
IV. ENVIRONMENTAL IMPACT ANALYSIS

B. BIOLOGICAL RESOURCES

INTRODUCTION

This section of the Draft EIR provides a general description of biological and wetland resources on the site, information on regulations that serve to protect sensitive resources, and an assessment of the potential impacts of implementing the proposed project.

Methodology

The assessment of potential impacts on biological and wetland resources involved the review of available information, including detailed surveys and mapping of the site, and conducting a reconnaissance-level survey by the EIR biologist to confirm existing conditions on the site. Available literature and resource mapping reviewed include the following: past environmental studies for the site and vicinity; the occurrence records for special-status species and sensitive natural communities maintained by the California Natural Diversity Data Base (CNDDB) of the California Department of Fish and Game (CDFG); the California Native Plant Society (CNPS) *Inventory of Rare and Endangered Plants of California*,¹ and numerous other information sources. The field reconnaissance survey was conducted by the EIR biologist on 22 July 2006.

The following provides a summary of the past studies and mapping which formed the primary basis for the existing conditions on the site. These reports can be found in Appendix C. These consist of the following:

- *Revised Biological Assessment Report* prepared by Thomas Reid Associates for Pacific Quarry Homes.² This report was based on a survey conducted by biologists on April 23, 2004. The report provides a general description of vegetation and wildlife resources, potential for occurrence of special-status species, assessment of potential impacts, and recommended mitigation measures.
- *Natural Habitat Restoration Proposal* prepared by Go Native in 2004.³ This report summarizes the proposed restoration plans for approximately 8.8 acres of the site as native habitat. The

¹ California Native Plant Society, 2001, *Inventory of Rare and Endangered Plants of California*, 6th Edition.

² Thomas Reid Associates, 2005, *Revised Biological Assessment Report for Fassler Avenue Property, APN 022-083-020 and 022-083-030, for compliance with San Mateo County Local Coastal Program Policies*, revised April 27.

³ Go Native, 2004, *Natural Habitat Restoration Proposal for the Fassler Avenue Property, Pacifica, California APN 022-0830020 & 030, prepared for Pacifica Quarry Homes, October 6.*

restoration plans focus on removal of invasive plant species, reclamation of the Old Fassler Avenue alignment that bisects the site, restoration of appropriate coastal native habitat, and landscape controls on the interface of preservation areas with proposed development.

- Tree report on two *Cupressus macrocarpa* (Monterey Cypress) trees on the site prepared by Christopher Campbell, Tree Design.⁴ The report describes the two Monterey cypress on the site, indicates that they are proposed for removal, and acknowledges that the proposed project is to include substantial tree replacement plantings.

ENVIRONMENTAL SETTING

The proposed project site occupies the rolling hillside along the north side of Fassler Avenue. The majority of the proposed project site was disturbed as part of a former quarry operation and through construction of the former alignment of Fassler Avenue, which once bisected the site. The lower, northern slopes of the site appear to be relatively undisturbed, supporting a cover of native scrub vegetation. The following provides descriptions of vegetation and wildlife habitat types on the proposed project site, potential for occurrence of special-status species, occurrence of sensitive natural communities, and potential jurisdictional waters.

Vegetation and Wildlife

Vegetative cover on the site is dominated by northern coastal scrub, willow scrub and non-native grassland, with ruderal (weedy) cover occurring along the old asphalt road and portions of the former quarry face. Other than the willows, some of which have fairly thick trunks in excess of 12 inches but an overall height generally under 15 feet, and two Monterey cypress (*Cupressus macrocarpa*) trees described in the tree report, no other trees occur on the site. The two Monterey cypress trees grow together as the western edge of the site, with one tree having a trunk circumference of 67 inches measured at 24 inches above the ground surface and the other having a circumference of about 56 inches. Figure IV.B-1 shows the dominant vegetation cover types on the proposed project site. The following summarizes vegetation and associated wildlife habitat types on the proposed project site.

Northern Coastal Scrub

Northern coastal scrub forms the dominant cover over most of the site, and is spreading into the remaining grasslands. Coyote brush (*Baccharis pilularis*) is the most abundant species in the coastal scrub, which occurs with poison oak (*Toxicodendron diversiloba*), toyon (*Heteromeles arbutifolia*), sticky monkeyflower (*Mimulus aurantiacus*), honeysuckle (*Lonicera* sp.), California sagebrush (*Artemisia californica*), California blackberry (*Rubus parviflorus*), twinberry (*Lonicera involucrate*), and cow

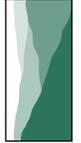
⁴ Christopher Campbell, Tree Design, , undated, letter report regarding Two (2) *Cupressus macrocarpa* (Monterey Cypress) at 801 Fassler Avenue, prepared for The Prospects, received by City of Pacifica on February 16, 2006.



Legend

-  Coastal Scrub
-  Willow Scrub - Potential Jurisdictional Wetland
-  Grassland/Ruderal

Source: Environmental Collaborative, Christopher A. Joseph & Associates, Google Earth, 2006



CHRISTOPHER A. JOSEPH & ASSOCIATES
 Environmental Planning and Research

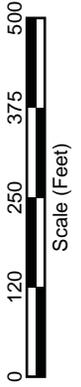


Figure IV.B-1
 Vegetative Cover

This page left blank intentionally.

parsnip (*Heracleum lanatum*), among others. Herbaceous species tend to be sparse where cover is dense or dominated by grassland species in openings.

Coastal scrub provides important protective cover for wildlife, many of which forage in the surrounding grasslands. The dense cover provides habitat for many bird and mammal species, including California quail (*Callipepla californica*), rufous-crowned sparrow (*Aimophila ruficeps*), Bewick's wren (*Thryomanes bewickii*), wrentit (*Chamaea fasciata*), Anna's hummingbird (*Calypte anna*), brush rabbit (*Sylvilagus bachmani*), deer mouse (*Peromyscus maniculatus*), and dusky-footed woodrat (*Neotoma lepida*). Black-tailed deer (*Odocoileus hemionus*), grey fox (*Urocyon cinereoargenteus*), raccoon (*Procyon lotor*), also forage and disperse through the scrub habitat.

Willow Scrub

Native willow form two thickets on the site, on either side of the abandoned Fassler Avenue alignment (see Figure IV.B-1). These thickets are dominated by dense stands of willow (*Salix sitchensis*), with a sparse groundcover. Willow can be an indicator of potential jurisdictional wetland habitat, and their occurrence on the site appears to be a result of seasonal seepage on the cut slopes and former quarry face. However, willows are deep rooted and often occur in transitional habitats which are not technically wetlands, such as the fringe of riparian corridors.

The dense cover associated with the willow provides protective cover for wildlife, including black-tailed deer, dusky-footed woodrat, California quail, and other bird species. No evidence of nesting birds or woodrats was observed during the field reconnaissance; however, the dense vegetation may have obscured existing nests.

