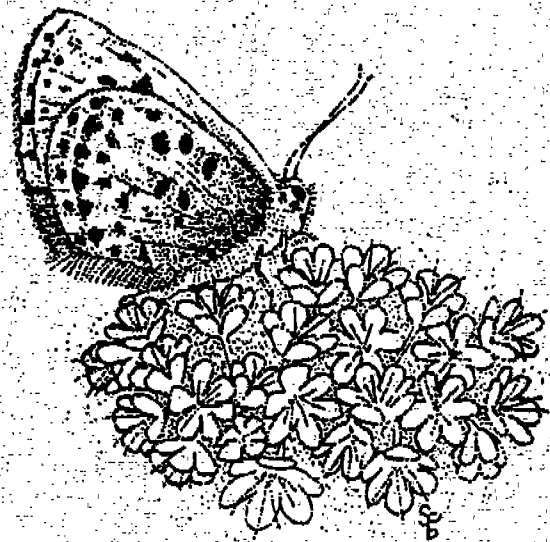


Purpose and Need



Smith's Blue Butterfly

Chapter 1. Purpose of and Need for the Habitat Management Plan

INTRODUCTION AND BACKGROUND

The Department of the Army in 1991 was directed to close and dispose of Fort Ord, California. The U.S. Army's (Army's) action is considered a major federal action that could affect eight species proposed for listing or listed as threatened or endangered under the federal Endangered Species Act (ESA). A Biological Assessment (BA) was prepared that identifies the potential loss of populations and habitat of federally listed species, species proposed for listing, and species that are candidates for listing, resulting from caretaker actions, disposal actions, and six reuse alternatives (U.S. Army Corps of Engineers 1993a). A supplement to the draft BA was prepared that describes the loss of populations and habitat of these same species resulting from an additional reuse alternative (Alternative 6R) (U.S. Army Corps of Engineers 1993b).

The June 1993 Final Environmental Impact Statement (FEIS) for the disposal and reuse of former Fort Ord identified the need to develop and implement a multispecies Habitat Management Plan (HMP) as a mitigation measure for impacts on vegetation and wildlife resources. The affected resources addressed in the FEIS included 22 plant and 22 wildlife species that are (or were during development of the 1994 Habitat Management Plan [1994 HMP]) listed, proposed, or candidates for federal or state listing as threatened or endangered; state species of special concern; and plants listed by the California Native Plant Society (CNPS) (U.S. Army Corps of Engineers 1993c). The FEIS described the potential impacts of several reuse alternatives analyzed in the document as severe enough to result in federal or state listing as threatened or endangered for some unlisted species.

The U.S. Fish and Wildlife Service's (USFWS's) October 19, 1993, final Biological Opinion on the disposal and reuse of former Fort Ord required that an HMP be developed and implemented to reduce the incidental take of listed species and loss of habitat that supports these species.

The land use and land management concepts that were contained in Alternative 6R in the FEIS were augmented by input from local entities following publication of the FEIS. As a result, an Alternative 6R modified (6RM) was included in the December 1993 National Environmental Policy Act (NEPA) Record of Decision (ROD) (hereinafter referred to as the 1993 NEPA ROD) as a most likely reuse scenario. This modified alternative consisted largely of updates to federal, state, and local screening requests and incorporated those portions of local reuse planning that were analyzed in the FEIS. At the time, this alternative was considered the most likely reuse based on screening requests and community reuse planning. This reuse concept was used as the basis for development of the 1994 HMP.

An HMP was published in February 1994 in response to both the October 1993 biological opinion and mitigation measures identified in the FEIS. The 1994 HMP addressed impacts resulting from predisposal, disposal, and reuse actions. Reuse actions addressed are those proposed under Alternative 6RM, a modified version of the preferred alternative (Alternative 6R) presented in the FEIS.

Since publication of the FEIS and 1994 HMP, the Army has prepared a Final Supplemental Environmental Impact Statement (FSEIS) to include additional data and an analysis of the following:

- disposal of additional land excess to the Army needs resulting from changes in the Army's Presidio of Monterey (POM) Annex boundary;
- those reuse areas that, as agreed to by the Army in the 1993 NEPA ROD associated with the FEIS, require additional analysis to cover disposal for new land uses;
- uses contained in the Fort Ord Reuse Authority (FORA) Final Base Reuse Plan (December 1994) that were not covered fully in the FEIS and 1993 NEPA ROD; and
- three additional reuse alternatives:
 - Alternative 7, which represents the December 12, 1994 FORA Final Base Reuse Plan, is slightly different from the anticipated reuse scenario contained in the Army's 1993 NEPA ROD on disposal and reuse of Fort Ord;
 - Revised Alternative 7 is not significantly different from Alternative 7 and includes land uses established through property transfers or memoranda of agreement (MOAs) for property transfers already completed by the Army; land uses proposed through federal, state, local, and McKinney Act screening completed in April 1996 for recently excessed lands; land uses required in the Draft Revised HMP; land uses for remaining areas as proposed in the Draft FORA Fort Ord Reuse Plan (March 1996) that do not conflict with laws and other federal regulations, policies, and requirements or the draft Revised HMP; relocation of a resort hotel; and utility easements needed for transfer of utility systems; and
 - Alternative 8 a land use scenario very similar to Alternative 7, contains most of the land use proposals of the FORA Final Base Reuse Plan (December 1994), but it also includes uses for specific parcels that were received through the scoping process for the Supplemental EIS.

