# ASSESSMENT
# EAST GARRISON – PARKER FLATS
# LAND USE MODIFICATIONS
# FORT ORD, CALIFORNIA

*Prepared for:*
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Monterey County, California

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# 1.0 INTRODUCTION

The Fort Ord Reuse Authority (FORA) and the County of Monterey (County) propose boundary changes and other modifications to the *Installation-Wide Multispecies Habitat Management Plan for Former Fort Ord* (HMP). The modifications are intended to resolve land use conflicts stemming from a long history of ordnance and explosives use of certain land areas along with parallel and competing conveyance requests for surplus property at the former base. The modifications would accommodate proposed new uses in appropriate areas and would primarily affect lands designated for development and lands designated for development with reserve areas or restrictions on the HMP map (Figures S-1 and 4-1 and Attachment A to the HMP). To a lesser extent, the proposed changes would affect small areas of land designated as habitat reserve. The goals, objectives and overall intent of the HMP would not be altered and the protections afforded those species addressed in the HMP (HMP Species) would not be reduced as a result of the proposed modifications. On the contrary, an increase in the overall acreage of designated habitat reserve lands occupied by HMP Species would occur. In addition, the habitat corridor connections between designated reserve areas in the southerly half of the base and those in the northerly portion would be expanded and enhanced. The following report presents the background against which the modifications and boundary changes are proposed, describes the changes that would result from the proposal, analyzes the potential HMP consistency and biological resource implications of the changes, and provides conclusions and recommendations based on available data, coordination with interested parties, and best professional judgement.

# 2.0 BACKGROUND

## 2.1 The Habitat Management Plan (HMP)

The Fort Ord HMP establishes a habitat conservation area and corridor system and parcel-specific land use categories and management requirements for all lands on the former base. The conservation areas, corridors and parcel-specific land use designations are illustrated on Figures S-1 and 4-1 and Attachment A of the HMP (reproduced here as Figure 1). Four general categories of parcel-specific land use are identified: habitat reserve, habitat corridor, development with reserve areas or restrictions, and development with no restrictions. Resource conservation and management requirements and responsible parties for each parcel or group of parcels with habitat designations are discussed in Chapter 4 of the HMP.

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 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. Losses to 18 special-status species (HMP Species) are also accounted for by the HMP (Appendix A). The establishment of approximately 16,000 acres of habitat reserves with about 400 additional acres of connecting habitat corridors is the primary measure to minimize the impacts of reuse on HMP Species. In addition, the HMP further conditions development on approximately 1,800 additional acres by requiring reserve areas or restrictions on those lands.

Notes:

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

2) The E11b parcels do not reflect the public benefit conveyance still being coordinated by FORA, the County of Monterey, and Monterey Peninsula Regional College. A portion of these parcels will likely be transferred as public benefit conveyance transfers.