Non-Native and Native Grasslands

Plant species composition in the grasslands is dominated by non-native grasses and forbs,⁵ such as wild oats (*Avena fatua*), soft chess (*Bromus hordeaceus*), bur clover (*Medicago polymorpha*), English plantain (*Plantago lanceolata*), scarlet pimpernel (*Anagallis arvensis*), bull thistle (*Cirsium vulgare*), and dove's-foot geranium (*Geranium molle*). A number of highly invasive species are also present on the proposed project site, although the applicant has worked to control and eradicate many of these species. Invasive species include: pampas grass (*Cortaderia selloana*), poison hemlock (*Conium maculatum*), fennel (*Foeniculum vulgare*), French broom (*Genista monspessulana*), periwinkle (*Vinca major*), German ivy (*Senecia mikanioides*), and prickly lettuce (*Lactuca serriola*).

Portions of the grasslands continue to support native species, but not to the degree that they could be characterized as native grassland. Native species include: purple needlegrass (*Nassella pulchra*), oniongrass (*Melica imperfecta*), coast buckwheat (*Eriogonum latifolium*), common cinquefoil (*Potentilla*

⁵ Forbs are any herb that is not a grass or grasslike or a broad-leaved herb other than a grass, especially one growing in a field, prairie, or meadow.

glandulosa), common yarrow (*Achillea millefolium*), beach strawberry (*Fragaria chiloensis*), and fescue (*Vulpia* spp.).

The grasslands support a number of insects, reptiles, birds, and small mammals, which in turn serve as important prey for predatory reptiles, birds, and mammals. Some of these species forage in the open grasslands, and retreat to the protective cover of the surrounding scrub for refuge and nesting. Herbivorous small mammals include Botta's pocket gopher (*Thomomys bottae*) and California vole (*Microtus californicus*). Reptiles associated with grassland habitat include: gopher snake (*Pituophis catenifer*), common king snake (*Lampropeltis getula*), western rattlesnake (*Crotalus ciridis*), western fence lizard (*Sceloporus occidentalis*), and alligator lizard (*Elgaria* sp.). Bird species include granivores, omnivores, and insectivores, as well as birds-of-prey. Bird species observed or suspected to forage on the site include: western meadowlark (*Sturnella neglecta*), Say's phoebe (*Sayornis saya*), savanna sparrow (*Passerculus sandwichensis*), red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo leucurus*), white-tailed kite (*Elanus leucurus*), American kestrel (*Falco sparverius*), and great-horned owl (*Bubo virginianus*). Large herbivores and predatory mammals that frequent the grasslands or use the open areas for dispersal and movement across the site include: black-tailed deer, black-tailed jackrabbit (*Lepus californicus*), long-tailed weasel (*Mustela frenata*), grey fox, striped skunk (*Mephitis mephitis*), and possibly bobcat (*Lynx rufus*) and coyote (*Canis latrans*).

Special-Status Species

Special-status species are plants and animals that are legally protected under the State and/or federal Endangered Species Acts or other regulations, as well as other species that are considered rare enough by the scientific community and trustee agencies to warrant special consideration, particularly with regard to protection of isolated populations, nesting or denning locations, communal roosts, and other essential habitat. As discussed below, under Regulatory Setting, species with legal protection under the Federal and State Endangered Species Acts often represent major constraints to development; particularly when they are wide ranging or highly sensitive to habitat disturbance and where proposed development would result in a "take" of these species. "Take" as defined by the Federal Endangered Species Act (ESA) means to "harass, harm, pursue, hunt, shoot, kill, trap, capture, or collect" a threatened or endangered species. "Harm" is further defined by the USFWS to include the killing or harming of wildlife due to significant obstruction of essential behavior patterns (i.e. breeding, feeding, or sheltering) through significant habitat modifications or degradation. The CDFG also considers the loss of listed species habitat as "take", although this policy lacks statutory authority and case law support under the California Endangered Species Act (CESA).

A query of the CNDDDB, together with other relevant information, indicates that several occurrences of special-status plant and animal species have been recorded from or are expected to occur in the Pacifica vicinity of San Mateo County. The *Revised Biological Assessment Report* provides information on special-status species known from the Pacifica vicinity, including their status, and conclusion regarding potential for occurrence on the site. No known occurrences of special-status plant or animal species actually extend over the site or immediate vicinity. Several reported occurrences of Montara manzanita

(*Arctostaphylos montaraensis*) are known from Montara Mountain about 1.5 miles to the southeast of the site, and occurrences of San Francisco gumplant (*Grindelia hirsutula* var. *maritima*) and San Francisco spineflower (*Chorizanthe cuspidate* var. *cuspidate*) have been reported along the Ocean shoreline. Known occurrences of California red-legged frog (*Rana aurora dryatonii*) have been recorded from San Pedro Creek approximately one mile to the south of the site, and from Calera Creek, upstream of the Rockaway Quarry, about one mile to the north. San Francisco garter snake (*Thamnophis sirtalis tetrataenia*) is also known to occur near the mouth of Calera Creek and from San Pedro Creek. The following provides a discussion of special-status species known from the Pacifica vicinity, and conclusion regarding presence or absence on the site.

Special-Status Plant Species

The *Revised Biological Assessment* identified eight plant species that have been reported within five miles of the site, including: Montara manzanita, San Francisco Bay spineflower, San Francisco gumplant, Hickman's cinquefoil (*Potentilla hickmanii*), white-rayed pentachaeta (*Pentachaeta bellidiflora*), coast yellow linanthus (*Linanthus croceus*), and rose linanthus (*Linanthus rosaceus*). All of these are maintained on List 1B of the CNPS *Inventory*, and Hickman's cinquefoil and white-rayed pentachaeta are State and Federally-listed as endangered. A survey for special-status plants was conducted on the site on April 24, 2003 by the applicant's consulting biologists, when all of these species and other special-status plant species would have been most easily detected. No special-status plant species were detected during the focused plant survey, and due to the extent of past disturbance and absence during the survey, none are believed to occur on the site.

Special-Status Animal Species

The *Revised Biological Assessment* indicates that nine special-status animal species have been reported within five miles of the proposed project site by the CNDDDB. These include: California red-legged frog, San Francisco garter snake, the federally-threatened steelhead (Central California Coast ESU) (*Onchorynchus mykiss*), the State and federally-endangered California clapper rail (*Rallus longirostris obsoletus*), the federally-endangered mission blue butterfly (*Icarioides missionensis*), the federally-endangered San Bruno elfin butterfly (*Incisalia mossii bayensis*), the federally-endangered Myrtle's silverspot (*Speyeria zerene myrtieae*), and San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*) and saltmarsh common yellowthroat (*Geothlypis trichas sinuosa*) which have no legal protective status but are considered California Special Concern species (CSC) by the CDFG. Information on each of these species is summarized below.

California Red-legged Frog. This species is listed as threatened by the USFWS and is recognized as a CSC species by the CDFG. It typically occurs in aquatic habitat of streams and ponds, but can disperse considerable distances in search of breeding and aestivation sites. Continued loss of upland dispersal habitat, fragmentation of remaining breeding locations, competition and predation by bullfrog, and degradation of aquatic habitat are primary concerns regarding protection and recovery of this species.