During development of the FSEIS and through an agreement between the Army, USFWS, U.S. Bureau of Land Management (BLM), University of California (UC), and Fort Ord Reuse Authority (FORA) related to minimizing impacts on biological resources, it was determined that a revised HMP would be developed to replace the 1994 HMP. The revised HMP would accommodate disposal and reuse of property by defining development areas that may be used for nondetermined land uses that may be proposed in community reuse plans and by future landowners. The revised HMP would provide for the establishment of habitat reserves, development areas with reserve areas or development with restrictions, and habitat corridors that mitigate impacts to the target biological resources in the development areas.

This document (this HMP) serves as a revised HMP. It follows a format very similar to that presented in the 1994 HMP and has the same goals and objectives as the original document. The primary differences are modification of the HMP reuse scenario to reflect the planned methods for remediation of the beach trainfire ranges to the health-based level of concern, revisions in development and reserve areas, replacing parcel-specific land use descriptors from a specific reuse alternative with a generic development designation that would include a potential range of reuses considered in the FEIS and the FSEIS, and inclusion of the mitigation measures agreed to by the Army, USFWS, and other agencies included in the agreement mentioned above.

USFWS issued an amended Biological/Conference Opinion in January 1997 dealing with new species listings and status changes and the December 1996 draft HMP. USFWS then issued a second amended Biological/Conference Opinion in April 1997, which analyzed additional information provided by the Army. The April 1997 Biological/Conference Opinion analyzes the implementation of this revised HMP and establishes

incidental take limits for listed animal species contained in this HMP. The April 1997 amended Biological/Conference Opinion replaces the 1993 and January 1997 opinions.

Army Disposal Process

Upon completion of this HMP and FSEIS ROD, the Army intends to continue with property disposal at the former Fort Ord. The Army does not intend to adopt a specific reuse plan or alternative. The Army intends for the disposal process to be consistent with FORA's Final Base Reuse Plan where it is not in conflict with laws and other federal regulations, policies, and requirements. As stated in the 1993 NEPA ROD, "The disposal process will consider federal requests received in the screening process for transfer of federal land that is required under the Federal Property and Administrative Services Act of 1949, as well as all McKinney Act requests. The Army will honor, where possible and appropriate, all state and local requests for conveyance from separately authorized federal programs for transportation, education, recreation and open space, public health and safety, and airports." In addition, the Army will proceed with transfers for which memoranda of agreement (MOA) have been completed (e.g., California State University, Monterey Bay and University of California, Santa Cruz). Lands that are not transferred through these processes will be available for FORA to include in its economic development conveyance (EDC) application. Any remaining property will be available for negotiated sale to public bodies and for private sale.

All transfers must be consistent with the Army and other federal requirements for historic preservation; Endangered Species Act requirements for special-status plants and animals, including the 1993 Biological Opinion and requirements of this HMP; and conditions contained in the Army's Coastal Zone Management Act consistency determinations.

The likely reuse scenario contains elements of Alternative 6, Alternative 6RM, Alternative 7, Revised Alternative 7, and Alternative 8 as described in the FEIS, 1993 NEPA ROD, and the FSEIS. Based on the FEIS, 1993 NEPA ROD, the 1994 HMP, and the then-existing reuse plan, key disposal actions have been initiated or committed to by the Army that include the coastal zone transferred to the California Department of Parks and Recreation for habitat and park uses; the inland range and training areas transferred to the U. S. Bureau of Land Management for open space and natural resource management uses; a southern portion of the base transferred to the Monterey Peninsula Regional Park District for recreation area expansion; and airfield areas transferred to the City of Marina and the University of California for airport, science-related business park, and habitat reserves.

The 1993 Biological Opinion describes the concepts for disposal and habitat preservation within portions of Fort Ord (based on Alternative 6R) with habitat reserve lands to be transferred with binding habitat management and conservation requirements. The 1993 Biological Opinion provides for other parcels to be transferred that contain habitat for special status species without management or conservation requirements as development parcels. The 1994 HMP expanded the 1993 Biological Opinion's analysis to accommodate the 1993 NEPA ROD's anticipated reuse scenario. This HMP further expands the 1993 Biological Opinion's analysis to include the current range of anticipated reuse scenarios. The development parcels would be subject to impacts from construction and reuse subsequent to Army transfer. The Development Areas, Development with Reserve Areas or Development with Restrictions Areas, and Borderland Development Areas Along NRMA Interface (described in this HMP) will be available for disposal and development for reuse. For the 1993 Biological Opinion, it is assumed that a complete loss of biological resources would occur in the development parcels. The development parcels could be transferred with no covenants, deed restrictions, or conservation easements required. The development parcels would be available for total development. (See pages 10-12 of the 1993 Biological Opinion.)

Several reuse alternatives have been analyzed in the Army FEIS and FSEIS and these include the 1993 NEPA ROD land use map (Alternative 6RM), the December 1994 FORA Final Base Reuse Plan (Alternative 7) and elements of the March 1996 Draft FORA Fort Ord Reuse Plan (Revised Alternative 7). The

1994 HMP supports reuse within development areas based on Alternative 6RM. The FSEIS concluded that Alternative 7 would result in the removal of approximately 6,180 acres of habitat, approximately 240 acres more habitat removed than provided for in the 1994 HMP. Revised Alternative 7 would remove 6,300 acres of habitat, and Alternative 8 would remove 6,230 acres of habitat.

