largely attributed to contaminated surface water runoff. Contamination from the chemical manufacturing facilities could alter water chemistry requirements for these species, in addition to potentially altering the physiology of the organisms and/or their prey (aquatic insects).

Semi-aquatic species such as southwestern pond turtle, two-striped garter snake, and western toad could also be impacted due to contaminated surface runoff. In addition, due to these species reliance on both aquatic and terrestrial environments, they may also be impacted due to the environmental hazards present in upland habitat. However, upland habitat for these species is highly degraded in many areas of the LUO/LUE area; therefore, there is a low potential for these species to occur within these habitats (ruderal, coyote brush, ornamental).

Impacts to avian, terrestrial species, and special-status plant species (black-flowered figwort) are expected to be the same under the “worst-case” permissible land use for both the existing and proposed land use categories because impacts to these species would be largely affected by the loss of habitat that would be experienced under the “worst-case” scenarios.

Impact Category: Significant but Mitigable

Threshold of Significance Criteria: 1, 6

Mitigation Measures: BIO-9: The following measures shall be implemented to avoid and/or minimize potential special-status species impacts associated with the proposed LUO/LUE amendment:

- A. Mitigation Measure BIO-4(C);
- B. Implement Mitigation Measure WR-9;
- C. Implement Mitigation Measure WR-10; and,
- D. Prior to any new development within 150 feet of Nipomo Creek, Nipomo Creek tributary, and/or Santa Maria River under the proposed IND land use category, pre-activity surveys for special-status wildlife species (e.g., California red-legged frog, southwestern pond turtle, two-striped garter snake, etc.) shall be conducted by a qualified biologist, according to regulatory agency protocols. In the event that these species are identified, then the appropriate regulatory agencies (USFWS and/or CDFG) shall be contacted prior to development activities to determine appropriate buffers from project activities and any additional appropriate project-specific mitigation measures to be implemented.
- E. Prior to any new development within the LUO/LUE Amendment Area, a qualified biologist shall determine whether the project site contains suitable habitat for Black-flowered figwort. If suitable habitat (i.e., chaparral, coastal dunes, and riparian scrub) is present, then pre-activity surveys for Black-flowered figwort shall be conducted by a qualified biologist, according to regulatory agency protocols. In the event that this species is identified, then the appropriate regulatory agencies (USFWS and/or CDFG) shall be contacted prior to development activities to determine appropriate buffers from project activities and any additional appropriate project-specific mitigation measures to be implemented.

Residual Impacts: Implementation of the above listed measures will reduce potential project impacts associated with the LUO/LUE amendment to less than significant levels.

5.4.3.4 Cumulative Impacts

As discussed in Section 8.2 of this EIR, cumulative projects include Caldwell Minor Use Permit, Loomis Minor Use Permit, and the Troesch Land Use Ordinance Amendment. The Caldwell Minor Use Permit involves the construction of one office building/warehouse and one warehouse with appurtenant vehicle storage. The Loomis Minor Use Permit involves the construction of a modular office building. The Troesch Land Use Ordinance Amendment involves the development of a commercial composting facility for receiving and processing green material. All three projects occur in previously developed areas and all of the projects have been determined to have no effect on cumulative biological resources, upon review by the County of San Luis Obispo. Therefore, the proposed project is not expected to have any cumulative impacts on biological resources in the area.

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