The site is outside of the designated critical habitat areas for CRF, which were recently approved by the USFWS. As indicated in the *Revised Biotic Assessment Report*, the site does not contain a water source for California red-legged frog to use as either breeding habitat or non-breeding shelter habitat. Protocol surveys were not conducted, but this species is not suspected to occur on the site due to the absence of suitable habitat and distance to known occurrences. The *Revised Biological Assessment* included a recommendation for on-site monitoring during construction to ensure that no California red-legged frog are present, in the remote instance that an individual was able to disperse into the area.

San Francisco Garter Snake. This subspecies is State and federally-listed as endangered. It occurs in wetlands and the surrounding grasslands near ponds, marshes, and sloughs. They are typically found around ponds and marshes that support large populations of Pacific tree frog (*Hyla regilla*) and California red-legged frog, which serve as their primary food source. San Francisco garter snake is known to disperse through a variety of habitat types between breeding areas and they may retreat to uplands, especially during the rainy season.

Suitable habitat for San Francisco garter snake is absent on the proposed project site and surrounding lands. Protocol surveys were not conducted, but this species is not suspected to occur on the site due to the absence of suitable habitat, distance to known occurrences, and fact that the proposed project site is not located in between potential breeding habitat where individuals may occasionally be expected to disperse. Although the potential for an individual San Francisco garter snake to disperse onto the proposed project site is considered highly unlikely, the *Revised Biological Assessment* included a recommendation for on-site monitoring during construction to ensure that no individuals are present, in the remote instance that one was able to disperse into the area.

Mission Blue Butterfly. Mission blue butterfly is associated with coastal grasslands and coastal sage scrub habitats where its larval foodplants, three perennial species of lupine (*Lupinus albifrons*, *L. variicolor*, and *L. formosus*), grow. This subspecies is now known primarily from San Mateo County, but also occurs at Twin Peaks in San Francisco and at the north end of the Golden Gate Bridge in Marin County. Nectar from coast buckwheat serves as the primary food source for adult butterflies, which will also visit goldenaster (*Heterotheca villosa*), Ithuriel's spear (*Triteleia laxa*), and blue dicks (*Dichelostemma capitatum*) during the adult flight season from March through June. Suitable larval host plant species are absent, and this species is therefore not suspected to occur on the site. Coast buckwheat and some other suitable adult nectar plants are found on portions of the site, but these species are common in coastal scrub and grassland communities. The presence of suitable adult nectar plants on the site is not expected to provide essential habitat or attract Mission blue butterflies to the site, particularly given the distance to known occurrences and larval host plants.

San Bruno Elfin Butterfly. San Bruno elfin butterfly is found in association with rock outcrops in coastal scrub or native bunch grassland habitat, where its sole larval foodplant, pacific stone crop (*Sedum spathulifolium*), grows. All known populations of this butterfly are from San Mateo County, with populations occurring on Whiting Ridge within the neighboring Crystal Springs Reservoir, on Montara Mountain, at Milagra Ridge, and on private land adjacent to Milagra Ridge. Adults feed on nectar from

several plant species (e.g. *Lomatium utriculatum*, *Achillea millefolium*, *Arabis blepharophylla*, *Erysimum franciscanum*, *Ranunculus californicus*, and *Fragaria californica*) during their flight season in March and April. Larvae feed on pacific stone crop flowers in May and June. Suitable larval host plant species are absent, and this species is therefore not suspected to occur on the proposed project site. Beach strawberry and some other suitable adult nectar plants are found on portions of the site, but these species are common in coastal scrub and grassland communities. The presence of suitable adult nectar plants on the site is not expected to provide essential habitat or attract San Bruno elfin butterflies to the site, particularly given the distance to known occurrences and larval host plants.

Myrtle's Silverspot. Formerly widespread on the San Francisco and Marin peninsulas, the Myrtle's silverspot is now only known from a few sites in northern Marin County. Populations of Myrtle's silverspot are restricted to areas immediately adjacent to the coast: dunes, scrub, and grasslands. Adults appear throughout the late summer and early fall, living for about three weeks during which time they feed on nectar of primarily gumplant (*Grindelia* spp.), mate and lay eggs. The eggs are laid only on species of *Viola*, possibly only *Viola adunca*, and hatch in the fall. Most of the larval feeding, however, occurs in the spring when most of the violet's growth takes place. Suitable habitat for this species, including larval host plant and adult nectar plant species are absent, and Myrtle's silverspot is therefore not suspected to occur on the site.

Steelhead. This Central California Coast ESU of this species is restricted to coastal streams through the Central California coast. The absence of any perennial or intermittent streams on the site preclude the possible occurrence of steelhead or any fishery resource. However, appropriate measures would be required to ensure that indirect effects of sedimentation and water quality degradation does not occur during rainfall events.

San Francisco Dusky-Footed Woodrat. This subspecies has no legal protective status, but is considered a CSC by the CDFG. It occurs in a variety of brushy and wooded habitats, including coastal scrub. The subspecies occurs in the Santa Cruz Mountains and in the East Bay. It builds stick houses for nesting and protection. Numerous stick nests were observed in the open scrub on the open face of the former quarry, and numerous other nests most likely occur in the dense coastal scrub along the northern portion of the site. The *Revised Biotic Assessment Report* included a recommendation that occupied woodrat nests should be avoided, and if this was not feasible, that individuals should be trapped and relocated to secure habitat outside the spring/summer breeding season.

California Clapper Rail. This species is typically associated with emergent coastal salt marsh along the San Francisco Bay and other protected water bodies along the coast. Suitable habitat is absent on the proposed project site and this species is not expected to be even an occasional visitor to the site.

Other Bird Species. Although not addressed in the *Revised Biological Assessment*, there is a possibility that one or more special-status bird species could establish nests on the proposed project site. Species considered to have some potential for possible nesting in the scrub habitat on the site include: northern harrier (*Circus cyaneus*), white-tailed kite, and loggerhead shrike (*Lanius ludovicianus*). If nests were

found in the future, the nesting individuals would be protected under the Migratory Bird Treaty Act and possibly other federal and state laws when in active use. No nests were observed during the field reconnaissance surveys in preparation of this analysis. The Cypress trees identified on the project site are not native to the site, and do not support active nests or other important wildlife habitat values. The absence of nesting trees precludes the possibility of more common tree-nesting raptors from nesting on the site, such as red-tailed hawk, red-shoulder hawk, and great horned owl. Pre-construction surveys would be necessary to confirm presence or absence of any nesting activity, and this could change in the future as nests are abandoned and new nests established.

It should be noted that there remains a potential for occasional use of the proposed project site vicinity by other bird species of concern including: ferruginous hawk (*Buteo regalis*), Aleutian Canada goose (*Branta canadensis leucopareia*), merlin (*Falco columbarius*), and prairie falcon (*Falco mexicanus*), among others. Species usage would be limited to occasional wintering activity by migratory bird species or possible occasional foraging activity by species for which essential breeding habitat is absent from the site.

