

4.7 BIOLOGICAL RESOURCES

The *FORA Reuse Plan Final Environmental Impact Report* (FORA FEIR) identified on a program level a potentially significant environmental impact for biological resources as related to loss of sensitive species addressed in the *Installation-Wide Multispecies Habitat Management Plan for Former Fort Ord* (HMP). The FORA FEIR also identified less than significant impacts to beach areas, coastal scrub, annual grasslands, coast live oak woodlands, native perennial grass, vernal ponds and wetlands, loss of sensitive species not addressed in the HMP, and conflict with the Sanctuary Management Plan for Monterey Bay National Marine Sanctuary.

Site specific details and project-level information for the EGSP project was not known and not analyzed at the time of the FORA FEIR. New information between the time the FORA FEIR was certified and the release of the Notice of Preparation (NOP) for the currently proposed EGSP project includes change in location of land uses previously proposed at Parker Flats to the EGSP project area and therefore, change in proposed land uses and intensities on the project site. Other changes include changes in the regulatory environment due to the listing and de-listing of sensitive species on State and Federal lists and the preparation of a landscape palette for the project site. This section provides additional analysis of potential impacts not previously analyzed in the FORA FEIR.

The biological resources in the East Garrison Specific Plan (EGSP) area have been described in several documents, including the *Flora and Fauna Baseline Study of Fort Ord* (USACE 1992b), *Installation-Wide Multispecies Habitat Management Plan for Fort Ord* (USACE 1997), the *Forest Management Plan (FMP) for East Garrison Project/Woodman Development Company, Inc.* (January 2004), *Assessment, East Garrison-Parker Flats Land Use Modifications Fort Ord, California* (Zander Associates, 2002) aka *Land Swap Assessment (LSA)*, and the *Biological Resources Assessment (BRA) EGSP* (January 2004). All other documents are incorporated by reference. The FMP and BRA are included in Appendix H of this DSEIR.

All of the existing documents addressing the biological resources at East Garrison were reviewed. This section summarizes the information contained in these documents regarding existing biological resources in the proposed EGSP area. In addition, this section evaluates the effects of the proposed development on habitat and species at East Garrison, including consistency with the assumptions of the HMP.

4.7.1 Environmental Setting

The EGSP area encompasses approximately 244 acres; however, to accommodate infrastructure improvements associated with full buildout, additional areas outside of the EGSP area will be used for project development. Therefore, the study area for biological resources impacts includes all areas within the limits of grading as shown on the proposed *Vesting Tentative Map for East Garrison*, dated February 2004, prepared by Carlson Barbee & Gibson, Inc. This study area is approximately 252 acres and includes areas south of Reservation Road as well as areas west and south of the EGSP site. Exhibit 4.7-1 identifies the limits of the biological resources impacts study area.

The topography is mostly gently rolling hills except for the steep bluff areas south of Reservation Road and north of the eastern section of Watkins Gate Road. Approximately 108 acres of the project area is developed with buildings, foundations, infrastructure and other facilities associated with the former military activities. Outside of the developed sites, there are grasslands and oak woodlands that have been subjected to varying degrees of disturbance. The areas north of Inter-Garrison Road contain relatively intact oak woodland and oak savanna habitat but south of Inter-Garrison the

vegetation is primarily non-native grassland with scattered shrubs and oaks. Beyond the boundary of the study area, the habitat is less disturbed and consists of oak woodland and dense stands of central maritime chaparral. There are no ponds or drainages within the study area, but there is a large fishing pond on the Youth Camp Property, just to the south of Watkins Gate Road.

Fort Ord Habitat Management Plan

The HMP establishes a habitat conservation area, a corridor system, and parcel-specific land use categories, in addition to outlining management requirements for all lands on the former Fort Ord (FFO). The HMP identifies four general categories of parcel-specific land uses: habitat reserve, habitat corridor, development with reserve areas or restrictions, and development with no restrictions.

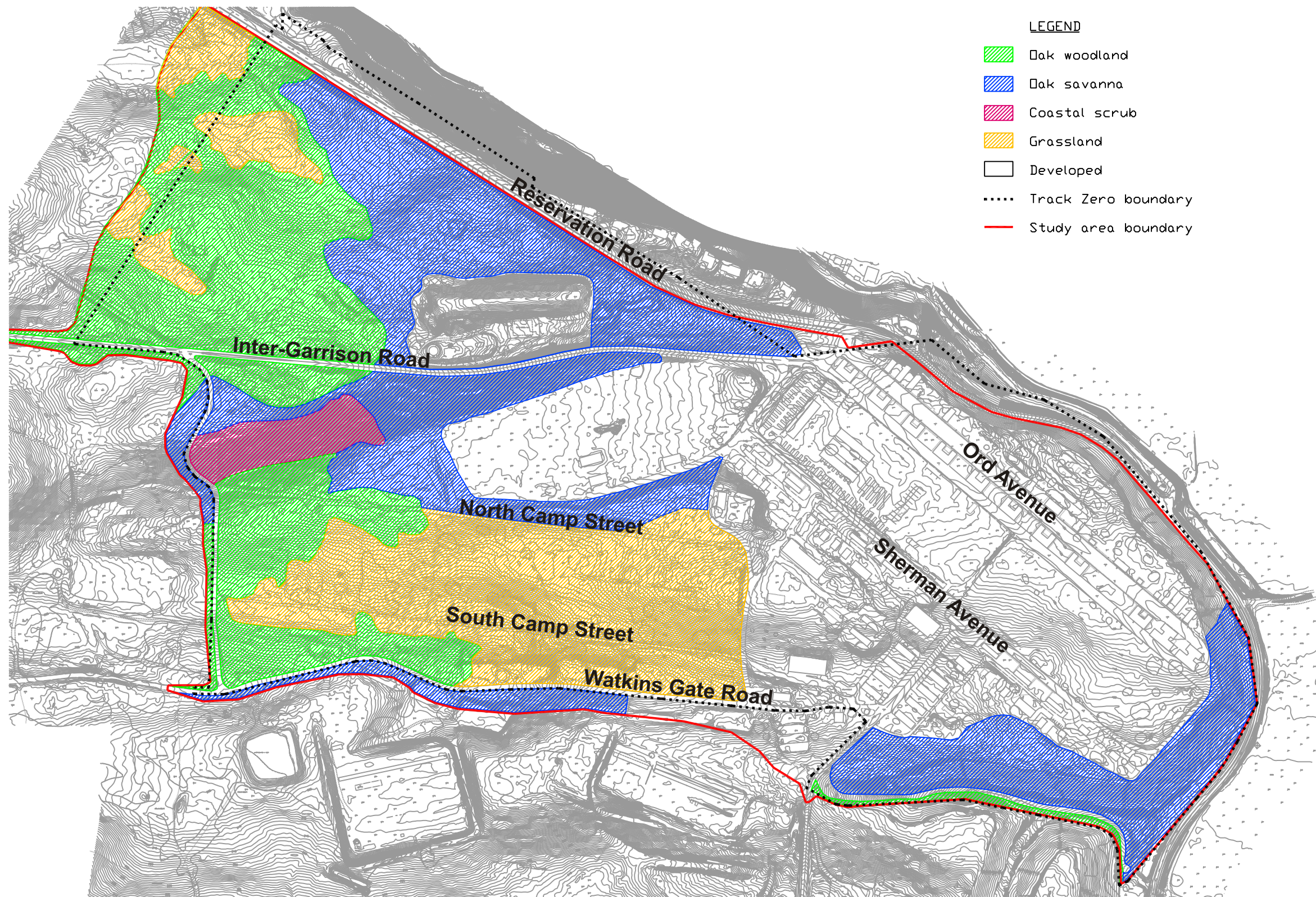
A general goal of the HMP is to promote preservation, enhancement, and restoration of habitat while allowing implementation of a community-based reuse plan that supports economic recovery after the closure of Fort Ord. The HMP assumes a reuse development scenario for the entire base that will result in the removal of up to 6,300 acres of existing vegetation and wildlife habitat. The HMP also identifies the loss of 18 special-status species (HMP species). To minimize the impacts of reuse on HMP species, the HMP establishes approximately 16,000 acres of habitat reserves with about 400 additional acres of connecting habitat corridors. In addition, the HMP places further conditions on development of approximately 1,800 additional acres by requiring reserve areas or restrictions on those lands. The HMP designates the project area as development with reserve areas or restrictions and allows for up to 200 acres of total development in addition to 41 acres of development allowed on the former sewage treatment plant and the development of a roadway corridor through the area.