Alternative 7 would have adverse effects on biological resources from development within the coastal zone, proposed increased development areas, and from transportation corridors in locations that would bisect the HMP reserve and corridor areas described in the 1994 HMP. While the majority of land uses proposed in Alternative 7 (and the December 1994 FORA Plan) could be accommodated within the development areas of the 1994 HMP, avoidance and mitigation measures are needed to avoid significant impacts to HMP target species. These measures were cooperatively developed by FORA, the Army, BLM, UC, and USFWS. The measures are described in the April 1996 HMP Concept Agreement and included in Revised Alternative 7 and Alternative 8 in the FSEIS and in this HMP. Revisions in land use proposals from the March 1996 Draft FORA Fort Ord Reuse Plan are included in Revised Alternative 7. Table 1-1 summarizes the vegetation and wildlife impacts from the 1993 NEPA ROD, Alternative 7, Revised Alternative 7, and Alternative 8. Any of the land uses described in these alternatives can be accommodated within the Development, Borderland Development Areas Along NRMA Interface, Development with Reserve Areas or Development with Restrictions, and Habitat Corridor areas in this HMP.

Mitigation Agreement for the HMP

The following is the mitigation agreement between the Army, USFWS, BLM, UC, and FORA. The agreement, a letter of concurrence signed by all five agencies, and a copy of Figure 5-11 (referenced in the agreement) are included in Appendix A.

Representatives from the Army, USFWS, and Fort Ord Reuse Authority (FORA) met on March 15, 1996 to discuss modifications to the HMP. A telephone conference was held on March 28, 1996 which included a University of California (UC) representative. The discussion resulted in clarifications regarding revision to the [1994] HMP, including an agreement by UC or FORA to obtain the landfill parcel and manage a portion of it as habitat subject to review of liability and indemnification. Any final decision regarding acceptance of the landfill parcel is subject to approval by the respective governing body. A detailed amendment to the HMP will be prepared by the Army and provided to affected parties for signature prior to publication. The following are the terms of the modifications for the Revised Habitat Management Plan.

- a. The requirement for the landfill parcel to be included as an HMP habitat management area is revised from being an Army responsibility to being a University of California or FORA responsibility. The Army will not be required to restore habitat on the landfill cap nor will the Army be required to perform habitat management activities in the parcel while the landfill is being remediated or in caretaker status.
- b. The University of California (if not UC, then FORA) will apply to obtain the landfill parcel as part of an Economic Development Conveyance (EDC) transfer under terms of an existing MOA between the U.S. Army and UC. Following land transfer from the Army, UC or FORA will manage seventy-five percent (75%) of the landfill parcel (including the completed landfill cap) as habitat. The remaining twenty-five percent (25%) of the parcel will be available for development. Other changes in boundaries and trade-offs of development and habitat areas will be made in the HMP as shown on the attached figure (Figure 5-11, Revised Habitat Management Plan for Former Fort Ord). This will satisfy basewide HMP habitat management requirements for all proposed development

Table 1-1. Vegetation and Wildlife Impact Summary
 Alternative 7, Revised Alternative 7, and Alternative 8 and the
 Reuse Scenario Contained in the 1993 NEPA ROD

Resource Area	ROD	Alternative 7	Revised Alternative 7	Alternative 8
Vegetation and Wildlife				
Approximate acres of existing habitat considered removed	5,940 (25%)	6,180 (26%)	6,300 (26%)	6,230 (26%)
Approximate acres of existing sand gilia habitat removed	693 (19%)	793 (21%)	764 (20%)	793 (21%)
Approximate acres of existing Monterey spineflower habitat removed	3,215 (31%)	3,495 (34%)	3,372 (33%)	3,423 (34%)

areas (shown as land areas with no HMP habitat preservation requirements on Figure 5-11).

- c. The other development areas adjacent to the BLM Natural Resources Management Area (NRMA) will be obtained as part of the FORA EDC. In these areas of undeveloped habitat adjacent to the NRMA, FORA will either arrange to have existing native habitat managed or construct and maintain fire breaks and vehicle barriers to separate these areas from the NRMA until such time as roads and other developments are constructed in these locations. (See attached figure for locations of fire breaks along the edge of the NRMA.) This will replace the individual development parcel descriptions contained in the original HMP. The revised HMP will rely on this measure to accomplish the desired separation of habitat areas from future development areas. The land use specific requirements for development parcels will be removed in the revised HMP.

If FORA becomes responsible for managing the habitat portion of the landfill parcel identified in item b, FORA will arrange for and fund an appropriate agency for long-term management of this area.

The Borderland Development Area Along NRMA Interface habitat management requirements (described in the section titled "Borderland Development Areas Along NRMA Interface" in Chapter 4) includes interim and long-term management requirements applicable to the Habitat Reserve/Development interface between the NRMA and developing areas. This management category will implement provisions in item c.