Sensitive Natural Communities

In addition to species-oriented management, protecting habitat on an ecosystem-level is increasingly recognized as vital to the protection of natural diversity in the state. This is considered the most effective means of providing long-term protection of ecologically viable habitat, and can include whole watersheds, ecosystems, and sensitive natural communities. Providing functional habitat connectivity between natural areas is essential to sustaining healthy wildlife populations and allowing for the continued dispersal of native plant and animal species. Sensitive natural communities are natural community types that are generally rare or especially valuable because of their special nature or role in an ecosystem and which tend to be vulnerable to disturbance and degradation due to human activities and development. These communities may or may not necessarily support special-status plant and animal species. These sensitive natural communities are usually identified in local or regional plans, policies, or regulations, or by state or federal resource agencies (CDFG (i.e., CNDDDB) or the USFWS).

With the possible exception of the willow stands, the site is dominated by relatively common coastal scrub and non-native grassland natural community types, neither of which is considered sensitive natural communities. None of the grasslands contain a native species composition high enough or large enough to be considered a sensitive natural community type. The willow scrub is associated with seeps on the face of the former quarry, and could be considered riparian habitat. For the purposes of this EIR, it should be considered a sensitive natural community type.

Jurisdictional Waters

Although definitions vary, wetlands are generally considered to be areas that are periodically or permanently inundated by surface or groundwater, and support vegetation adapted life in saturated soil. Wetlands are recognized as important features on a regional and national level due to their inherent value to fish and wildlife, use as storage areas for storm and flood waters, and water recharge, filtration and

purification functions. The U.S. Army Corps of Engineers (Corps), CDFG, and San Francisco Bay Regional Water Quality Control Board (RWQCB) have jurisdiction over modification to riverbanks, lakes, streams channels, and other wetland features. Jurisdiction of the Corps is established through provisions of Section 404 of the Clean Water Act, which prohibits the discharge of dredged or fill material without a permit. The RWQCB jurisdiction is established through Section 401 of the Clean Water Act, which requires certification or waiver to control discharges in water quality. Jurisdictional authority of the CDFG over wetland areas is established under Section 1600 of the State Fish and Game Code, which pertains to activities that would disrupt the natural flow or alter the channel, bed or bank of any lake, river or stream.

A preliminary wetland assessment was conducted as part of the field reconnaissance in preparation of this section. No established creeks or drainages were observed on the accessible portions of the proposed project site where development is proposed. However, the stands of willow contain evidence of vegetation, soils, and hydrologic indicators that they may qualify as jurisdictional wetlands under Corps and/or RWQCB regulations. The extent of these willow stands, which are hydrologically connected by a culvert under the former alignment of Fassler Avenue, is indicated in Figure IV-B-1. A routine wetland delineation, with verification by the Corps, would be required to confirm whether these features are technically regulated wetlands.

REGULATORY SETTING

Federal

Federal Endangered Species Act

The USFWS in the Department of the Interior, and the National Oceanic and Atmospheric Administration (NOAA) in the Department of Commerce share responsibility for administration of the ESA. The ESA provides broad protection for species of fish, wildlife and plants that are listed as threatened or endangered in the United States or elsewhere. The ESA has four major components: provisions are made for listing species, requirements for consultation with USFWS, prohibitions against “taking” of listed species, and the provisions for permits that allow incidental “take”. The ESA also discusses recovery plans and the designation of critical habitat for listed species.

The Migratory Bird Treaty Act of 1918

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

Clean Water Act Section 404

Although definitions vary to some degree, wetlands are generally considered to be areas that are periodically or permanently inundated by surface or ground water, and support vegetation adapted to life in saturated soil. Wetlands are recognized as important features on a regional and national level due to their high inherent value to fish and wildlife, use as storage areas for storm and flood waters, and water recharge, filtration, and purification functions. Technical standards for delineating wetlands have been developed by the Corps and the USFWS, which generally define wetlands through consideration of three criteria: hydrology, soils, and vegetation.

Under Section 404 of the Clean Water Act (CWA), the Corps is responsible for regulating the discharge of fill material into waters of the United States. The term "waters" includes wetlands and non-wetland bodies of water that meet specific criteria as defined in the Code of Federal Regulations. All three of the identified technical criteria must be met for an area to be identified as a wetland under Corps jurisdiction, unless the area has been modified by human activity. In general, a permit must be obtained before fill can be placed in wetlands or other waters of the United States. The type of permit depends on the amount of acreage and the purpose of the proposed fill, subject to discretion of the Corps.

The RWQCB is responsible for implementing Section 401 of the CWA and for upholding state water quality standards. Pursuant to Section 401 of the CWA, projects that apply for a Corps permit for discharge of dredge or fill material, and projects that qualify for a Nationwide Permit must obtain water quality certification. The RWQCB has taken an increasing role over regulating wetlands that are hydrologically isolated following the U.S. Supreme Court decision in 2001 regarding the case *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers (SWANCC)*, which limits the jurisdictional authority of the Corps under Section 404. These hydrologically isolated features are now regulated by the RWQCB under authority of Section 401 of the CWA and the Porter-Cologne Water Quality Control Act.

State

California Endangered Species Act

The CESA is similar to the main provisions of the federal ESA and is administered by the CDFG. Unlike its federal counterpart, CESA applies the take prohibitions to species petition for listing (state candidates). Section 86 of the Fish and Game Code defines "take" as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill."

The CDFG maintains lists for Candidate-Endangered Species and Candidate-Threatened Species, which have the same protection as listed species. Under CESA the term "endangered species" is defined as a species of plant, fish, or wildlife which is "in serious danger of becoming extinct throughout all, or a significant portion of its range" and is limited to species or subspecies native to California. CESA prohibits the "taking" of listed species except as otherwise provided in State law.

California Native Plant Protection Act

The Native Plant Protection Act (NPPA) of 1977 gave the California Fish and Game Commission the power to designate native plants as "endangered" or "rare" and protects endangered and rare plants from take.

The Natural Community Conservation Planning Act

The Natural Community Conservation Planning Act (NCCP Act) was added to CESA in 1991 which authorizes voluntary cooperation among CDFG, landowners, and other interested parties to develop natural community conservation plans which provide for early coordination of efforts to protect listed species or species that are not yet listed. The primary purpose of the NCCP Act is to preserve species and their habitats, while allowing reasonable and appropriate development to occur on affected lands.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act establishes the State Water Resources Control Board and each RWQCB as the principal State agencies for having primary responsibility in coordinating, protecting, enhancing, and controlling water quality in California. The project is under the San Francisco Regional Water Quality Control Board Jurisdiction. The San Francisco (Region 2) office guides and regulates water quality in streams and aquifers of the San Francisco Bay area through designation of beneficial uses, establishment of water quality objectives, administration of the National Pollutant Discharge Elimination System (NPDES) permit program for storm water and construction site runoff, and Section 401 water quality certification where development results in fill of jurisdictional wetlands or waters of the US under Section 404 of the CWA. Additionally the office regulates water quality in the Bay Area in accordance with the Water Quality Control Plan or 'Basin Plan'.⁶ The Basin Plan presents the beneficial uses, which the Regional Board has specifically designated for local aquifers, streams, marshes, rivers, and the Bay, as well as the water quality objectives, and criteria that must be met to protect these uses.