The Fort Ord Reuse Authority (FORA) and the County of Monterey submitted modifications to the original HMP to the Army and the U.S. Fish and Wildlife Service (USFWS) for approval. The Army and USFWS approved the boundary changes and other HMP modifications. The approved modifications allow residential and commercial development at East Garrison on an additional 210 acres of oak woodland, maritime chaparral, and grassland communities that would have been preserved under the original HMP. In exchange, the amendments to the habitat reserve set aside over 450 acres of land to support biotic communities at Parker Flats, which was previously designated for development. The Parker Flats development concept is shown in Exhibit 4.7-2. Thus, some 240 acres of habitat are preserved under the amended HMP than under the original. The process and findings are explained in detail in Appendix H of this DSEIR and in Section 4.7-2, Project Impacts and Mitigations Measures, later in this section.

The proposed modifications were described in the LSA document prepared by Zander Associates and were submitted to the Army for review and consideration. The Army determined that the goals and objectives of the HMP would be met through implementation of the modifications and requested concurrence from the USFWS on that finding (USDOA 2002). The USFWS agreed that the proposed modifications were consistent with the resource protection goals of the HMP and concluded that the level of effects on HMP species would not exceed those already addressed in biological opinion 1-8-99-F/C-39R (USFWS 2002).

Existing Plant Communities and Wildlife Habitats

As shown on Table 4.7-1, five different plant communities/wildlife habitats are found within the study area: oak woodland, oak savanna, grassland, coastal scrub, and developed areas (see Exhibit 4.7-1). A complete list of the plant species inventoried in the study area during floristic surveys is provided in Appendix H of this DSEIR.

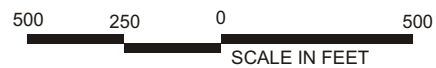


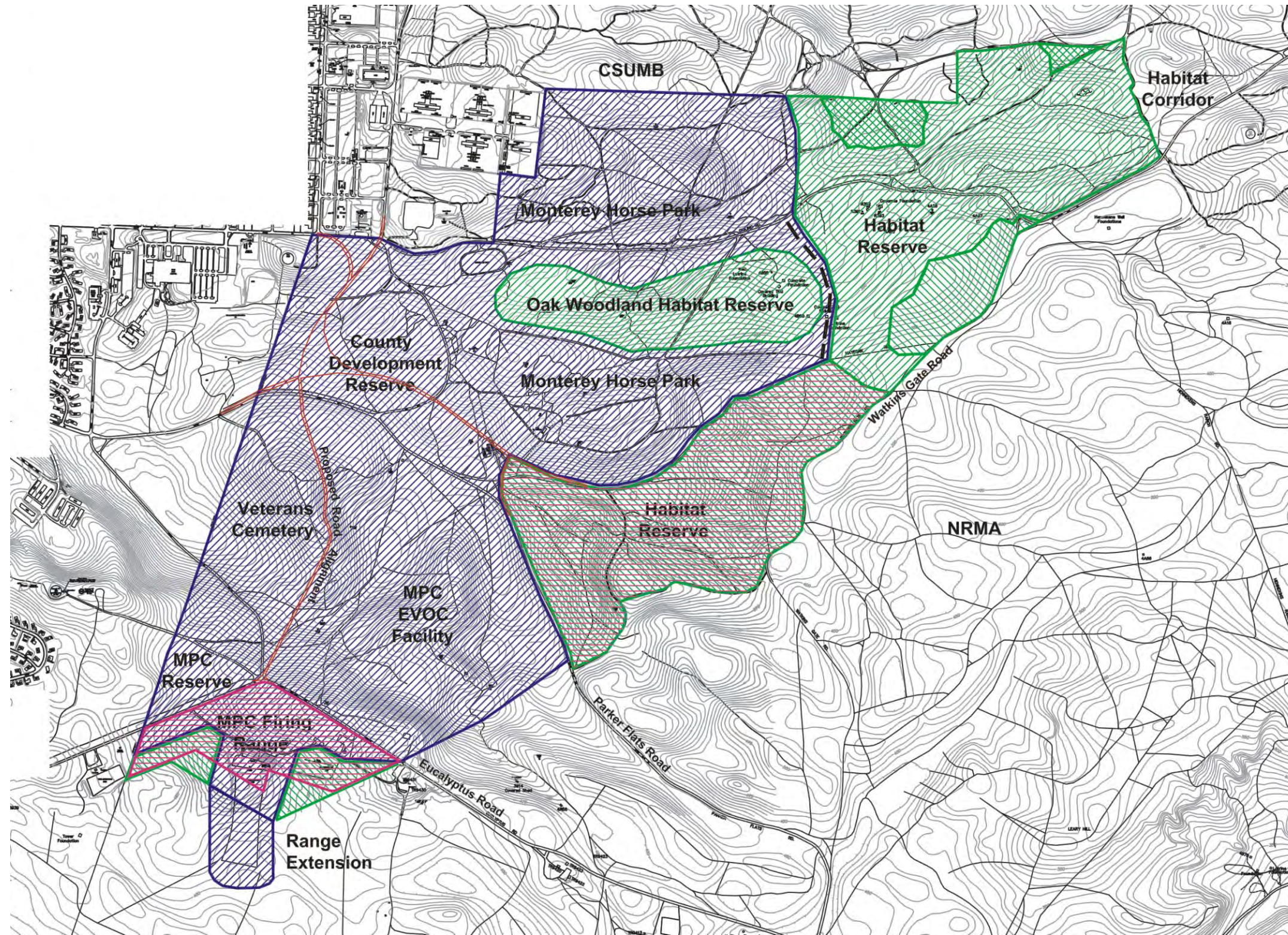
- LEGEND**
- Dak woodland
 - Dak savanna
 - Coastal scrub
 - Grassland
 - Developed
 - Track Zero boundary
 - Study area boundary

Source: Zander Associates, January 2004.



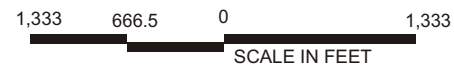
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- LEGEND**
- Habitat Reserve areas:
 - Oak woodland
 - Maritime chaparral
 - Grassland
 - Development
 - Designated development
 - Extended development
 - Areas mechanically cleared
 - Proposed location of Horse Park cross country trail

Source: Zander Associates, September 2003.



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Exhibit 4.7-2
Parker Flats Development Concept

EAST GARRISON SPECIFIC PLAN • DSEIR

Oak Woodland and Oak Savanna

Within the study area, the oak woodland and oak savanna communities are relatively intact north of Inter-Garrison Road. South of Inter-Garrison Road, the oak woodlands are remnants of a larger area that was likely cleared during previous military operations. The oak savanna south of Inter-Garrison Road was designated as grassland in the *Flora and Fauna Baseline Study of Fort Ord* (USACE 1992) but in the time since that document was prepared, oak trees have begun to recolonize the area and it is now more representative of a savanna. The grassland understory of the savanna south of Inter-Garrison Road contains more non-native annual species and fewer native wildflowers.

According to the January 2004 FMP prepared by Stephen R. Staub, forester and environmental consultant, approximately 5,100 oak trees are located in the study area within the oak woodland, savanna habitat, and in and around existing development on the project site. The majority of the trees are in the 6 to 23-inch size classes. Approximately 177 trees are in the greater than 24-inch size class. The largest trees were found in the developed areas, probably due to reduced competition and maintenance. The greatest number of smaller diameter trees was observed in the oak woodland north of Inter-Garrison Road. The location of these trees is identified as polygons (i.e., grouping of trees) in Exhibit 4.7-3.

Typically, oak woodlands provide good habitat for a variety of wildlife species. Oak trees serve as nesting sites and provide cover for many birds and mammals. Acorns are a valuable food source for several animal species, including the California quail (*Callipepla californica*), western gray squirrel (*Sciurus griseus*) and black-tailed deer (*Odocoileus columbianus*). Other representative animal species of oak dominated forests include arboreal salamander (*Aneides lugubris*), western screech owl (*Otus kennicottii*), western scrub jay (*Aphelocoma californica*), and Virginia opossum (*Didelphis virginiana*). The open canopy and grassy understory of oak savannas provide favorable conditions for many grassland-related species such as California ground squirrel (*Spermophilus beecheyi*), California vole (*Microtus californicus*), and black-tailed hare (*Lepus californicus*). Red-tailed hawks (*Buteo jamaicensis*) and other raptors use the scattered trees as perching and scanning points while hunting for these species. In addition to the species found in oak woodlands, Western bluebird (*Sialia mexicana*), mourning dove (*Zenaida macroura*), and olive-sided flycatcher (*Contopus borealis*) are also found in the oak savannas.

Developed Areas

The developed portions of the study area contain a variety of weedy early successional plants, many of which are non-native species. However, there are a few native trees and landscape species around the buildings and some of the largest individual oak trees are found in this community, probably due to less competition in these areas. Developed areas typically do not support a diversity of wildlife as a result of the limited extent of native habitat. However, the large trees present in the developed portion of the study area could provide perching and nesting sites for raptors and other bird species. Moreover, the abandoned buildings may have suitable roosting sites for bats.