In reference to the requirements in item c, FORA has stated that it is not FORA's intent to separate developable natural land areas from the NRMA by the establishment of fire breaks and vehicle barriers before planned development of those lands as allowed by this HMP. BLM and FORA will work together to identify suitable locations for both interim and long-term fire breaks/barriers separating developed lands from natural lands as development of former Fort Ord lands proceeds. FORA or other recipients of the land will supply reports on interim habitat management in development parcels and/or development of firebreaks to BLM.

Grazing

An additional modification of this HMP is the removal of grazing as an Army caretaker action. The discussion of impacts and mitigation related to grazing was removed because the Army no longer has a grazing program at former Fort Ord, as lands previously used for grazing are being transferred to the BLM.

Species Addressed in the HMP

Wildlife and plant species and habitats addressed in this HMP are the same as those included in the 1994 HMP. These species are a subset of the species analyzed in the FEIS. Species addressed in the 1994 HMP were included based on their legal protection, listing status at the time of publication, and the relative importance of populations and habitats at former Fort Ord to the continued survival of the species (Tables 1-2 and 1-3). However, since publication of the 1994 HMP, the legal status of several species has changed. The columns labeled "Listing Status" in Tables 1-2 and 1-3 reflect these changes, and the circumstances and results of these changes are described below.

Table 1-2. Plant Species Considered in This Habitat Management Plan (HMP Plants)

Plant Species	Listing Status* Federal/State/CNPS	CNPS RED Code ^b	Approximate Percent of Range at Former Fort Ord	Habitat	Distribution	Importance of Populations at Former Fort Ord
Robust spineflower <i>Chorizanthe robusta</i> var. <i>robusta</i>	E/--/1A	1-1-3	<1	Found on sandy soils in coastal dune and coastal scrub habitats	Historically from Alameda and San Mateo Counties south to Santa Cruz County and near the coast from southern Santa Cruz County to northern Monterey County, much of which is now developed (4, 5, 8) ^c	Several plants of robust spineflower were found at one site on former Fort Ord; former Fort Ord does not provide important habitat for this species (7)
Sand gilia <i>Gilia tenuiflora</i> ssp. <i>arenaria</i>	E/T/1B	3-3-3	50-70	Sandy openings in coastal dunes and scrub and maritime chaparral	Occurs around Monterey Bay, Salinas River Beach, Asilomar State Beach, from Point Pinos to Point Joe, and Fort Ord (1, 2, 9)	Former Fort Ord provides extensive suitable habitat for sand gilia and constitutes a substantial portion of its range (at least half)
Yadon's piperia <i>Piperia yadoni</i>	PE/--/1B	N/A	<1	Occurs on sandy soils in maritime chaparral, coastal scrub, and closed-cone coniferous forest	Occurs in Monterey County from the Pajaro Hills to the Monterey Peninsula	Less than 1% of the individuals of Yadon's piperia are found on former Fort Ord; it is noteworthy that its habitat on former Fort Ord is inter- mediate between that of its occur- rence in chaparral and pine forest habitats (7)
Monterey spineflower <i>Chorizanthe pungens</i> var. <i>pungens</i>	T/--/1B	3-3-3	75-95	Colonizes recently disturbed sandy sites in coastal dune, coastal scrub, grassland, and maritime chaparral habitats	Along the coast of southern Santa Cruz and northern Monterey Counties and inland to the coastal plain of the Salinas Valley (1, 4, 8)	Former Fort Ord supports the largest populations of Monterey spineflower known (7, 8)
Coast wallflower <i>Erysimum ammophilum</i>	SC/--/1B	2-2-3	10-30	Occurs scattered on stabilized coastal dunes	Coastal dunes of Monterey Bay and Santa Rosa Island, and coastal scrub on former Fort Ord (10, 11)	Former Fort Ord provides a moderate amount of suitable habitat for coast wallflower and may consti- tute an important portion of its range because of the limited extent and high degree of disturbance to its habitat in California
Eastwood's ericameria <i>Ericameria fasciculata</i>	SC/--/1B	3-3-3	70-90	Inhabits coastal dune and scrub, maritime chaparral, and closed-cone coniferous forest communities	Found in Monterey County, including Del Monte Forest, Monterey Airport, Toro Regional Park, near Prunedale, and former Fort Ord (1)	Former Fort Ord supports most of the remaining individuals of Eastwood's ericameria (3)
Monterey ceanothus <i>Ceanothus cuneatus</i> var. <i>rigidus</i>	SC/--/1A	1-2-3	50-70	Sandy hills and flats of maritime chaparral, closed- cone coniferous forests, and coastal scrub	Monterey County along the coast and former Fort Ord, Toro Regional Park, Monterey Airport, and near Prunedale (1, 6)	The most abundant and probably most vigorous population of Monterey ceanothus is found on former Fort Ord (3)