Boundary of the Former Fort Ord

HMP Management Categories

Habitat Reserve

Habitat Corridor

Habitat Corridor

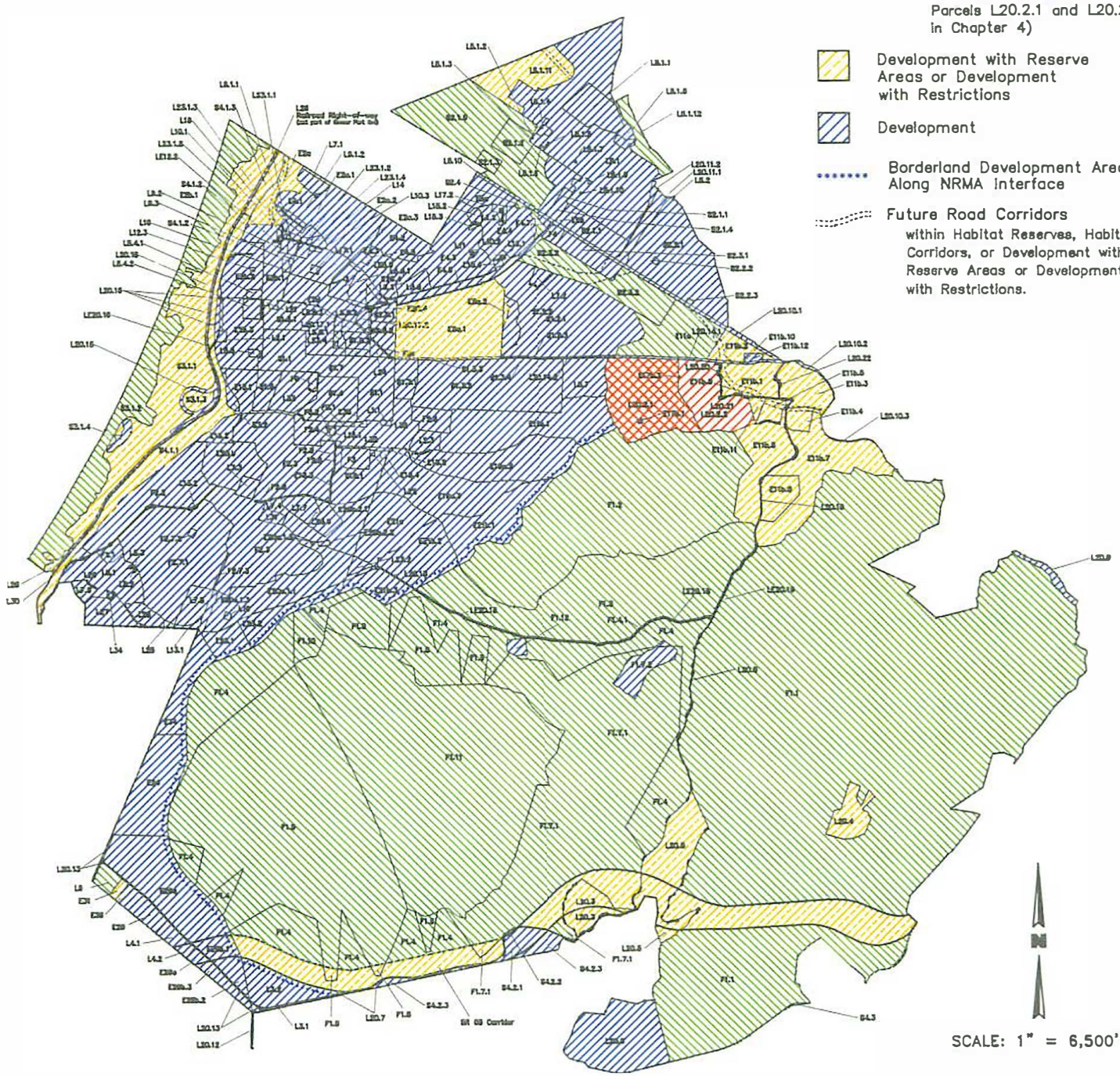
Portion of Habitat Corridor with Allowance for Future Development (See Figure 4–3 and the Discussion of Parcels L20.2.1 and L20.2.2 in Chapter 4)

Development with Reserve Areas or Development with Restrictions

Development

Borderland Development Areas Along NRMA Interface

Future Road Corridors within Habitat Reserves, Habitat Corridors, or Development with Reserve Areas or Development with Restrictions.

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Habitat Management Plan Map
for Former Fort Ord
December 1996

Figure 1

Generic land use designations have been assigned by the HMP to allow for broad flexibility in reuse of specific development parcels. Changes in specific use of development parcels within the range of uses described through the U. S. Department of the Army (Army) environmental review process do not require revisions to the HMP. Furthermore, polygon boundaries in development areas may be modified and development polygons may be subdivided or aggregated without necessitating modifications to the HMP. Other changes to the HMP may be allowed if the affected landowners and the U.S. Fish and Wildlife Service (Service) can agree that the overall goals and objectives of the HMP will not be compromised.