Grasslands

The grassland portion of the study area is dominated by annual non-native species with a mix of native and non-native forbs. Some areas are densely covered by weedy species that form a tall dense thatch that effectively excludes most low growing natives. Other grassland areas are dominated by lower growing species and provide more available habitat for a diversity of both native and non-native grasses and forbs. Four such grassland areas occur as open meadows within the oak woodland north of Inter-Garrison Road. These areas support native and non-native grasses and have a spring display of annual wildflower species including sky lupine (*Lupinus nanus*), tidytips (*Layia*

platyglossa), California poppy (*Eschscholzia californica*), and baby blue-eyes (*Nemophila menziesii* var. *menziesii*). The grasslands south of Inter-Garrison Road have been subjected to more disturbance and do not support the same diversity of native wildflowers. Grasslands provide habitat for common rodents such as the California vole, California ground squirrel, broad-footed mole (*Scapanus latimanus*) and Botta's pocket gopher (*Thomomys bottae*). These animals serve as prey for raptors such as red-tailed hawks, golden eagles (*Aquila chrysaetos*), kestrels (*Falco sparverius*), and owls that forage in the grasslands. Western meadowlarks (*Sturnella neglecta*), California horned larks (*Eremophila alpestris actia*) and northern harriers (*Circus cyaneus*) nest in grassland habitats.

Coastal Scrub

Coastal scrub vegetation is scattered throughout the study area and there is one intact stand of this plant community located on the relatively steep south-facing slope above North Camp Street. The coastal scrub in this area is comprised of coyote brush (*Baccharis pilularis*), poison oak (*Toxicodendron diversilobum*), California sage (*Artemisia californica*), and black sage (*Salvia mellifera*).

Typically, diverse wildlife species inhabit coastal scrub communities. Birds such as the orange-crowned warbler (*Vermivora celata*), rufous-sided towhee (*Aimophila ruficeps*), California thrasher (*Toxostoma redivivum*), California quail, and wrenit (*Chamaea fasciata*) feed and nest in the scrub. Rodents such as the California mouse, brush rabbit (*Sylvilagus bachmani*), and Herman's kangaroo rat (*Dipodomys heermanni*) find forage and cover in the scrub and in turn serve as prey for gray fox (*Urocyon cinereoargenteus*), bobcat (*Lynx rufus*), western spotted skunk (*Spilogale gracilis*) and western rattlesnake (*Crotalus viridis*). Coastal scrub also provides important forage and cover for resident black-tailed deer.

Special-Status Species

Special-status species are those plants and animals listed, proposed for listing, or candidates for listing as threatened or endangered by the USFWS or by the California Department of Fish and Game (CDFG), plants occurring on lists 1B or 2 of the California Native Plant Society's (CNPS) *Inventory of Rare and Endangered Plants of California, Sixth Edition* (2001); and animals designated as Species of Special Concern by the CDFG.

The *Flora and Fauna Baseline Study of Fort Ord* (USACE 1992) identifies 2 special-status plant species and 8 special-status animal species within the study area: Monterey spineflower (*Chorizanthe pungens* var. *pungens*); wedge-leaved horkelia (*Horkelia cuneata* ssp. *sericea*); Monterey dusky-footed woodrat (*Neotoma fuscipes luciana*); Monterey ornate shrew (*Sorex ornatus salarii*); loggerhead shrike (*Lanius ludovicianus*); California horned lark; Northern harrier; burrowing owl (*Athene cunicularia*); golden eagle; and prairie falcon (*Falco mexicanus*). Two additional special-status plant species were observed on the site during surveys conducted by Zander Associates in 2003, sand gilia (*Gilia tenuiflora* ssp. *arenaria*) and Hooker's manzanita (*Arctostaphylos hookeri*). Several other species were considered but dismissed due to lack of suitable habitat or the results of directed surveys. Additionally, there are 4 special-status species of bats with ranges in Monterey County. The abandoned buildings and dense oak woodland within the study area could provide suitable roosting habitat for these bats.

Monterey Spineflower

Monterey spineflower (*Chorizanthe pungens* var. *pungens*) is a federally listed threatened species, it is included on CNPS List 1B, and it is an HMP species. It occurs on sandy soils within coastal dune, coastal scrub, grassland, and other plant communities from the Monterey Peninsula, northward along

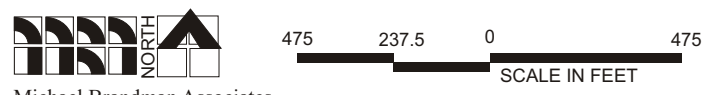


LEGEND

- 98 Tree polygon number
- Track zero boundary
- - - Grading limits

All trees within grading limits are expected to be removed.

Source: Staub Forestry, January 2004.



Michael Brandman Associates

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**Exhibit 4.7-3
Tree Reference Map**

EAST GARRISON SPECIFIC PLAN • DSEIR

the coast to southern Santa Cruz County, and inland to the Salinas Valley. Monterey spineflower is a small, prostrate annual plant with white- to rose-colored flowers that typically bloom from April through June. The HMP maps low density Monterey spineflower in the portion of the study area north of Inter-Garrison Road. This is consistent with what was observed by Zander Associates in its 2003 surveys, although the mapping was refined to identify specific locations of high, medium and low-density occurrences of Monterey spineflower (see Exhibit 4.7-4). No Monterey spineflower was observed in the study area south of Inter-Garrison Road by Zander Associates.

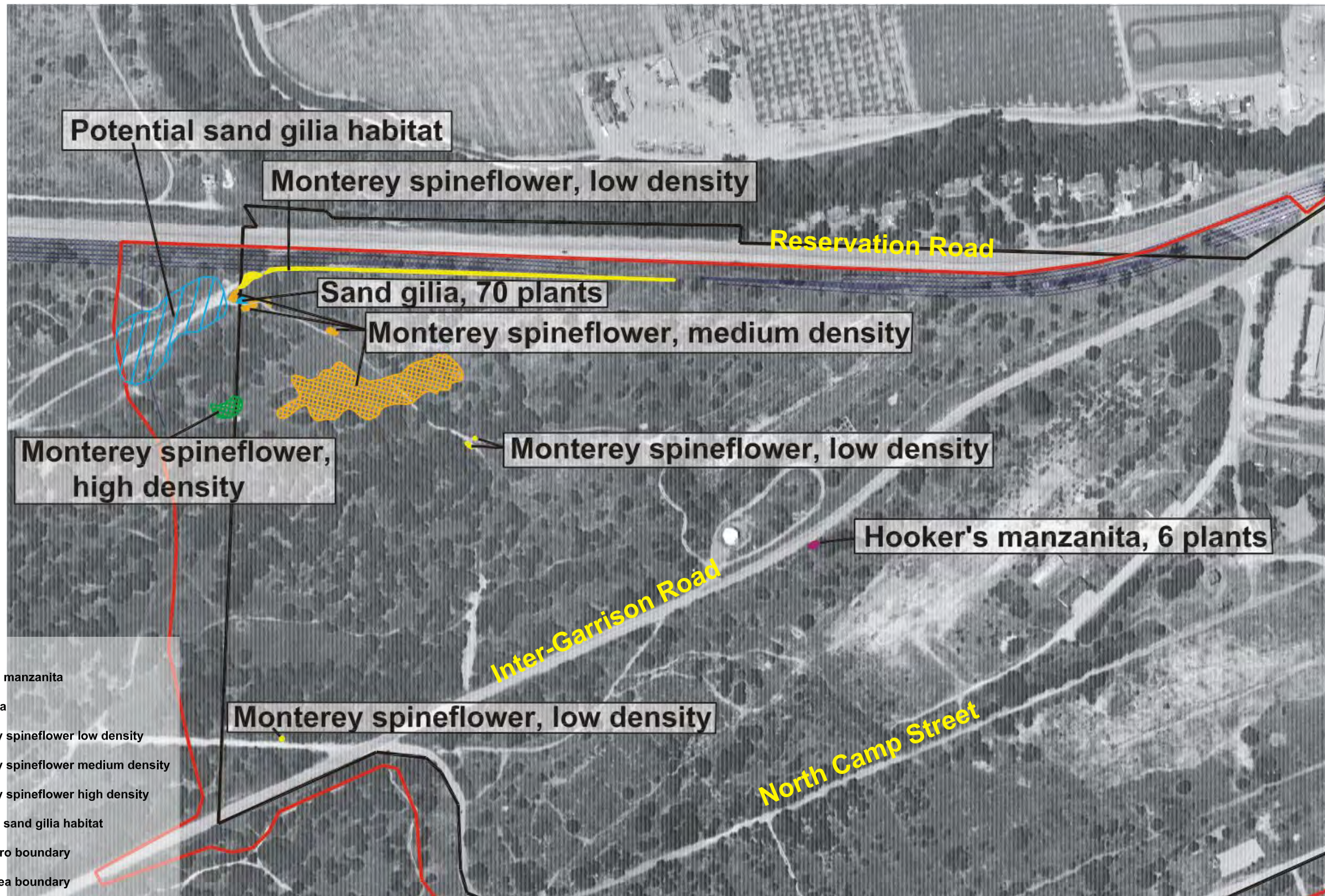
In May 2002, the USFWS designated critical habitat for Monterey spineflower, which included lands on FFO (Unit H of the designated critical habitat units). The USFWS designated critical habitat on lands specified as "Habitat Reserve," "Habitat Corridor," and "Development with Reserve Areas or Development with Restrictions," as shown on the map and post-transfer modifications of the HMP. Not included were lands designated solely for development, with no accompanying resource conservation requirements. The critical habitat designation was published prior to final approval of the LSA and, therefore, portions are mapped as critical habitat for Monterey spineflower; however, none of Parker Flats is included in the designation because prior to the LSA Parker Flats was slated for development.