Plant Species	Listing Status* Federal/State/CNPS	CNPS RED Code ^b	Approximate Percent of Range at Former Fort Ord	Habitat	Distribution	Importance of Populations at Former Fort Ord
Sandmat manzanita <i>Arctostaphylos pumila</i>	SC/--/1B	3-2-3	70-90	Sand hills of maritime chaparral and coast live oak woodland	Scattered locations around Monterey Peninsula and an extensive area on former Fort Ord (1, 3)	A large and important part of the range of sandmat manzanita is found on former Fort Ord
Seaside bird's-beak <i>Cordylanthus rigidus</i> var. <i>littoralis</i>	SC/E/1B	2-3-3	30-50 ^d	Inhabits sandy soils of stabilized dunes, maritime chaparral, coastal scrub, and closed-cone coniferous forests	Monterey and Santa Barbara Counties, including former Fort Ord, Monterey Airport, and between Carmel and Elkhorn Slough in Monterey County, and on Burton Mesa in Santa Barbara County (1, 2)	A substantial portion of the range of Seaside bird's-beak is found at former Fort Ord
Toro manzanita <i>Arctostaphylos montereyensis</i>	SC/--/1B	3-2-3	70-90	Occurs on stabilized sandy soils and badlands in maritime chaparral	Restricted to several sites in Monterey County, including former Fort Ord, Toro Regional Park, and Monterey Airport (1, 3)	Former Fort Ord supports the largest expanse of Toro manzanita in existence
Hooker's manzanita <i>Arctostaphylos hookeri</i>	--/--/1B	2-2-3	15-35	Sand hill and Aromas formation maritime chaparral and closed-cone coniferous forest	Del Monte Forest, Monterey Peninsula, Prunedale Hills, former Fort Ord, and sand hills in the Larkin Valley	Former Fort Ord supports large populations of Hooker's manzanita; although it is more common on the Monterey Peninsula and near Prunedale than at former Fort Ord, former Fort Ord provides important and extensive habitat (3,6)

* Status explanations (see the "Definitions of Special-Status Species" section above for citations):

Federal

- E = listed as endangered under the federal Endangered Species Act.
- T = listed as threatened under the federal Endangered Species Act.
- PE = proposed for federal listing as endangered under the federal Endangered Species Act.
- SC = Species of Concern are all former Category 1 and 2 candidate species that without additional conservation action are likely to become candidates for listing by the U.S. Fish and Wildlife Service under the federal Endangered Species Act.
- = no designation.

State

- E = listed as endangered under the California Endangered Species Act.
- T = listed as threatened under the California Endangered Species Act.
- = no designation.

California Native Plant Society

- 1B = List 1B species: rare, threatened, or endangered in California and elsewhere
- 4 = List 4 species: plants of limited distribution.
- = no designation.

^b CNPS RED Code:**Rarity (R)**

- 1 = Rare, but found in sufficient numbers and distributed widely enough that the potential for extinction is low at this time.
- 2 = Occurrence confined to several populations or to one extended population.
- 3 = Occurrence limited to one or a few highly restricted populations, or present in such small numbers that it is seldom reported.

Endangerment (E)

- 1 = Not endangered.
- 2 = Endangered in a portion of its range.
- 3 = Endangered throughout its range.

Distribution (D)

- 1 = More or less widespread outside California.
- 2 = Rare outside California.
- 3 = Endemic to California.

^c Data sources:

- 1 = Natural Diversity Data Base 1992.
- 2 = Hillyard 1992.
- 3 = Griffin 1976.
- 4 = Reveal and Hardham 1989.
- 5 = Thomas 1961.
- 6 = Griffin 1978.
- 7 = Morgan 1992.
- 8 = U.S. Fish and Wildlife Service 1991.
- 9 = U.S. Fish and Wildlife Service 1992.
- 10 = Munz and Keck 1968.
- 11 = Abrams 1940.

^d This estimate incorporates locations of Seaside bird's-beak in Santa Barbara County, which may have formed as a result of hybridization. The estimate based only on Monterey County occurrences would increase the percent of range at former Fort Ord to 60-80%.

Table 1-3. Wildlife Species Considered in This Habitat Management Plan (HMP Species)

Wildlife Species	Listing Status* Federal/State	Approximate Percent of Range at Former Fort Ord	Habitat	Distribution	Occurrence at Former Fort Ord	Importance of Former Fort Ord Population
Smith's blue butterfly <i>Euphilotes enoptes smithi</i>	E/-	5-10	Uses coastal dunes and hillsides that support seaciff buckwheat (<i>Eriogonum parvifolium</i>) or coast buckwheat (<i>Eriogonum latifolium</i>); these plants are used as a nectar source for adults and host plant for larvae	Restricted to localized populations along the coast of Monterey County; single populations reported in Santa Cruz and San Mateo Counties	Known to occur near the northern boundary of former Fort Ord and from Giggling Siding to the southern base boundary (5) ^b	Former Fort Ord has been identified as important to the recovery of Smith's blue butterfly
California black legless lizard <i>Anniella pulchra nigra</i>	PE/SSC	10-20	Requires moist, warm habitats with loose soil for burrowing and prostrate plant cover; may be found on beaches, in chaparral, pine oak woodland, or riparian areas	Restricted to small populations along the coast in Monterey and northern San Luis Obispo Counties; one population in Contra Costa County	Found in stabilized dunes, oak woodland, and oak savanna, and maritime chaparral with sandy soils at former Fort Ord (2, 4, 7)	Former Fort Ord supports one of the larger expanses of black legless lizard habitat within the species' range
California red-legged frog <i>Rana aurora draytoni</i>	T/SSC	<1	Requires coldwater ponds with emergent and submergent vegetation and riparian vegetation at the edges	Found along the coast and coastal mountain ranges from Humboldt to San Diego Counties, and in the Sierra Nevada from Butte to Fresno Counties	May occur at Ford Ord (1)	Former Fort Ord composes little of the species' total range; however, former Fort Ord provides potential habitat for California red-legged frog, which is relatively rare within the Monterey Bay region
Western snowy plover <i>Charadrius alexandrinus nivosus</i>	T/SSC	5-10	Found along beach above the high tide limit; also uses shores of salt ponds and alkali or brackish inland lakes	Intermittent nesting sites along the Pacific Coast from Washington to Baja California	Nests along the beaches at former Fort Ord north of Stillwell Hall (3)	Former Fort Ord supports one of 20 coastal breeding populations of western snowy plovers in California; Monterey Bay as a whole is considered one of eight primary coastal nesting areas; former Fort Ord beaches are one of the areas proposed by USFWS as critical habitat for this species (60FR 11768 March 2, 1995)