Section 1602 Lake and Streambed Alteration Agreement

Jurisdictional authority of the CDFG over wetland areas is established under Section 1600 of the Fish and Game Code, which pertains to activities that would disrupt the natural flow or alter the channel, bed, or bank of any lake, river, or stream. The Fish and Game Code stipulates that it is unlawful to substantially divert or obstruct the natural flow or substantially change the bed, channel or bank of any river, stream or lake without notifying the CDFG, incorporating necessary mitigation, and obtaining a Streambed Alteration agreement. The Wetlands Resources Policy of the CDFG states that the Fish and Game

⁶ *Regional Water Quality Control Board, San Francisco Bay (Region 2), 1995, Water Quality Control Plan (Basin Plan), June 1995.*

Commission will strongly discourage development in or conversion of wetlands unless, at a minimum, project mitigation assures there will be no net loss of either wetland habitat values or acreage. The Department is also responsible for commenting on projects requiring Corps permits under the Fish and Wildlife Coordination Act of 1958.

Local

City of Pacifica General Plan

The Open Space and Conservation Elements of the *City of Pacifica General Plan* includes goals and policies related to the protection of sensitive biological and wetland resources. Most of these relate to preservation of creeks, trees, and native vegetation, as well as essential habitat for special-status species, and important wildlife habitat. Relevant policies are listed below.

Open Space Element

Policy 1: Retain open space which preserves natural resources, protects visual amenities, prevents inappropriate development, provides for the managed use of resources, and protects the public health and safety.

Policy 3: Encourage development plans which protect or provide generous open space appropriately landscaped. Balance open space, development and public safety, particularly in the hillside areas.

Policy 6: Where open space is a condition of development, the City should require that it be clearly designated as permanent open space.

Conservation Element

Policy 1: Conserve trees and encourage native forestation.

Policy 2: Require the protection and conservation of indigenous rare and endangered species.

Policy 3: Protect significant trees of neighborhood or area importance and encourage planting of appropriate trees and vegetation.

Policy 5: Local year-round creeks and their riparian habitat shall be protected.

Policy 7: Promote the conservation of all water, soil, wildlife, vegetation, energy, minerals and other natural resources.

City of Pacifica Heritage Tree Ordinance

The Municipal Code Sec. 4-12.04 for the City of Pacifica requires approval to remove or destroy trees above a certain size. Specifically, the City's municipal code states: No person shall cut down, destroy, remove, or move a heritage tree, or engage in new construction within the dripline of a heritage tree

growing on private property or City-owned property, without a permit. “Heritage tree” shall mean and include: (1) All trees within the City of Pacifica, exclusive of eucalyptus, which have a trunk with a circumference of fifty (50”) inches (approximately sixteen (16”) inches in diameter) or more, measured at twenty-four (24”) inches above the natural grade; or (2) A tree or grove of trees, including eucalyptus, designated by resolution of the Council to be of special historical, environmental, or aesthetic value.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

Based on Appendix G of the *CEQA Guidelines*, the proposed project would have a significant environmental related to biological resources impact if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service;
- Have a substantial adverse effect on federally-protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery site;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance;
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

In addition to these thresholds of significance, those requirements outlined in the Regulatory Setting discussion, as well as, the existing site conditions provided in the Environmental Setting will be utilized for the project impact analysis in order to establish whether a project impact would be significant.

Biological Resources Issues Not Analyzed Further

As discussed in the Initial Study (Appendix A), the proposed project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. The proposed project site is not subject to a

Habitat Conservation Plan, Natural Community Conservation Plan, or any other habitat plan. Therefore, development of the proposed project would not conflict with any habitat conversion plan and thus, no further analysis of the issue is required.

Proposed Project

The proposed project would involve development of approximately 4.8 acres of the site, primarily in the western portion of the property which has been extensively disturbed by past quarry operations and construction of the abandoned Fassler Avenue alignment. Impacts to vegetation and wildlife would occur as a result of clearing, grading, and filling during site preparation, although impacts to wildlife would also occur through habitat fragmentation and increased human activity on the site. Existing vegetative cover, composed primarily of non-native grasslands, coastal scrub, and ruderal (plants that grow in poor land or waste places) cover, would be removed as part of initial grubbing and grading. The proposed project also includes removal of the existing paving from the abandoned Fassler Avenue alignment outside the proposed limits of development, and restore the area as natural habitat. The *Natural Habitat Restoration Proposal* prepared for the applicant summarizes the proposed restoration plans for approximately 8.8 acres of the site as native habitat. The restoration plans focus on removal of invasive plant species, reclamation of the old Fassler Avenue alignment that bisects the site, restoration of appropriate coastal native habitat, and landscape controls on the interface of preservation areas with proposed development.

Project Impacts

Impact IV.B-1 The proposed project could have a Substantial Adverse Effect on Species Identified as a Candidate, Sensitive, or Special Status Species.

Special-Status Plant Species

Implementation of the proposed project would not directly affect any known occurrences of special-status plant species on the site. Based on the results of the survey conducted by the applicant's consulting biologist and extent of past disturbance on the site, no special-status plant species are believed to occur on the site, and no adverse impacts are anticipated. The impact to special-status plants would therefore be *less than significant*.

Special-Status Animal Species

Impacts to special-status animal species are considered significant. Implementation of the proposed project is not expected to have any significant adverse impacts on special-status animal species. However, direct or indirect impacts on a number of species could occur, as discussed in the *Revised Biological Assessment*. These include: California red-legged frog, San Francisco garter snake, and San Francisco dusky-footed woodrat. In addition, there are several species of birds which could be adversely affected if nests are established on the site in the future before construction proceeds.

Essential habitat for California red-legged frog and San Francisco garter snake is absent on the site, and the likelihood that individuals of these species would be present on the site is extremely remote.

However, there remains a remote possibility that one or more individuals could disperse into the construction area and be inadvertently taken. This is considered a significant impact. Implementation of the recommended avoidance measure specified in the *Revised Biotic Assessment Report* would serve to adequately address this potential for individuals dispersing onto the site. Proposed grading and development would result in the loss of a number of San Francisco dusky-footed woodrat nests. The extensive stand of coastal scrub proposed as open space on the site contains many woodrat nests that would remain undisturbed, but the possible loss of active nests and individuals would be considered a significant impact. Although this subspecies is not protected under the State or federal Endangered Species Acts, it is considered a CSC by the CDFG. Trapping and relocation of this small mammal could be successfully accomplished to avoid inadvertent take of any individual woodrats within the limits of proposed grading and development. The *Revised Biotic Assessment Report* includes a recommendation to avoid woodrat nests if feasible, and to trap and relocate any individuals outside the spring/summer breeding season if complete avoidance is not feasible.

While no nests of raptors or loggerhead shrike were observed on the proposed project site, there is a potential for new nests to be established prior to project implementation. If new nests are established prior to construction, vegetation clearing or disturbance in the immediate vicinity of a nest in active use could result in abandonment of the nest or loss of eggs and young, which would be a violation of the Migratory Bird Treaty Act. This is considered a significant impact. Mitigation Measure IV. B-3 recommends pre-construction surveys during the nesting season (March through August) to confirm presence or absence of any new nests. Implementation of Mitigation Measures MM IV.B-1 thru MM IV.B-3 would ensure impacts to special-status animal species are mitigated to a level of *less than significant*.