Sand Gilia

Sand gilia (*Gilia tenuiflora* ssp. *arenaria*) is a federally listed endangered species, a state listed threatened species, it is on CNPS List 1B, and it is an HMP species. It occurs in sandy soils in open, wind-sheltered areas, most often on level ground or on shallow slopes with stabilized sand. Sand gilia is a small annual herb with bright pinkish lavender flowers and basal leaves. Its distribution is limited, extending from Moss Landing to Spanish Bay on the Monterey Peninsula. FFO supports one of the largest populations of sand gilia known. No sand gilia was recorded in the study area in the USACE 1992 *Flora and Fauna Baseline Study of Fort Ord*. However, site-specific surveys conducted in 1993, mapped sand gilia in polygons that extend into the northwestern portion of the study area. Zander Associates observed approximately 70 plants of sand gilia in an approximate 45 square foot area in this same portion of the study area during the 2003 spring surveys (Exhibit 4.7-4). However, because sand gilia is an annual plant and because there is additional suitable habitat for the species in the open grassland and trails just to the west of where the 70 plants were identified, it is estimated that sand gilia could occupy up to 1.1 acres within the study area in any given year.

Kellogg's Horkelia

Kellogg's horkelia (*Horkelia cuneata* ssp. *sericea*) is a CNPS List 1B species. It is a low-growing perennial herb that occurs in sandy and gravelly soils in coastal scrub and closed cone pine forest near the coast, but it has also been observed in grasslands on FFO. It blooms from April through September and it is necessary to have the floral and seed characteristics in order to identify it to the particular subspecies. The USACE 1992 *Flora and Fauna Baseline Study of Fort Ord* identified low-density Kellogg's horkelia in the portion of the study area north of Inter-Garrison Road. In focused surveys conducted April through June 2003, Zander Associates did not observe any Kellogg's horkelia in the study area. Prior to conducting these surveys, specimens were reviewed on the UC South Reserve, near Imjin Road, to confirm that it was blooming and identifiable. No species of *Horkelia* were observed in the study area but moderate numbers of California acaena (*Acaena pinnatifida* var. *californica*) were found, which has very similar foliage to Kellogg's horkelia.



Source: Zander Associates, January 2004.



NOT TO SCALE

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Exhibit 4.7-4
Special Status Plants

EAST GARRISON SPECIFIC PLAN • DSEIR

Hooker's Manzanita

Hooker's manzanita (*Arctostaphylos hookeri*) is a CNPS List 1B species and an HMP species. It is a low-growing woody shrub (up to 3 feet high) that forms conspicuous mounds on sandy soils. It is a common component of the central coast maritime chaparral community at FFO. The HMP does not identify any Hooker's manzanita within the study area but it does map medium density occurrences within the maritime chaparral habitat in the southern portion of East Garrison. Approximately 6 plants of Hooker's manzanita were identified along Inter-Garrison Road in the study area during Zander Associates 2003 surveys. These plants were in a small patch (about 30 feet by 6 feet) right at the road edge and were associated with some shrubs of black sage (*Salvia mellifera*) (see Exhibit 4.7-3).

Seaside Bird's-beak

Seaside bird's-beak (*Cordylanthus rigidus* var. *littoralis*) is a state listed endangered species, it is included on CNPS List 1B, and it is an HMP species. This is an annual herb with inconspicuous white flowers that blooms late in the season, typically May through September. It has a very limited distribution in Monterey County, found in coastal areas from Carmel to Elkhorn Slough. Seaside bird's-beak occurs on sandy soils in a variety of habitats ranging from dune to chaparral and coastal scrub. It is often found at transitions between these vegetation types and grasslands. The HMP maps low-density seaside bird's-beak within the maritime chaparral in the southern portion of East Garrison, but not within the study area. No seaside bird's-beak plants were found within the study area during the 2003 floristic surveys by Zander Associates.

Monterey Dusky-Footed Woodrat

The Monterey dusky-footed woodrat (*Neotoma fuscipes luciana*) is a California Species of Special Concern (CSC). It is restricted to western and central Monterey County and northwestern San Luis Obispo County. This subspecies is typically found within dense chaparral or oak woodland habitats with moderately dense understory growth and abundant dead wood for nest construction. The USACE 1992 *Flora and Fauna Baseline Study of Fort Ord* identified potential habitat for Monterey dusky-footed woodrat in the oak woodlands north of Inter-Garrison Road in the study area. Woodrat nests were observed west of West Camp Road and in the oak woodland north of Inter-Garrison Road in the study area during Zander Associates 2003 surveys but the locations of these nests were not mapped.

Monterey Ornate Shrew

Monterey ornate shrew (*Sorex ornatus salerius*) is a CSC species and an HMP species. It occupies a variety of mostly moist riparian woodland habitats but is also found in upland communities where there is thick duff or downed logs. Little is known about this species, since it is difficult to locate and does not survive well in traps due to very high metabolic rates. Shrews are often short-lived (less than a year), and several generations may occur in a single year. The HMP identifies the oak woodland north of Inter-Garrison Road and the woodland west of West Camp Road in the study area as potential habitat for the Monterey ornate shrew. No Monterey ornate shrews were observed on FFO during surveys conducted for the HMP. Moreover, no shrews were observed in the study area during Zander Associates recent surveys (2003). However, it is assumed that the Monterey ornate shrew could inhabit the oak woodland north of Inter-Garrison Road and west of West Camp Road in the study area (Exhibit 4.7-1).

California Tiger Salamander

The Central California population of California tiger salamander (CTS) (*Ambystoma californiense*) was listed as federally threatened by the USFWS on August 4, 2004. The animal is also a CSC

species and an HMP species. CTS breed in seasonal pools in grasslands and lowland hills, but spend most of their life in subterranean *refugia* in nearby upland habitat, commonly using small mammal burrows for that purpose. CTS are known to move long distances (± 1 km) between aestivation sites and breeding pools. For successful breeding, CTS require seasonal pools that hold water for a minimum of four months to allow CTS larval metamorphosis to occur. Because CTS adults may take 4 to 5 years to reach sexual maturity, during which time they are using upland habitat, 95 to 99 percent of their life cycle is spent on land, and suitable upland habitat is critical to the species' survival. Presence of the species is most readily determined by springtime pond surveys or by rainy season drift fencing, pit traps, and nighttime observations.

There is no suitable breeding habitat for CTS in the study area. The pond on the Youth Camp property is approximately 150 feet south of the southwestern corner of the study area. It is an artificially created feature that was constructed and maintained by the Army for recreational use. It is fed by an artificial water source and has historically been stocked with fish. The pond is about 1.7 acres in size and approximately 5 feet deep (Mitchell 2000). There is some emergent wetland vegetation established around the perimeter (cattails and bulrush), but the center is mainly open water. Sampling conducted in 2000 found a low diversity of crustaceans in the pond, but many bullfrogs, fish and crayfish (Mitchell 2000). The presence of predatory game fish, bullfrogs, and other predators preclude successful breeding of CTS in this water body.

There is a large vernal pool less than a mile south of the study area that is known to provide breeding habitat for CTS. This pool is surrounded by suitable upland aestivation habitat to the south, east, and west. There are additional CTS breeding pools located to the south and west that are also within a mile of the study area. Even though Track Zero is within the range of movement for CTS, the area has been highly disturbed through previous land uses and there are no breeding pools on or north of the site. Consequently, the potential for CTS to aestivate on or travel through Track Zero is low. However, the Army is currently preparing an assessment of CTS habitat on former Fort Ord that will be submitted to the USFWS. This assessment will serve as the basis for reviewing future Army actions as they may affect CTS breeding or aestivation habitat, should the animal be listed as threatened by the USFWS. In its draft assessment, the Army identifies both breeding and upland habitat for CTS. Interim CTS Survey Protocol published by the Service identifies potential upland habitat being within 2 kilometers of breeding sites. However, according to the Army, many of the potential breeding sites found on former Fort Ord occur in areas surrounded by maritime chaparral. Chaparral is not considered ideal upland habitat since CTS avoid moving through areas with heavy canopy cover. Therefore, the Army defined the extent of potential upland habitat using a 1-kilometer radius around known breeding ponds. Applying the 1-kilometer radius, about half of the study area is considered upland habitat for CTS and applying the 2-kilometer radius, all of the study area is included as upland habitat for CTS. Depending on what the USFWS concludes either half or all of the study area could be considered potential upland habitat for CTS.