Wildlife Species	Listing Status* Federal/State	Approximate Percent of Range at Former Fort Ord	Habitat	Distribution	Occurrence at Former Fort Ord	Importance of Former Fort Ord Population
California tiger salamander <i>Ambystoma tigrinum californiense</i>	C/SSC	<1	Favors open woodlands and grasslands; requires water for breeding and burrows or cracks in the soil for summer dormancy	Occurs only in California from the coastline to the Sierra Nevada crest and from Sonoma to Santa Barbara Counties	Occurs in ponds and vernal pools throughout former Fort Ord (2, 6)	Former Fort Ord comprises little of the total range of California tiger salamander; however, vernal pool habitat is relatively rare in the Monterey Bay region
Monterey ornate shrew <i>Sorex ornatus salaricus</i>	SC/--	15-25	Found in a variety of riparian, woodland, and upland communities where there is thick duff or downed logs	Restricted to the Monterey Bay region; historical occurrences at the mouth of the Salinas River and Moss Landing in Monterey County	May occur at former Fort Ord (1)	Former Fort Ord provides abundant potential habitat for Monterey ornate shrew within the species' limited range
California linderiella <i>Linderiella occidentalis</i>	--/--	<1	Ephemeral freshwater habitats such as vernal pools, rock outcrop pools, swales, and ponds	Found in the Central Valley from Tehama to Madera Counties, and the central and south Coast Ranges from Lake to Riverside County	Known from eight water bodies at former Fort Ord (2)	Former Fort Ord composes little of the total range of California linderiella; however, vernal pool habitat is relatively rare in the Monterey Bay region

* Status definitions:

Federal

- E = listed as endangered under the federal Endangered Species Act.
- T = listed as threatened under the federal Endangered Species Act.
- PE = federally proposed for listing as endangered.
- C = species for which USFWS has on file sufficient information on biological vulnerability and threat(s) to support proposals to list them as endangered or threatened.
- SC = Species of Concern are former Category 1 and 2 species that without additional conservation action are likely to become candidates for listing by the U.S. Fish and Wildlife Service under the federal Endangered Species Act.
- = no status.

State

- SSC = considered a State Species of Special Concern by California Department of Fish and Game.
- = no status.

^b Data sources.

- (1) Not found during field surveys.
- (2) Encountered during field surveys
- (3) Source: George pers. comm.
- (4) Source: Bury 1985.
- (5) Source: Arnold 1983.
- (6) Source: Stanley pers. comm.
- (7) Source: Installation UXO surveys.

California Linderiella

The California linderiella fairy shrimp was proposed for listing as endangered by USFWS in May 1992. The species was still considered proposed for listing during development of the 1994 HMP. However, during the scientific review of the species completed during the proposal period, USFWS found the California linderiella to be more abundant than initially believed. Based on this information, USFWS withdrew the proposal to list the California linderiella in September 1994 and determined that the species is not likely to become either endangered or threatened throughout all or a significant portion of its entire range in the foreseeable future.

Although the California linderiella is no longer considered proposed for listing as endangered, it is retained in this HMP because measures included in this HMP to protect the California linderiella also protect other wetland-associated HMP wildlife species such as the California tiger salamander and California red-legged frog.

Removal of Category 2 Candidate Species Designation from the ESA

On February 28, 1996, the Department of the Interior published in the Federal Register (FR) the Department of the Interior Endangered and Threatened Species, Plant and Animal Taxa; Proposed Rule (61 FR 7596 February 28, 1996). Under the rule, the Category 1 and 2 classifications for federal candidate species are removed. Species either are identified as Candidate species with a listing priority classification or are no longer given any federal status.

Included in the rule are tables identifying new classifications for numerous species. Many species previously considered Category 1 or 2 candidates are retained under the new Candidate status and provided listing priority classification. Other species that were previously considered candidate species are identified as no longer having status under the federal ESA. Species not listed in the tables included in the rule are presumed to no longer be provided federal status. Further guidance from USFWS staff has indicated that these former candidate species are now considered "Species of Concern". The listing status for each species addressed in Tables 1-2 and 1-3 has been modified as appropriate to reflect information included in this rule.

Species listed as threatened or endangered or proposed for threatened or endangered status were not affected by the rule.

Although several species included in the 1994 HMP are no longer considered federal candidates, they are retained in this HMP because they may be listed under the California ESA, they are considered by USFWS as Species of Concern, they have a significant portion of their range at former Fort Ord, or they are associated with a habitat that is important to a suite of many other sensitive species.