Impact IV.B-2 The proposed project could have a Substantial Adverse Effect on Riparian Habitat or Other Sensitive Natural Community.

Proposed grading and development would result in impacts to the stands of willow scrub on the site. According to the site plans for the proposed project, the Community Gardens would extend over portions of the willow scrub habitat, and a man-made creek would pass through the southern stand of willows. Grading necessary to accommodate these features and the Upper Playfield could extend further into the willow stands. This is considered a significant impact. Implementation of Mitigation Measure MM IV.B-4 would ensure that grading activities would avoid the willow scrub. As such, this mitigation measure would ensure that impacts would be *less than significant*.

Impact IV.B-3 The proposed project could have a Substantial Adverse Effect on Federally Protected Wetlands as defined by Section 404 of the Clean Water Act.

Potential impacts on jurisdictional waters would include possible direct modifications to the stand of willow scrub, if it is confirmed as a wetland, and indirect changes associated with the increased potential for erosion and water quality degradation. Potential erosion and degradation of wetlands and aquatic habitat may result from increased urban runoff volumes and degraded water quality associated with implementation of the proposed project. Grading and impervious surface from roads and structures

would magnify the volume of runoff and potential for urban pollutants, with perhaps the greatest potential damage resulting from sedimentation during the construction phase of the project and from new non-point discharge of automobile by-products, fertilizers and herbicides. However, implementation of adequate erosion control measures, and use of Best Management Practices would serve to address potential indirect impacts on wetlands and water quality, as discussed in the Section IV.F Hydrology and Water Quality. The *Revised Biological Assessment* includes use of Best Management Practices and implementation of appropriate erosion control methods to control erosion and sedimentation, with preparation of a Storm Water Pollution Prevention Plan.

Based on the preliminary wetland assessment conducted in the preparation of this section, it appears that the stands of willow scrub on the site may be jurisdictional wetlands. A wetland delineation, verified by the Corps, would be required to determine whether these features are in fact jurisdictional. As previously mentioned, the Community Gardens would extend over portions of the willow scrub habitat, and a man-made creek would pass through the southern stand of willows. Grading necessary to accommodate these features and the Upper Playfield could affect the potential jurisdictional wetlands. This is considered a significant impact. The willow scrub habitat will be avoided and protected as described in Mitigation Measure IV.B-4 regardless of the results of the wetland delineation and would ensure that grading activities avoid the willow scrub habitat. In addition, Mitigation Measure MM IV.B-5 requires a Wetland Mitigation Program be prepared that avoids grading in delineated wetlands or requires protection and replacement of such wetlands. Implementation of these mitigation measures would ensure that impacts to federally protected wetlands would remain *less than significant*.

Impact IV.B-4 Implementation of the proposed project could interfere Substantially with the Movement of 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.

The proposed project would alter existing habitat on approximately 4.8 acres of the site, replacing areas of primarily non-native grassland and scrub with residential development and landscape improvements. However, these modifications are generally not expected to affect any native wildlife nursery areas, substantially interfere with the movement of native resident or migratory wildlife, or obstruct migratory wildlife corridors. Wildlife in the area are already acclimated to human activity along the Fassler Avenue roadway, and a substantial portion of the site would remain as undeveloped open space and would continue to be available for wildlife use and movement. Implementation of the proposed *Natural Habitat Restoration* program would improve the extent of natural habitat on the site, through the removal of invasive exotics and restoration of native cover along the former Fassler Avenue alignment.

There is a possibility that proposed grading and the activities of future residents and visitors could further degrade the value of the remaining natural communities on the site. Species such as French broom, Scotch broom (*Cytisus scoparius*), and pampas grass are currently not a severe problem on the site due in part to removal and control by the applicant. However, grading would create exposed slopes that provide preferred habitat for these species and development of the site could contribute to their spread if not carefully controlled. Dogs and cats owned by future residents of the project could harass or kill wildlife if

not controlled, and intense night-time lighting could disrupt wildlife use of natural areas unless carefully designed. There is also a possibility that future residents could plant a number of highly invasive non-native plant species as landscaping. Many species used in landscaping are highly invasive, and could spread into open space areas to be preserved, further reducing the native habitat values of the site. The California Exotic Pest Plant Committee has identified certain plant species typically used in landscaping considered to be unsuitable due to their invasive character and tendency to out-compete native flora.⁷ As a result, impacts are considered significant on the existing wildlife habitat values of the site. Implementation of Mitigation Measures MM IV.B-6 and MM IV.B-7 would ensure through use of landscape architects and additional wildlife avoidance measures that impacts related to native resident or wildlife species remain *less than significant*.

Impact IV.B-5 The proposed project would not conflict with local policies and ordinances related to biological and wetland resources.

In general the proposed project would conform with local policies and ordinances related to protection of biological and wetland resources. Most of the relevant policies from the City of Pacifica General Plan are general in nature, calling for retention of open space, preservation of creeks, and protection of trees and other resources. As currently proposed and described in the tree report prepared for the applicant,⁸ the project would require removal of the two Monterey cypress trees on the site. Both of these trees meet the definition of “Heritage tree” under the City’s Municipal Code Sec. 4-12.04, which would require approval for their removal. However, these trees are not native to the site, and do not support active nests or other important wildlife habitat values. Nonetheless, impacts are considered significant. Mitigation Measure MM IV.B-8 would ensure that the proposed project would comply with the City ordinance, including preparing the required tree protection plan. Implementation of Mitigation Measure MM IV.B-8 would ensure that impacts related to conflicts with local policies remain *less than significant*.

MITIGATION MEASURES

MM IV.B-1 Special-Status Amphibian and Reptile Species

A qualified biologist shall be retained by the applicant to oversee construction and ensure that no inadvertent take of the San Francisco garter snake or California red-legged frog occurs as a result of development of the site. The following procedures, based on the recommendations in the *Revised Biological Assessment*, shall apply:

- Prior to any grading or grubbing of the site, a biologist shall conduct a preconstruction survey to confirm absence of any California red-legged frogs or San Francisco garter snakes on the site. During the construction phase of the project, a trained biologist or a trained on-site monitor (such

⁷ California Exotic Pest Plant Council, 2006, *The CalEPPC List: Exotic Pest Plants of Greatest Ecological Concern in California*, March.

⁸ Christopher Campbell, *Tree Design*, *ibid*.

as the construction foreman) shall check the site in the morning and in the evening of construction activities for the presence of California red-legged frogs and San Francisco garter snakes. This includes checking holes, under vehicles and under boards left on the ground. If any California red-legged frogs or San Francisco garter snakes are found, construction shall be halted until they disperse naturally, and the monitor shall immediately notify the biologist in charge and the USFWS. Construction shall not proceed until adequate measures are taken to prevent dispersal of any individuals into the construction zone, as directed by the USFWS. Subsequent recommendations made by the USFWS shall be followed. The monitor shall not handle or otherwise harass the animal. The biologist in charge and the on-site monitor shall be aware of all terms and conditions set by USFWS and CDFG on the project. The biologist in charge shall train the on-site monitor in how to identify California red-legged frogs and San Francisco garter snakes. The biologist in charge shall visit the site at least once a week during construction and confer with the trained on-site monitor.