California Black Legless Lizard

The California black legless lizard (*Aniella pulchra nigra*) is a CSC species and an HMP species. Legless lizards are fossorial animals that burrow in sand and leaf-litter beneath plants; they feed on insects and other invertebrates. The black legless lizard is found in loose, friable, sandy soils in a variety of habitat types. At FFO, it is closely associated with the Baywood Sands and Oceano soils with native dune vegetation, coastal scrub, maritime chaparral, oak woodlands, oak savanna, and grasslands. The HMP does not identify occupied or potential habitat for the black legless lizard in the study area, but subsequent information regarding the distribution of this species indicates potentially

suitable habitat because the area is underlain by Oceano soils. Therefore, there is a potential that black legless lizards are present in the study area.

California Horned Lizard

The California horned lizard (*Phrynosoma coronatum frontale*) is also a CSC species but is not an HMP species. This lizard inhabits open country, especially sandy areas, washes, flood plains, and wind-blown deposits in a wide variety of habitats, including shrub lands, woodlands, riparian habitats, and annual grassland. Warm, sunny, open areas are a main habitat requirement, along with patches of loose soil where the lizard can bury itself. The California horned lizard is known to occur in many habitat types on FFO, and there is suitable habitat for this species within the study area. Therefore, these lizards could be present in the study area; however, no horned lizards were observed during field surveys by Zander Associates in 2003.

Special-Status Birds

The Migratory Bird Treaty Act (16 USC 703) (MBTA) prohibits the taking, hunting, killing, selling, purchasing, etc. of migratory birds, parts of migratory birds, and their eggs and nests. As used in MBTA, the term “take” is defined as meaning, “to pursue, hunt, capture, collect, kill or attempt to pursue, hunt, shoot, capture, collect or kill, unless the context otherwise requires.” Most native bird species in the vicinity of the study area are covered by MBTA. The California Fish and Game Code (§3511) also provides protection for certain species as listed in the section. Section 3503.5 of the Fish and Game Code specifically protects the nests and eggs of birds-of-prey and essentially overlaps with the MBTA. In practice, abiding by the MBTA and §3503.5 of the Fish and Game Code usually means avoiding removal of trees with active nests until such time as the young have fledged and the nest is abandoned.

Grassland Foraging Birds

Several special-status bird species suspected to occur in the vicinity of the project site could forage in the grasslands and could nest in the study area. The California horned lark is a ground-nester and the northern harrier nests on the ground in marsh vegetation or tall dense grass. The California burrowing owl nests in abandoned ground squirrel burrows. All of these birds are CSC species with their nesting habitat being of primary concern. The 1992 USACE *Flora and Fauna Baseline Study of Fort Ord* identifies the potential for each of these species to inhabit the grasslands in the study area. However, no nests of any of these species were observed during our 2003 surveys. Numerous surveys conducted subsequent to 1992 have not found burrowing owls or signs of burrowing owl activity in this portion of Fort Ord. Those results combined with Zander Associates 2003 observations suggest that burrowing owls are not present in the study area.

Loggerhead Shrike

The loggerhead shrike is a CSC species that prefers open woodland habitats with scattered trees, shrubs, posts, fences, or other perches. Nests are usually built in trees and shrubs; however, structures such as telephone poles and abandoned buildings are also used. The 1992 USACE *Flora and Fauna Baseline Study of Fort Ord* identifies potential habitat for loggerhead shrike in the grassland and oak savanna habitat south of Inter-Garrison Road.

Golden Eagle

The golden eagle is a CSC species and a “fully protected” species under Section 3511 of the California Fish and Game Code. Fully protected birds may not be taken or possessed except under specific permit. The golden eagle is also provided protection under the MBTA and the Bald and Golden Eagle Protection Act (16 USC 668). Golden eagles are uncommon permanent residents and

migrants throughout California, except in the Central Valley. Eagles typically prefer rolling foothills, mountain areas, sage-juniper flats, or desert with available nest sites. Nests are usually constructed on cliffs or in large trees in open areas. The nests are large platforms, often 10 feet across and 3 feet high, made of sticks, twigs, and greenery. Golden eagles are relatively site-faithful and often reuse old nests. They breed from late January through August with the peak period in March through July. Eggs are laid in early February to mid-May and the clutch size is usually 2. One golden eagle was observed foraging in the grasslands south of Inter-Garrison Road during Zander Associates surveys, but no active nests were identified. However, potentially suitable nesting habitat for this species is present in the study area.

Prairie Falcon

The prairie falcon (*Falco mexicanus*) is a CSC species and its nesting habitat is of primary concern. Prairie falcons are scarce and local residents of open and dry interior country of southern and eastern Monterey County. They nest on cliffs, in rock fissures or crevices and forage in grasslands and oak savanna habitats. There is no suitable nesting habitat for the prairie falcon in the study area, but the flora and fauna baseline study (USACE 1992b) identifies potential foraging habitat in the grassland and oak savanna.

Sharp-Shinned Hawk

Jones and Stokes mapped potential wintering habitat for the sharp-shinned hawk (*Accipiter striatus*) in the oak woodland at East Garrison south of Watkins Gate Road (USACE 1992b). The sharp-shinned hawk, a CSC species, typically nests in dense woodland or coniferous forests and no nests of this species have been observed at East Garrison.

Other Birds

Other birds that are not considered special-status, but that are protected under the California Fish and Game Code and MBTA and could establish nests in the study area, include the red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*), American kestrel (*Falco sparverius*), and white-tailed kite (*Elanus leucurus*).

Special-Status Bats

There are four special-status bat species with ranges in Monterey County that are known to use buildings or trees for roosts. These species include: Townsend's western big-eared bat (*Plecotus townsendii*), pallid bat (*Antrozous pallidus*), western mastiff bat (*Eumops perotis*), and long-legged myotis (*Myotis volans*). All of these bats are CSC species. The abandoned buildings and dense oak woodland within the study area could provide suitable roosting habitat for these bat species.

4.7.2 Project Impacts and Mitigation Measures

THRESHOLDS OF SIGNIFICANCE

The proposed project is considered to have a significant impact upon biological resources if it will:

- 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 CDFG or USFWS;
- Interfere substantially with the movement of any native resident or migratory wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;

- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance,
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat plan; or
- Have the potential to substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal.

The definition of “substantial” depends on the resource in question. Substantial impacts are those that diminish or result in the net loss of an important biological resource, or those that conflict with local, state or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally important, but not significant because, although they result in an adverse alteration of existing conditions, they do not substantially diminish, or result in the permanent loss of an important resource on a population-wide or region-wide basis.

METHODOLOGY

A BRA and a FMP were prepared for the project area. For the BRA, Zander Associates reviewed all previous research conducted on the project site, conducted several field surveys to map and describe existing habitats, prepared a floristic list, searched for special status plants, and evaluated potential wildlife habitat within the study area. Habitat types were mapped on current aerial photographs and where any special status species encountered, the number of plants and density estimates noted.

As part of the FMP, Staub Forestry & Environmental Consulting conducted a tree inventory of the study area to characterize existing stands, estimate tree removal and retention numbers, and identify the location and number of heritage trees on the project site. The tree inventory was prepared through a site reconnaissance to identify sample stands based on stand history and structure and to determine appropriate sampling procedures for each. To best estimate tree densities and size/class distribution, four general areas were identified based on stand history, density and structure. The four areas are not delineated on Exhibit 4.7-3 but are generally distributed as follows: Area 1 is located along the eastern boundaries of the study area and is bordered by Chapel Hill Road on the west; Area 2 is within the central portion of the study area where tree densities are lower; Area 3 is the large in-tact oak woodland located in the northwestern portion of the study area; Area 4 consists of four distinct oak stands located along the northeastern project boundary.

IMPACT ANALYSIS AND MITIGATION MEASURES

Consistency with the Habitat Management Plan

Impact 4.7-A	Implementation of the EGSP is considered consistent with the HMP. (Less than Significant)
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In accordance with the LSA that amended the HMP, habitat and species losses at East Garrison are offset by equivalent or better gains in kind at Parker Flats. The revised development footprint at Parker Flats would result in the preservation of about 249 acres of oak woodland, 196 acres of maritime chaparral and 18 acres of grassland habitats, which were previously slated for development in the HMP.

Three federally and/or state listed plant species, Monterey spineflower, sand gilia and seaside bird's beak have been recorded from the Parker Flats area, and Hooker's manzanita is also present in the maritime chaparral habitat. There is potential habitat for numerous other special-status species at Parker Flats, including Monterey dusky-footed woodrat, Monterey ornate shrew, black legless lizard, California horned lizard, and several bird and bat species. Parker Flats was not included in the designation of Monterey spineflower critical habitat because it was identified as a development polygon in the HMP. Under the LSA, the reserve areas would be considered critical habitat, following the methods employed by the USFWS in identifying habitat at former Fort Ord, and would offset losses resulting from the implementation of the project.