Changes in Listing Status

Since publication of the 1994 HMP several species proposed for threatened or endangered status have been listed, and other species that were previously considered federal candidates are now proposed for threatened or endangered status. The California red-legged frog and Monterey spineflower are now listed as threatened, the robust spineflower is listed as endangered, and both Yadon's piperia and the black legless lizard are proposed for endangered status. Management and preservation measures in this HMP will not change because of changes in the listing status of HMP species. However, land recipients may need to further coordinate with USFWS and/or other agencies as appropriate in the event that species such as the black legless lizard become listed to receive Section 10a permits or other approvals.

ORGANIZATION OF THE HMP

This HMP is organized in the same manner as the 1994 HMP. It is presented in six chapters. Chapter 1, "Purpose of and Need for the Habitat Management Plan", describes the purpose and need, goals and objectives, and procedure followed in developing this HMP. Chapter 2, "Minimum Conservation Area and Corridor System", describes methods used to develop a minimum conservation area and corridor system for former Fort Ord. Chapter 3, "Habitat Management for Predisposal Actions", presents habitat management procedures to accompany Army actions taken before disposal of former Fort Ord land. Chapter 4, "Habitat Management for Disposal and Reuse", describes the habitat management procedures to be taken by recipients of disposed land. Chapter 5, "Citations", lists the sources cited in this HMP. Chapter 6, "List of Preparers and Acknowledgments", describes the contributions of key staff and agency representatives.

GOALS AND OBJECTIVES

The goals and objectives of this HMP are the same as those for the 1994 HMP.

- Preserve, protect, and enhance populations and habitat of federally listed threatened and endangered wildlife and plant species.
- Avoid reducing populations or habitat of federal proposed and candidate wildlife and plant species to levels that may result in one or more of these species becoming listed as threatened or endangered.
- Preserve and protect populations and habitat of state-listed threatened and endangered wildlife and plant species.
- Avoid reducing populations or habitat of species listed as rare, threatened, and endangered by the CNPS (List 1B), or with large portions of their range at former Fort Ord, to levels that may result in one or more of these species becoming listed as threatened or endangered.
- Conduct the disposal of land to public and private entities in a manner that is compatible with the preservation of federally listed threatened and endangered wildlife and plants within the HMP conservation area.
- Inform potential recipients of former Fort Ord land and the general public of methods that provide a suitable mechanism for protecting natural resources while allowing implementation of a community-based reuse plan that promotes economic recovery after closure of former Fort Ord.
- Provide the basis for recipients of former Fort Ord lands to seek Section 10(a) permits pursuant to the federal ESA and achieve compliance for conservation of state-listed threatened and endangered species and other special-status species recognized by California Department of Fish and Game (DFG) under the California ESA and the California Environmental Quality Act (CEQA).
- Provide a foundation for a prelisting agreement between USFWS and recipient landowners.

The overall goal of this HMP is to provide for, at a minimum, no net loss of populations or important habitat for any of the subject species of this HMP. This goal can be met through the careful selection of areas

designated as reserves and corridors. The beneficial enhancement of habitat by the selected management agencies is essential to the achievement of this goal.

FLEXIBILITY OF THE HMP

Pre-Transfer Modifications to This HMP

This HMP has adjusted the development and reserve areas to reflect changes proposed in the community reuse plan and information relating to the Army environmental remediation actions. The specific land use designations for individual development parcels have been replaced with a generic development designation, allowing for broad flexibility in reuse of specific development parcels. Changes in specific use of development parcels within the range of uses described in the FEIS and the FSEIS would not require revision to this HMP. During disposal by the Army, it may be necessary to alter management agencies for reserve areas or portions of reserve areas because of changes in anticipated land recipients. Any such change would be coordinated with USFWS and agreed to by both parties. Any further revision to habitat reserves or corridors before transfer would necessitate revisions in this HMP.

The Army will remain responsible for any changes to this HMP in areas that have not been transferred (pre-transfer). The Army will also remain responsible for revisions to this HMP relating to hazardous, toxic, and radiological waste and ordnance and explosives response actions. Changes undertaken in parcels after they are transferred are the responsibility of the land recipient.

Polygon boundaries in development areas may be modified, and development polygons may be subdivided or aggregated before transfer. These types of changes in development polygons will not require modifications to this HMP.

Post-Transfer Modifications to the HMP

All recipients of former Fort Ord lands will be required to abide by management guidelines and procedures addressed in this HMP. However, situations may arise during the life of this HMP that make changes in the plan's guidelines after lands have been transferred (post-transfer) appropriate. Several types of changes may occur. Land recipients may wish to change the boundaries of their parcels or land uses within their parcels. Actions such as additional infrastructure development in reserve areas may be necessary. Changes in management guidelines within a land use may be required to better preserve or enhance a resource. These kinds of changes may be made if the affected landowners and USFWS can agree that the overall goals and objectives of this HMP will not be compromised.

Such post-transfer revisions do not involve the Army and would be the responsibility of future landowners, subject to the terms of the reservation placed on the lands in the MOAs and/or deeds at the time the lands are transferred from the Army. Such revisions will be funded by the responsible agency/land recipient. The agency or land recipient will also be responsible for any necessary documentation and any coordination with USFWS, BLM, or other agencies.

Polygon boundaries in development areas may be modified, and development polygons may be subdivided or aggregated after transfer. These types of changes in development polygons will not require modifications to this HMP.