## 2.2 The Fort Ord Base Reuse Plan

The Fort Ord Base Reuse Plan (Base Reuse Plan), adopted by the FORA Board of Directors on June 13, 1997, serves as a general plan for the former base. The Base Reuse Plan was developed in concert with the HMP to avoid conflicts in general land use designations. Land uses approved in the Base Reuse Plan are: residential, multiple educational facilities, office and research parks, light industrial and business parks, commercial and retail businesses and a variety of visitor-serving uses such as lodging, golf courses, beach and community parks and equestrian facilities.

The Base Reuse Plan defines land uses for the 28,000 acres that comprise former Fort Ord. Consistent with the HMP, the Base Reuse Plan designates nearly 17,000 acres, or over 60 percent of the land on the former base as habitat reserve area. About 4,000 acres are planned for parks, open space, visitor serving, and public facility uses. Over 2,300 acres are designated for educational or research uses, about 2,000 acres for residential units and approximately 1,500 acres for business and retail uses. The remainder of the land will be needed for infrastructure/rights of way or will be retained by the Army.

Most of the areas proposed for development in the Base Reuse Plan are designated for development without restrictions in the HMP. However, some Base Reuse Plan development areas (e.g. future road corridors, the East Garrison Area) have HMP-related issues that will require coordination with the Service and other resource agencies prior to final siting and design of development.

## 2.3 Land Conveyance

Through the base closure process, federal agencies have first priority for receiving surplus military land. Thus, the Bureau of Land Management (BLM) has already received approximately 7,200 acres of designated habitat reserve lands which represent the first installment in the establishment of the Natural Resource Management Area (NRMA) that is a core component of the HMP. State and local government agencies as well as non-profit organizations that serve a specific public purpose are also eligible to receive property at no cost or at a discounted price through the Public Benefit Conveyance (PBC) process. The California Department of Parks and Recreation, the University of California and others either have or will receive both habitat reserve and development lands through this process. An additional conveyance mechanism known as the Economic Development Conveyance (EDC) process allows local reuse authorities (in this case FORA and, through FORA, its member agencies) to request property specifically for economic development purposes in conformance with an

approved land use plan. FORA (and its member agencies) can then hold the property and manage it over the long term or sell it and retain the proceeds to finance infrastructure and other improvements necessary to support future development. Most of the developable lands at former Fort Ord are being transferred through FORA to its member agencies for future sale using the EDC process. However, some PBC and other requests remain that create potential land use conflicts, especially in the East Garrison area of the former base.

## 2.4 East Garrison Stakeholders

A number of organizations have requested lands at East Garrison but the principal parties with valid conveyance requests are Monterey Peninsula College and the County of Monterey.

### *2.4.1 Monterey Peninsula College*

Monterey Peninsula College (MPC) is seeking an area on former Fort Ord for development of law enforcement officer training facilities which include classrooms, firing ranges and an Emergency Vehicle Operations Center (EVOC). MPC estimates that about 86 acres would be required to develop an EVOC facility, classrooms and administrative offices, depending on the location, surrounding terrain and land uses. Firing ranges would also be necessary and could involve rehabilitation and reuse of former Army ranges. MPC has a U. S. Department of Education approved PBC request for lands in the East Garrison area for development of these law enforcement officer training facilities. However, because of land use conflicts with the other prospective uses for that area (see below), the Army, MPC, the County and FORA have worked together to identify potential areas elsewhere on the former base that could suit MPC's needs.