The LSA included a set of conditions that provide the necessary assurances to the USFWS that the proposed modifications will not compromise the overall goals of the Fort Ord HMP or result in a net loss of HMP species or habitat. The assessment, along with the concurrence letter from the USFWS to the Army, dated May 28, 2002, is the basis for modifications to the April 1997 HMP. A copy of the conditions is provided in Appendix H of this DSEIR.

The proposed development is consistent with the HMP, as modified through the LSA. Approximately 126 acres of habitat and 108 acres of developed areas would be lost/converted by the project and this is within the range assumed in the LSA. The loss of Monterey spineflower (about 1.5 acres), and sand gilia (about 1.1 acre) are also anticipated by the HMP as modified, which assumed that up to 36 acres of low-density Monterey spineflower habitat and about 5 acres of sand gilia would be removed. Because the designation of critical habitat for Monterey spineflower occurred before the LSA was finalized, portions of Track Zero are mapped as critical habitat for Monterey spineflower in the May 2002 Final Rule. In its Biological Opinion issued October 22, 2002 on the Closure and Reuse of Fort Ord as it affects Monterey spineflower critical habitat (1-8-01-F-70R), the USFWS determined that development of East Garrison as described in the LSA would not likely destroy or adversely modify critical habitat for Monterey spineflower. Hooker's manzanita was not previously mapped within the project area but it is a component of the maritime chaparral in East Garrison south of the Track Zero boundary and in the several thousand acres of reserve lands established on FFO by the HMP.

The proposed development outside of Track Zero consists of the future road corridor linking Reservation Road and East Garrison, widening and realignment of West Camp Road and improvements to Watkins Gate Road. The HMP allows for the future road corridor through habitat reserve lands west of the Track Zero boundary and the conditions included in the LSA state that the Fort Ord Reuse Authority (FORA) and the County shall make all reasonable efforts to realign this corridor to avoid isolating habitat reserve lands. The area included in the future road corridor through Monterey County's habitat parcel at East Garrison as illustrated in the HMP totals approximately 7.5 acres. The road alignment indicated on the Vesting Tentative Map linking Reservation Road with East Garrison through the habitat reserve would impact approximately 7.5 acres of habitat and it realigns the road to avoid isolating habitat reserve lands. Therefore, the proposed road alignment is consistent with what was assumed in the HMP and it meets the conditions in the LSA.

Improvements to West Camp Road and Watkins Gate Road shown on the Vesting Tentative Map extend slightly beyond the Track Zero boundary into the Monterey County Youth Camp parcel. The HMP allows development in this parcel (L20.2.2) within the existing campground and also allows potential future expansion of the campground. Monterey County Parks, the entity expected to receive the property, supports the road improvements because they will occur within the area of the existing

campground, they will provide better access to the camping facility and they will serve as a barrier and fire buffer between residential and recreational uses. Approximately 1.7 acres of oak woodland and 2.7 acres of oak savanna on the Youth Camp parcel would be impacted for these road improvements but some of the area within the limit of grading could be replanted with oak trees once construction is completed.

Mitigation Measures

4.7-A-1 The County shall ensure compliance with the General Conditions and East Garrison Conditions as outlined in the Land Swap Assessment and listed below. The conditions and compliance status are listed below.

General Conditions

1. The County of Monterey shall sign the April 1997 HMP.

Compliance status: On July 29, 2003, the Board of Supervisors of the County of Monterey authorized County signature of the April 1997 HMP.

2. FORA, the County, BLM and MPC shall agree, through a Memorandum of Understanding or equivalent binding agreement, to the land use modifications at East Garrison, Parker Flats and the MOUT facility as described in this report.

Compliance status: On September 23, 2003, the Board of Supervisors of the County of Monterey approved and authorized the Chair to sign a Memorandum of Understanding on behalf of the County with FORA, BLM, MPC and the Army. All parties, with the exception of the Army, have signed the MOU. The MOU is currently under review for signature by the Army.

3. FORA and the County shall revise the cost and funding estimates for habitat management, to include the additional costs associated with prescribed burning and monitoring in the new habitat areas at Parker Flats, in accordance with changed habitat management responsibilities resulting from the proposed modifications described in this report. Funds previously allocated for habitat management shall not be reallocated to accommodate new prescribed burning requirements.

Compliance status: Representatives of the County and FORA are involved in ongoing discussions with the U.S. Fish and Wildlife Service and others through CRMP regarding the appropriate procedures for prescribed burning and monitoring at Parker Flats. Until the issues regarding prescribed burning are resolved, costs estimates cannot be accurately revised.

East Garrison Conditions

1. Final development siting and boundary adjustments at East Garrison shall be coordinated with the Service, BLM and the CDFG based on a maximum development footprint, exclusive of existing roads, of 451 acres, approximating the limits of development illustrated on Figure 4 in the LSA. Borders between habitat areas and development areas shall be established to allow fire breaks, fire management access and adequate habitat setbacks, all of which shall occur within the developable footprint.

Compliance status: This condition refers to the final development siting and boundary designations for full buildout of the 451 acres that were identified for development at East Garrison in the Land Swap Assessment. The current development footprint accounts for approximately 240 acres, largely within the existing developed areas of the East Garrison polygon, and does not extend into the southern area of the polygon where there are higher densities of maritime chaparral and other HMP species. The primary purposes of this condition are to assure that the effects of development do not extend beyond the limits presented in the Land Swap Assessment for the East Garrison polygon and that the interface between development and habitat meets standards acceptable to USFWS, BLM and CDFG. A meeting was held November 19, 2003 with the USFWS and BLM to preview the development siting and boundary adjustments for the EGSP. Ongoing coordination with these agencies and with CDFG and the Army will continue prior to final approval of the project by Monterey County.

2. FORA and the County shall make all reasonable efforts to realign the HMP-designated *Future Road Corridor* (Figures 1, 3 and 8 of this report) linking Reservation Road with East Garrison to avoid isolating habitat reserve lands. If such realignment is not possible, the resulting isolated habitat reserve land acreage will be designated for development and developable land of comparable value and size, contiguous with other reserve lands shall be redesignated as habitat reserve.

Compliance status: The "Future Road Corridor" shown in the HMP has been realigned in the EGSP so that habitat reserve lands are not isolated and no additional land area, beyond that anticipated by the HMP, will be required to link Reservation Road with East Garrison. A concept of this realignment was discussed with USFWS and BLM in a meeting held November 19, 2003.

3. FORA and the County recognize the potential impacts to California tiger salamander and other HMP Species that could result from increased use of minor roads leading out of East Garrison into habitat reserve areas. The disposition and use of these roads shall be addressed through the CRMP program, and appropriate habitat protection measures shall be incorporated into the HCP prepared through CRMP.

Compliance status: No minor roads leading out of East Garrison into habitat reserve areas (e.g. Watkins Gate Road) are proposed for improvement or active use as part of the EGSP. Inter-Garrison Road and Reservation Road are expected to be the primary travel routes servicing East Garrison. Barloy Canyon Road provides access to Laguna Seca raceway during events but is otherwise gated to through traffic at Eucalyptus. BLM manages the gate closure on Barloy Canyon Road and has considered moving the gate to the southern end of the East Garrison polygon when development occurs there. The ultimate disposition and use of minor roads leading out of East Garrison into habitat reserve areas will be addressed through CRMP as the HCP is revised.

4. A low wall or other suitable barrier to migration of California tiger salamanders shall be constructed along the development/reserve boundary to the east of the vernal pool illustrated on Figure 3 of this report when development occurs in that area. Such a barrier is intended to discourage movement of California tiger

salamanders into developed areas, thereby reducing the potential for harm to the species.

Compliance status: This condition applies to development that would occur in subsequent phases beyond the project site (outside Track Zero at East Garrison). The subject vernal pool is located to the southwest of the EGSP development area.

Significance After Mitigation

Less than significant.

Loss of Plant Communities and Wildlife Habitat

Impact 4.7-B Transition of the study area from a vacated military facility to land uses identified under the EGSP, will disturb plant communities and result in the loss of wildlife habitats. (Less than Significant After Mitigation)

The proposed project will result in the removal of approximately 44 acres of oak woodland, 41 acres of oak savanna, 40 acres of grassland, 2 acres of coastal scrub, in addition to approximately 5,100 oak trees in varying size classes spread throughout these habitats. Some of the buildings located within the 108 acres of existing developed areas will be retained; however, new buildings and infrastructure improvements are proposed for the majority of these areas. Most of the habitat impacts will occur within Track Zero; however, as a result of the construction of roadways and other infrastructure, some impacts will extend outside of these boundaries (see Exhibit 4.7-1). Table 4.7-1 provides a summary of the impacts on plant communities and wildlife habitats resulting from development of the EGSP.