- Construction workers shall be informed of the potential presence of California red-legged frogs and San Francisco garter snakes, that these species are to be avoided, that the foreman must be notified if they are seen, and that construction shall be halted until authorization to proceed is obtained from the USFWS. Harassment of these species is a violation of federal law.
- During construction, all holes shall be covered at night to prevent California red-legged frogs and San Francisco garter snakes from becoming trapped in holes on the construction site.

MM IV.B-2 Special-Status Mammal Species

A qualified biologist shall be retained by the applicant to conduct a trapping and relocation program for any San Francisco dusky-footed woodrats located within the limits of proposed grading and development. The trapping and relocation effort shall be conducted outside the breeding season (March through August) to ensure any young are not inadvertently lost due to the destruction of the protective nest. Any nests within the construction zone shall be relocated to locations proposed as permanent open space on the site, and individual woodrats released into their relocated nests. The trapping and relocation effort shall preferably be conducted within a few days prior to grubbing and vegetation removal to prevent individual woodrats from moving back into the construction zone. It should be noted that trapping and relocating special-status species is a technique that wildlife agencies have established as acceptable mitigation. No additional impacts to special-status species would result through this practice.

MM IV.B-3 Special-Status Bird Species

Any active raptor or loggerhead shrike nests in the vicinity of proposed grading shall be avoided until young birds are able to leave the nest (i.e., fledged) and forage on their own. Avoidance may be accomplished either by scheduling grading and vegetation removal during the non-nesting period (September through February), or if this is not feasible, by conducting a pre-construction survey for active nests. The survey report shall be submitted to the City of Pacifica for review and approval prior to

initiation of grading. Provisions of the pre-construction survey and nest avoidance, if necessary, shall include the following:

- If grading is scheduled during the active nesting period (March through August), a qualified wildlife biologist shall be retained by the applicant to conduct a pre-construction nesting survey no more than 30 days prior to initiation of grading to provide confirmation on presence or absence of active nests in the vicinity.
- If active nests are encountered, species-specific measures shall be prepared by a qualified biologist in consultation with the CDFG and implemented to prevent nest abandonment. At a minimum, grading in the vicinity of the nest shall be deferred until the young birds have fledged. A nest-setback zone of at least 300 feet shall be established for raptors and 100 feet for loggerhead shrike and passerine birds within which all construction-related disturbances shall be prohibited. The perimeter of the nest-setback zone shall be fenced or adequately demarcated, and construction personnel restricted from the area.
- If permanent avoidance of the nest is not feasible, impacts shall be minimized by prohibiting disturbance within the nest-setback zone until a qualified biologist verifies that the birds have either a) not begun egg-laying and incubation, or b) that the juveniles from the nest are foraging independently and capable of independent survival at an earlier date. A survey report by the qualified biologist verifying that the young have fledged shall be submitted for review and approval by the City of Pacifica Planning Department prior to initiation of grading in the nest-setback zone.

MM IV.B-4 Riparian Habitat or Other Sensitive Natural Community

The proposed Site Plan and Grading Plan shall be revised to avoid the stands of native willow scrub on the site. The revised plans shall be submitted to the City of Pacifica for review and approval prior to issuance of the tentative map. As necessary, this shall include adjustments to the proposed Community Gardens, Upper Playfield, and man-made creek. The stands of willow shall be enhanced as part of the proposed restoration efforts outlined in the *Natural Habitat Restoration Proposal* and non-native landscape species shall be restricted from the perimeter of these stands, with a minimum 15-foot setback from existing willow scrub. In addition, the following measures as outlined in the *Natural Habitat Restoration Proposal* shall be implemented with regard to restoration of native habitat.

- A qualified native plant specialist shall conduct surveys to delineate the different plant communities and determine the percentages of the different species within the communities. This data and the plant list in the Biological Assessment Report shall be used to determine an appropriate mix of rooted nursery stock plants to install and supplementary seed mix to be prepared. The re-graded slope of the quarry face shall be restored as coastal scrub.
- Seed collection shall be accomplished the summer before the work starts. Seed shall be site specific: collected onsite or within a five-mile radius of the project site.

- Plants used at the site shall be site specific: grown from material collected onsite or within a five mile radius from the project site.
- All remaining debris and trash shall be removed from the site.
- Appropriate irrigation (drip or sprinkler) shall be supplied for a period of time encompassing the first two rainy seasons after the restoration or however longer needed to establish the new growth.
- All areas will be monitored and maintained for five years after initial planting. Maintenance shall include weeding of non-native species, replacement of failed plantings, further seed collection as needed, and continued irrigation as needed.

The following procedures detail the restoration procedure for each of the communities.

Coastal Scrub:

- Cleared and prepared areas shall be lightly tilled and seeded with the appropriate seed mix.
- Planting shall be of one gallon specimens or equivalent, or at ratio of species as prescribed by the required surveys. Planting density shall be no less than one plant every one foot for the accumulative planting of shrubs, woody species, grasses, forbs, and annuals.
- All planted and seeded areas shall be mulched with rice straw to a loft thickness of no less than four inches.
- Appropriate irrigation (drip or sprinkler) shall be supplied for a period of time encompassing the first two rainy seasons after the restoration or however long needed to establish the new growth.

Perennial Grassland (Coastal Prairie):

- Cleared and prepared areas shall be lightly tilled and seeded with the appropriate seed mix.
- In the fall of the work season, all other areas designated grassland shall be lightly raked and supplemented with an appropriate mix of native seeds.
- Planting shall be of one gallon specimens or equivalent, at a ratio of species as prescribed by the required surveys. Planting density shall be no less than one plant every one foot for the accumulative planting of shrubs, woody species, grasses, forbs, and annuals.
- All planted and seeded areas shall be mulched with rice straw to a loft thickness of no less than four inches.
- Appropriate irrigation (drip or sprinkler) shall be supplied for a period of time encompassing the first two rainy seasons after the restoration or however long needed to establish the new growth.

MM IV.B-5 Authorization for Loss of Jurisdictional Waters

A Wetland Mitigation Program shall be prepared by a qualified wetland specialist to provide for the protection, replacement, and management of any jurisdictional waters on the site affected by proposed

development and submitted to the City for approval prior to issuance of building permits. The Mitigation Program shall include the following components and meet the following standards:

- Before project implementation, a delineation of waters of the United States, including wetlands that could be affected by development, shall be made by a qualified wetland specialist through the formal CWA Section 404 process.
- If jurisdictional wetlands are determined to be present on the site, proposed grading and development shall be redesigned to avoid removal or adverse impacts on areas verified as jurisdictional wetlands.
- Provide adequate mitigation for any direct or indirect impacts on jurisdictional waters as coordinated with the Corps, RWQCB, and the City of Pacifica where complete avoidance is infeasible. Replacement wetlands shall be replaced at a minimum 2:1 replacement ratio and shall be established in suitable locations within proposed open space areas. The wetlands replacement component of the Mitigation Program shall emphasize establishment of native riparian and uplands species to enhance existing habitat values. The Mitigation Program shall be submitted for review and approval by the City of Pacifica prior to issuance of building or grading permits.
- The wetland replacement component of the Mitigation Program shall specify performance criteria, maintenance and long-term management responsibilities, monitoring requirements, and contingency measures. Monitoring shall be conducted by the qualified wetland specialist for a minimum of five years and continue until the success criteria are met.