HMP STEPWISE ANALYSIS

This HMP was developed following a stepwise analysis to evaluate and minimize the loss of specific wildlife and plant species and their habitats resulting from disposal and reuse of former Fort Ord. A description of the steps is provided in the following sections. This analysis was conducted during development of the 1994 HMP; however, the results are still applicable to this HMP.

Step 1: Identify Species and Habitats to Be Considered in the HMP

Wildlife and plant species analyzed in this HMP were chosen during development of the 1994 HMP. Selection was based on their legal protection under the state and federal ESA, their listing status, and the relative importance of existing populations and habitats at former Fort Ord to the continued survival of the species. CNPS-listed species with more than 10% of their known range at former Fort Ord were also analyzed in this HMP. Habitats analyzed in this HMP were chosen based on their importance to the species chosen for analysis.

The same species selected for the 1994 HMP are also analyzed in this HMP; however, the legal status for many of the species has changed (see the "Species Addressed in this HMP" section earlier in Chapter 1 for an explanation of changes in legal status). The following species are analyzed in this HMP (current legal status is provided¹):

- federally proposed and listed threatened and endangered species (Smith's blue butterfly [E], sand gilia [E], Monterey spineflower [T], robust spineflower [E], western snowy plover [T], California red-legged frog [T], California black legless lizard [PE], and Yadon's piperia [PE]);
- species that are candidates for federal listing as threatened or endangered (California tiger salamander [C]);
- state-listed threatened and endangered species (sand gilia [T], Seaside bird's-beak [E]);
- species that fell under one of the previous categories during preparation of the 1994 HMP but that no longer have any legal status under the federal or state ESA (California linderiella, Monterey ornate shrew, and Monterey ceanothus); and
- CNPS list 1B species with extensive portions (greater than 10%) of their known ranges at former Fort Ord (Hooker's manzanita, Toro manzanita, sandmat manzanita, Eastwood's ericameria, and coast wallflower).

These species are referred to as "HMP species" in this report.

¹ Status explanations: **Federal** - E = listed as endangered under the federal ESA; T = listed as threatened under the federal ESA; PE = proposed for federal listing as endangered under the federal ESA; C = species for which USFWS has sufficient information on biological vulnerability and threat(s) on file to support proposals to list them as endangered or threatened; **State** - E = listed as endangered under the California ESA; T = listed as threatened under the California ESA; **California Native Plant Society** - 1B = List 1B species: rare, threatened, or endangered in California and elsewhere.

The following habitats were analyzed in this HMP because they support large concentrations of HMP species:

- maritime chaparral;
- coastal strand;
- dune scrub; and
- beaches, bluffs, and blowouts.

The following habitats were analyzed in this HMP because they occur at sites that could be restored to high-quality HMP species habitat:

- ice plant mats and
- disturbed dunes.

Vernal pools and ponds are habitat for California linderiella, red-legged frog, and California tiger salamander but were not analyzed in this initial stepwise analysis. Specific mitigation measures for impacts on fairy shrimp, red-legged frog, California tiger salamander, vernal pools, and ponds are included in Chapters 3 and 4. Protection or replacement for these waters of the United States will also be provided through implementation of the federal Clean Water Act of 1972.

Step 2: Develop a Conservation Area and Corridor System

A preliminary conservation area and corridor system was developed during preparation of the FEIS to define the minimal area necessary to preserve HMP species populations and habitats according to ecological principles and the known biological resource distributions at former Fort Ord.

The conservation areas developed for the FEIS provided a benchmark for subsequent analysis and defined these more valuable areas of habitat that could be given priority for conservation and protection from development impacts. The benchmark is used to identify biologically important habitat and the minimum area required to protect the most species. The conservation areas were planned to protect sufficient habitat for listed and proposed species to avoid a jeopardy opinion by USFWS and to protect representative populations and habitats of the other HMP species. Where necessary, corridors were identified to maintain connections between conservation areas. Habitat values within corridors may be less than in conservation areas; however, corridors are important for maintaining the ecological integrity of conservation areas.

Step 3: Compare Land Requests with Conservation Area and Corridor System

The locations of land requests and proposed land uses for former Fort Ord were compared with the locations of minimum conservation areas and corridors. The boundaries of the initial conservation areas and corridors were designed to be flexible, with some adjustments made to accommodate the land uses prescribed under various reuse scenarios for former Fort Ord. The loss of some valuable habitat within the conservation areas would be replaced by expanding the conservation areas to other locations, preserving usable habitat in other locations, or improving and restoring disturbed habitat. Certain land uses would be allowed within corridor areas if these uses are compatible with proper corridor functioning.

Step 4: Create Final Conservation Area and Corridor System

The conservation area and corridor system was modified to create a final conservation area and corridor system that considered the land uses proposed for former Fort Ord and includes sites necessary for mitigation of impacts on HMP species.

Step 5: Develop HMP Guidelines

Protection, enhancement, mitigation, monitoring, management, and funding guidelines were developed to allow for an installation-wide means of accomplishing mitigation.

Step 6: Implement the HMP

This HMP will be signed by all responsible parties, and conservation, management guidelines, monitoring, and enforcement will be implemented by each party as described in Chapter 4, "Habitat Management for Disposal and Reuse". The Army will include HMP conservation and management requirements in land transfer documents.