Table 4.7-1: Summary of Impacts on Plant Community/Wildlife Habitats on the EGSP

	Total Existing (acres)	Impacted (acres)
Oak Woodland	44.9	43.6
Oak Savanna	55.0	40.9
Developed	108.0	108.0
Grassland	39.6	39.6
Coastal Scrub	4.2	2.3
Total	251.7	234.4
Source: Zander Associates, January 2004		

As indicated previously, development of the EGSP will necessitate road construction beyond the Track Zero boundary. Table 4.7-2 summarizes the habitat impacts anticipated within and outside of these boundaries.

Table 4.7-2: Habitat Impacts Inside and Outside of the EGSP Boundary

Habitat	Within Track Zero at East Garrison		Outside of Track Zero (by feature)					
			Inter-Garrison Road		West Camp Road		Watkins Gate	
	Existing	Impacted	Existing	Impacted	Existing	Impacted	Existing	Impacted
Oak Woodland	39.2	37.9	4.0	4.0	1.7	1.7	—	—
Oak Savanna	50.7	36.6	—	—	1.2	1.2	3.1	3.1
Developed	103.7	103.7	—	—	—	—	4.3	4.3
Grassland	36.1	36.1	3.5	3.5	—	—	—	—
Coastal Scrub	4.2	2.3	—	—	—	—	—	—
Total	233.9¹	216.6	7.5	7.5	2.9	2.9	7.4	7.4

¹ Approximately 9 acres north of Reservation Road is within Track Zero but was not included in the study area. Source: Zander Associates, January 2004.

Mitigation Measures

With the LSA, habitat losses at East Garrison are offset by equivalent or better gains in kind at Parker Flats. The revised development footprint at Parker Flats would result in the preservation of about 249 acres of oak woodland, 196 acres of maritime chaparral and 18 acres of grassland habitats that were previously slated for development in the HMP. Implementation of all of the conditions in the LSA, including the designation of habitat reserve areas at Parker Flats, effectively mitigates for the habitat losses that will occur with development as proposed in the EGSP.

Although the loss of oak woodland and oak savanna habitat at East Garrison will be offset by the preservation of oak woodland at Parker Flats, there will be a loss of 77 acres of oak woodland habitat (approximately 5,100 oak trees within the EGSP boundary). County regulations require tree replacement planting on a 1:1 basis for all protected trees removed, except where this would result in an overcrowded or unhealthy environment. All of the 5,100 oak trees to be removed within the EGSP area are considered protected trees. Due to the extent of grading and development proposed, it is not feasible to replace all protected trees removed on a 1:1 basis within the EGSP boundary. It is also not feasible to replace these trees by planting additional oak trees at Parker Flats without compromising the integrity of the existing habitats in that area. In the FMP, Staub estimates that there may be suitable locations within the project area to replant between 700 to 1,200 oak trees, depending on visual and landscape objectives and engineering requirements to ensure native habitats remain onsite, the following mitigation measures are recommended: Additional measures can be employed as recommended in the FMP to protect trees during construction activities and to incorporate replanting of oaks in the landscape design.

The landscape palette was developed in consultation with a biologist or landscape architect familiar with the local flora and habitats. The landscape palette excludes non-native invasive plant species such as acacia (*Acacia* spp.), French broom (*Genista monspessulana*), pampas grass (*Cortaderia jubata*), and eucalyptus (*Eucalyptus* spp.). Maintenance programs developed for the open space areas will address the control of non-native invasive species to protect the native habitat.

4.7-B-1 As outlined in the FMP, project implementation shall include the following:

- To maximize tree retention and protection, a forester, arborist or other tree care professional shall be involved in the review and development of final grading and construction plans where trees occur either at project/grading margins. In such locations, it may be possible to incorporate special retention or other construction methods that will permit safe and healthy retention of existing trees. Onsite consultation with a forester or other tree professional should occur to establish operating parameters and protective measures including exclusionary fencing prior to removal of existing facilities, installation of the detention basin, and landscaping beyond delineated grading limits in the northeast corner of the project area.
- Protective fencing shall be erected along the approximate driplines around each tree or group of trees to be preserved.
- Where guidance of a tree professional is used to evaluate conditions and to establish the location of protective fencing, encroachment within the dripline of retained trees may occur in order to minimize tree removals.
- No storage of equipment, construction materials, or parking of vehicles is permitted within the tree-rooting zone, which is defined by the fencing of the construction boundary.
- No soil shall be removed from within the dripline of any retained tree and no fill of additional soil shall exceed two inches (2") within the driplines of retained trees, unless it is part of approved construction and is approved by a qualified forester, arborist, or other tree care professional.
- Fill shall not be allowed to be placed against the base of any tree. Permanent wells shall be constructed at original grade out from the trunk at a minimum distance of one foot.
- Before commencement of construction, a qualified arborist or other tree professional should identify trees where significant pruning will be necessary and make recommendations to help protect the tree.
- Onsite consultation with a qualified forester, arborist, or other tree care professional shall occur to establish the operating parameters and protective measures. These would include exclusionary fencing whenever operations commence and occur in the northeast corner of the project where the removal of existing facilities, installation of a detention basin, and site landscaping beyond shown grading limits is proposed.
- The Monterey County Agricultural Commissioners office shall be consulted, immediately, prior to any work that requires cutting and removal of oak materials from the site so that current requirements can be followed and enforced.
- Non-native trees near retained oak woodland areas, such as the eucalyptus in polygon 31 reference on the tree map (Exhibit 4.7-2) shall be eradicated.

Significance After Mitigation

Less than significant.

Loss of Special-Status Plant Species

Impact 4.7-C Transition of the study area from a vacated military facility to land uses identified under the EGSP, will disturb vegetation communities and result in the loss of special-status plant species. (Less than Significant After Mitigation)

Table 4.7-3 summarizes the estimated impacts on special-status plant species based on the 2003 survey results. Locations of special-status plants are depicted on Exhibit 4.7-3. Individual plants of sand gilia, Monterey spineflower, and Hooker’s manzanita will be impacted by the proposed project. To be removed are: approximately 70 sand gilia plants and up to 1.1 acres of sand gilia potential habitat, six Hooker’s manzanita plants, and 1.5 acres of Monterey spineflower having varying densities.

Table 4.7-3: Summary of Impacts on Special-Status Plant Species within the EGSP Boundary

Species	Total Existing (acres/plants)	Impacted (acres/plants)
Sand Gilia	70 plants ¹	70 plants
Potential Habitat	1.10	1.10
Monterey Spineflower	—	—
High Density	0.08	0.08
Medium Density	1.19	1.19
Low Density	0.23	0.23
Total	1.5¹	1.50
Hooker’s Manzanita	6 plants	6 plants
¹ Based on 2003 survey data. These are annual species and population numbers can fluctuate from year to year. Source: Zander Associates, January 2004.		

The area north of Inter-Garrison Road within Track Zero and the areas outside of Track Zero which are included in the study area are mapped as critical habitat for Monterey spineflower in the May 2002 Final Rule. As described previously, the Final Rule was issued before the LSA was approved and therefore the boundaries of critical habitat could not be adjusted to exclude the areas designated for development in East Garrison by the LSA. However, in its Biological Opinion issued October 22, 2002 on the Closure and Reuse of Fort Ord as it affects Monterey spineflower critical habitat (1-8-01-F-70R), the USFWS determined that development of East Garrison as described in the LSA would not likely destroy or adversely modify critical habitat for Monterey spineflower.

Mitigation Measures

With the LSA, species losses at East Garrison are offset by equivalent or better gains in kind at Parker Flats. The revised development footprint at Parker Flats would result in the preservation of about 249 acres of oak woodland, 196 acres of maritime chaparral and 18 acres of grassland habitats that were previously slated for development in the HMP. Assuming that all of the conditions in the LSA are met, the designation of habitat reserve areas at Parker Flats effectively mitigates for the species losses that will occur with development as proposed in the EGSP.

However, neither the HMP nor the LSA provides formal authorization for “incidental take” of state or federally listed species that may result from development at East Garrison or elsewhere on the base. The incidental take coverage provided to the Army through the HMP does not extend to other parties. Consequently, the principal parties that have or will be acquiring land at former Fort Ord are in the process of preparing a Habitat Conservation Plan (HCP) and Implementing Agreement (IA), which will provide the basis for issuance of basewide incidental take authorizations from both the Service and CDFG.¹ Until such basewide authorizations are granted, incidental take of state or federally listed species must be addressed on a project-by-project basis.