In addition, the applicant shall obtain all necessary permits from the Corps, USFWS, and the RWQCB as required by federal and State law to avoid, minimize or offset impacts to any species listed under either the State or federal Endangered Species Acts or protected under any other State or federal law as follows:

- If based on the verified delineation, it is determined that fill of waters of the United States would result from project implementation, authorization for such fill shall be secured from the Corps through the Section 404 permitting process and from the RWQCB as part of the Section 401 water quality certification process.
- Consultation or incidental take permitting may be required under the ESA. The applicant shall obtain all legally-required permits from the USFWS for the “take” of protected species under the ESA.
- Evidence that the applicant has secured any required authorization from these agencies shall be submitted to the City of Pacifica Planning Department prior to issuance of any grading or building permits for the project.

MM IV.B-6 Wildlife Habitat Protection and Enhancement

A qualified landscape architect or restoration ecologist who specializes in native habitat restoration shall be retained by the applicant to incorporate the following provisions into the Landscape Plans for the project:

- Prohibit the use of highly undesirable species in landscape improvements on the site which could spread into the adjacent open space areas. Unsuitable species include: blue gum eucalyptus (*Eucalyptus globulus*), acacia (*Acacia* spp.), pampas grass (*Cortaderi* spp.), broom (*Cytisus* spp. and *Genista* spp.), gorse (*Ulex europaeus*), bamboo (*Bambusa* spp.), giant reed (*Arundo donax*), English ivy (*Hedera helix*), German ivy (*Senecio milanioides*), Himalayan blackberry (*Rubus discolor*), cotoneaster (*Cotoneaster pannosus*), fennel (*Foeniculum vulgare*), and periwinkle (*Vinca* spp.), among others identified in the CalEPPC List.⁹ This restriction on use of highly undesirable species in landscaping shall be included as a requirement in the CC&Rs for the project.
- Implement the *Natural Habitat Restoration Proposal*, including the eradication program to effectively eliminate highly aggressive non-native species such as French broom, Scotch broom, pampas grass, fennel, wild teasel, and poison hemlock from the site, and replace them with appropriate native shrub and groundcover species.
- Define maintenance and monitoring provisions to ensure the successful establishment and long-term viability of native plantings and the control and eradication of highly aggressive non-native French broom, Scotch broom, pampas grass, Himalayan blackberry, periwinkle, and other noxious weeds from the site. The maintenance and monitoring program shall be implemented during a minimum five year monitoring as part of *Natural Habitat Restoration Proposal*, and shall continue as part of long-term maintenance of open space areas.
- Provide for the immediate reseeded of all graded slopes not proposed for roadways, residences, and ornamental landscape plantings with a mix of native grasses and forbs appropriate for the site rather than a conventional seed mix typically used for erosion control purposes to replace and improve existing habitat values of grasslands disturbed on the site.
- The revised landscape plans shall be submitted to the City for review and approval.

MM IV.B-7 Wildlife Habitat Avoidance

Measures recommended in Mitigation Measures IV.B-1 through IV.B-3; IV.B-4; and IV.B-5 would serve to protect important natural habitat on the site for wildlife, avoid the potential loss of nests in active use, and minimize disturbance to potential wetlands and provide for replacement of affected jurisdictional waters. The following additional provisions shall be implemented to further protect wildlife habitat resources, and shall be included in CC&Rs for the development:

- Prohibition on use of invasive plant species for landscaping.
- Fencing that obstructs wildlife movement shall be restricted to the vicinity of building envelopes and community gardens, and shall not be allowed elsewhere on the site. Wildlife exclusionary fencing is designed to exclude wildlife and contains one or more of the following conditions:

⁹ California Exotic Pest Plant Council, 2006, Ibid.

lowest horizontal is within 1.5 feet of ground, or highest horizontal is over 6 feet, or top or bottom wire is barbed, or distance between top wires is less than 10 inches, or it combines with existing structures or fences, even on neighboring parcels, to create an obstacle to wildlife movement.

- Lighting shall be carefully designed and controlled to prevent unnecessary illumination of natural habitat on the site. Lighting shall be restricted to the vicinity of building envelopes and the minimum level necessary to illuminate roadways and other outdoor areas. Lighting shall generally be kept low to the ground, directed downward, and shielded to prevent illumination into adjacent natural areas.
- Dogs and cats shall be confined to individual residences and the fenced portion of the building envelopes to minimize harassment and loss of wildlife, except dogs on leash and cats with bells on collars.
- All garbage, recycling, and composting shall be kept in closed containers and latched or locked to prevent wildlife from using the waste as a food source.

MM IV.B-8 Preservation of Heritage Trees

The applicant shall comply with all provisions in the City's Municipal Code (Sec. 4-12.04) for preservation of Heritage Trees. The applicant shall submit the required Tree Protection Plan (Sec. 4-12.07).

CUMULATIVE IMPACTS

The overall cumulative effect of development is dependent on the degree to which significant vegetation and wildlife resources are protected or mitigated as part of individual developments. This includes preservation of areas of sensitive natural communities such as valley oak woodland, riparian woodland, and native grasslands, protection of essential habitat for special-status plant and animal species, and avoidance of wetlands. Further environmental review of any specific development proposals in the vicinity of the site should generally serve to ensure that important biological and wetland resources are identified, protected and properly managed, and should serve to prevent any significant adverse development-related impacts. However, there may be significant unavoidable adverse impacts of an individual development that cannot be fully mitigated and could contribute to significant cumulative impacts on biological and wetland resources as well.

Cumulative development contributes to an incremental reduction in the amount and connectivity of existing natural communities and wildlife habitat. Proposed development on the Fassler Avenue site would result in the loss of approximately 4.8 acres of disturbed grassland and scrub habitat, which is relatively common in the surrounding area of Pacifica. Other anticipated development projects in the nearby area include the Verizon Wireless facility improvements to the east and the Harmony @ 1 residential development along Fassler Avenue near Roberts Road. Together with the proposed project, these nearby projects are not expected to result in any significant unavoidable cumulative-related impacts

on biological resources and natural habitat. Potential impacts on sensitive resources, such as the stands of willow scrub, potential jurisdictional waters, and other native habitat would be addressed through avoidance and on-site creation and enhancement. Measures recommended to mitigate potential impacts of the project on sensitive biological resources would serve to also address the project-related contribution to cumulative impacts. The project contribution to cumulative impacts on wildlife habitat and movement opportunities in the Pacifica vicinity would be *less than significant* with implementation of project-related mitigation measures.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Potential impacts on special-status species, sensitive natural communities, wetlands, and wildlife habitat and movement opportunities would be *less than significant* with implementation of the above mitigation.