- 4.7-C-1** The loss of sand gilia would require a project-specific incidental take authorization from CDFG (i.e., Section 2081 Permit) if basewide authorization is not granted prior to initiation of construction for the proposed project. The incidental take authorization would likely require mitigation beyond that provided by the HMP for the loss of at least 70 sand gilia plants and approximately 1.1 acre of potential habitat. In order to seek incidental take authorization, mitigation will need to be provided. This mitigation can be accomplished through seed and seedbank salvage and restoration or creation of habitat of an appropriate size and character at a suitable location at Fort Ord. Two areas where restoration could occur are within the County’s East Garrison Reserve Parcel (Parcel 11 a) or at Parker Flats. The East Garrison Reserve Parcel is immediately adjacent to where the sand gilia plants will be removed for the project and it contains suitable conditions for transplanting/replanting these gilia. The specifics of how the plants will be salvaged and who will be responsible for implementation and monitoring will be included in the mitigation plan for the Section 2081 Permit. Monitoring will be required for a minimum of five years following transplantation and/or seeding.
- 4.7C-2** Independent take authorization from the Service would not be required for the removal of the Monterey spineflower plants in the EGSP area. However, if there is a federal nexus (e.g. Army granting of Right of Entry in areas occupied by spineflower) to actions that might affect spineflower or critical habitat for spineflower, the federal entity involved would likely need to consult (Section 7) with the Service to comply with the federal Endangered Species Act (ESA). In similar situations on development parcels at Fort Ord in the past, the consultation process is a formality that does not result in additional mitigation requirements.

Significance After Mitigation

Less than significant.

Loss of Special-Status Animals

Impact 4.7-D **The transition of the study area from a vacated military facility to land uses identified under the EGSP will result in loss of special-status animals. (Less than Significant After Mitigation)**

Habitat for the Monterey dusky-footed woodrat and potential habitat for the Monterey ornate shrew will be affected with removal of the oak woodland and oak savanna habitats. Assuming that all of the LSA conditions are met, designating habitat reserve areas at Parker Flats for these species effectively

¹ Federal entities would still be required to consult with the USFWS under Section 7 of the ESA, but such consultation would be streamlined.

reduces impacts to less than significant levels for animal losses that will occur with proposed development under the EGSP.

The oak woodland and savanna plant communities also provide potential nesting habitat for a variety of special-status and migratory birds, in addition to potential roosting sites for special-status bat species. The grasslands in the EGSP area also could support ground-nesting birds such as the California horned lark and northern harrier, although evidence of these species was not observed during recent surveys of the site. Active nests of birds-of-prey and other migratory birds are protected under the MBTA and under §3503.5 of the California Fish and Game Code. Construction activities within or adjacent to the oak woodland habitat could disturb active nests through the removal of trees or by causing adult species to abandon the area. Disturbance to established roosts of special-status bat species are of concern to CDFG. More specifically, if active roosts are present in the oak woodlands or abandoned buildings, these could be disturbed during tree removal and/or building demolition.

The black legless lizard and California horned lizard may be present in the study area. The black legless lizard is not federally or state-listed, but it is designated as a CSC by CDFG. Loss of potential habitat for the black legless lizard is anticipated, and mitigation is provided through the set-aside and management of habitat reserve areas within the boundaries of the FFO as described in the April 1997 HMP and the LSA. The California horned lizard can be relatively mobile, and, as such, is likely to avoid the construction areas and construction equipment. No substantial loss of habitat for this species is expected to result from implementation of the EGSP.

The project would not substantially reduce the amount of aestivation habitat available on former Fort Ord for CTS. In its draft assessment of CTS habitat on former Fort Ord, the Army estimates that approximately 37 acres of known CTS breeding habitat, approximately 37 acres of potential CTS breeding habitat, and approximately 14,866 acres of potential upland habitat within 2 kilometers of breeding ponds will be protected and managed through the establishment of HMP Habitat Reserves and Corridors. The project would not disrupt travel corridors between breeding sites because there are no pools on or within a reasonable distance north of the project area that are used by CTS. Nevertheless, the Service may consider the project area potential upland habitat for CTS based on proximity to the known breeding pond to the south. If CTS is listed as threatened, the Service will likely assume that CTS are present in the project area in the absence of protocol-level surveys demonstrating the opposite. Assuming presence of CTS, development within the project area could require take authorization from the Service.

Mitigation Measures

Similar to other special-status animal species, designating habitat reserve areas at Parker Flats effectively reduces impacts to less than significant levels for animal losses that may occur with proposed development under the EGSP. However, some species-specific measures are recommended to comply with various regulations and/or to minimize harm to individuals

Mitigation Measures

4.7-D-1 To comply with the Fish and Game Code and the Migratory Bird Treaty Act, pre-construction surveys for active bird nests are recommended as follows:

California horned lark and northern harrier: Both of these species are ground nesters and if active nests are present they shall be avoided. To avoid disturbance of an active nest, ground-disturbing activities shall be initiated between August and

January. If these activities are initiated after January and before August, a qualified biologist shall conduct a survey for active nests within a certain radius around the area that will be disturbed. The survey area shall be determined by the biologist considering the nature of the activity and the site characteristics. If active nests are found and the biologist determines that construction activities would remove the nest or have the potential to cause abandonment, then those activities shall be avoided until the young have fledged as determined through monitoring of the nest. Once the young have fledged, construction activities can resume in the vicinity

Migratory birds: This survey is focused on the trees that are to be removed and is intended to determine if any active nests are present in the trees at the time they are being proposed for removal. If construction activities are initiated after August 1 and before January 15 (outside of the typical nesting season for the birds-of-prey and migratory birds that may nest in the study area), then pre-construction surveys for active nests shall not be necessary. If activities are initiated before August or after January, then pre-construction surveys for active nests within a certain radius of proposed activities are recommended. If active nests are found and the biologist determines that construction activities would remove the nest or have the potential to cause abandonment, then those activities shall be avoided until the young have fledged as determined through monitoring of the nest. Once the young have fledged, construction activities can resume in the vicinity.

4.7-D-2

Within 30 days of building demolition or tree removal, a qualified biologist shall conduct pre-construction surveys for presence of roosting bats. If special-status bat species are present, the following measures should be implemented:

- Building removal and/or tree removal shall not occur if maternity bat roosts are present in the building or tree. Maternity roosts are typically present between April 15 and August 1.
- No building or tree removal shall occur within 300 feet of the maternity roost until all young bats have fledged—as determined by a qualified biologist.
- If special-status bats are present but there is not an active maternity roost, a Memorandum of Understanding (MOU) with the California Department of Fish and Game (CDFG) shall be obtained in order to remove the animals prior to building demolition and/or tree removal. Alternate habitat shall be provided if bats are to be excluded from maternity roosts. A roost with comparable spatial and thermal characteristics shall be constructed as directed by a qualified biologist. In the event that adult bats need to be handled and relocated, a qualified biologist shall prepare and implement a relocation plan subject to approval by CDFG that includes relocating all bats found on-site to an alternate suitable habitat. A Mitigation and Monitoring Plan that mitigates for loss of bat roosting habitat shall be prepared by a qualified biologist and approved by CDFG prior to building/tree removal.

4.7-D-3

Within 30 days of building demolition or tree removal, a qualified biologist shall conduct pre-construction surveys for active bird nests and survey the buildings and

trees for presence of roosting bats. If special-status bat species are present, the following measures should be implemented:

- Building removal and/or tree removal shall not occur if maternity bat roosts are present (between April 15 and August 1) in the building or tree.
- No building or tree removal shall occur within 300 feet of the maternity roost until all young bats have fledged—as determined by a qualified biologist.
- If special-status bats are present but there is not an active maternity roost, a Memorandum of Understanding (MOU) with the California Department of Fish and Game (CDFG) shall be obtained in order to remove the animals prior to building demolition and/or tree removal. Alternate habitat in adjacent open space land managed by Monterey County shall be provided if bats are to be excluded from maternity roosts. A roost with comparable spatial and thermal characteristics shall be constructed as directed by a qualified biologist. In the event that adult bats need to be handled and relocated, a qualified biologist shall prepare and implement a relocation plan subject to approval by CDFG that includes relocating all bats found on-site to an alternate suitable habitat. A Mitigation and Monitoring Plan that mitigates for loss of bat roosting habitat shall be prepared by a qualified biologist and approved by CDFG prior to building/tree removal.

4.7-D-4 Prior to initiation of construction, a qualified biologist shall be designated to monitor construction activities and advise construction personnel of the potential biological issues associated with development of the site. The biological monitor shall attend weekly construction meeting and provide onsite direction for addressing habitat- or species-specific issues as they are encountered during construction. If as a result of pre-construction surveys the biologist establishes exclusion zones around trees or buildings to protect nesting birds or roosting bats, the biological monitor should advise the construction crews of those areas and of the importance of respecting and maintaining those zones.

4.7-D-5 This mitigation measure could be achieved through completion of the HCP/IA for former Fort Ord, issuance of incidental take authorization specific to the project, or other activities demonstrated to comply with the ESA. Because of the potential for the project area to provide upland habitat for CTS, compliance with the ESA will be required. Alternatively, protocol-level surveys for CTS could be conducted to demonstrate that CTS are not present in the project area. Assuming that the surveys show no CTS using the project area, take authorization may not be required.

Significance After Mitigation

Less than significant.