### *2.4.2 The County of Monterey*

For the County, the East Garrison area represents one of two major reuse opportunities at the former base. The other area of focus for the County, generally referred to as Parker Flats, consists of some 1200 acres of undeveloped lands in the central part of the base. The development of housing has been the County's primary concept for its lands at Parker Flats with various other land uses and requests for land under the County's aegis considered at East Garrison. However, for a number of reasons, including the potential danger of locating housing in former ordnance training areas, the County has recently directed its emphasis toward the provision of work-force housing at East Garrison. With this shift in emphasis, the County also hopes to accommodate MPC and the other potential stakeholders, depending on their ability to pay for the land and to complete a project. These other potential stakeholders include:

- Arts Habitat with a request to occupy the historic structures in the central East Garrison area for a live/work fine arts-oriented community.
- Monterey Horse Park with a request for a world-class equestrian center hosting international events, possibly including the 2012 Olympic equestrian events.
- Esselen Indian Nation with a request for an area that would primarily be preserved in native habitat with allowance for construction of an interpretive center, museum and village site with small campsites or "circles" and two sweat lodges.
- Akicita Luta Intertribal Society with a request for a cultural and educational preserve area where various Native American activities (e.g. cultural events, pow wows) can be held.

# 3.0 PROPOSED MODIFICATIONS

## 3.1 Overview

To resolve the land use conflicts posed by competing requests in the East Garrison Area, and to meet the County's need for developing work-force housing at former Fort Ord, MPC, the County and FORA have generally agreed to an exchange of uses between the Parker Flats and East Garrison areas. Under the agreement, MPC would locate its law enforcement training center and EVOC facility at Parker Flats. MPC would reuse existing Range 45 just south of Parker Flats and also be granted management responsibility of the former Military Operations/Urban Terrain (MOUT) facility for use in cooperation with other law enforcement agencies. The County would pursue community-based residential development at East Garrison instead of Parker Flats and would accommodate other potential East Garrison stakeholders at both locations.

The County has entered into an Exclusive Negotiating Rights Agreement with a private developer (Woodman Development) for master planning and development of lands in both the Parker Flats and East Garrison areas. Woodman Development sponsored a weeklong design charrette at Fort Ord in early November 2001 to address the issues, opportunities and constraints associated with planning for both areas. The charrette brought together all the various and potential stakeholders and resulted in design concepts for East Garrison and Parker Flats that would accommodate most of the desired land uses proposed for each area. However, some elements of these concepts would require minor boundary adjustments and other modifications to existing plans, notably the HMP and, to a lesser extent, the Base Reuse Plan.

A draft assessment of the proposed modifications was produced in February 2002 and presented to various representatives of key agencies and elected officials during late February and March 2002. Because of its implications relative to the HMP, the assessment was presented to all levels of U.S. Fish and Wildlife Service staff including the Ventura Field Office, the California-Nevada Operations Office and the Headquarters Office in Washington D.C. Subsequent technical meetings were held with representatives of the Service, the California Department of Fish and Game (CDFG), the Army, BLM, FORA, the County and others in late March and early April 2002 to further review the proposed modifications and address outstanding biological resource issues. Based on this review process, the draft assessment was revised; boundary and other adjustments were made, the analysis was expanded, and conditions were added to provide assurances that no net loss in habitat values would result from the proposed modifications.

Following is a summary of the existing HMP and Base Reuse Plan designations at East Garrison, Parker Flats and the MOUT facility and proposed modifications that would occur in each of these areas based on the planning, design and review process described above.

## 3.2 East Garrison

### *3.2.1 Existing Conditions and Plans*

The East Garrison area, as identified by both the Base Reuse Plan and the HMP (Base Reuse Plan polygon 11b, HMP polygon series E11b), comprises about 730 acres at the easterly edge of

former Fort Ord (Figure 2).[1] The area is the location of older barracks, a parade ground, various buildings and other former military facilities (Cantonment Area) separated from the central or main garrison at Fort Ord and connected to it by Inter-Garrison Road. Barloy Canyon Road follows a north-south alignment through the center of the polygon and serves as a connector road to the Laguna Seca raceway during events held there. The Army's former Ammunition Supply Point (ASP) is located at the southerly end of the East Garrison polygon along Barloy Canyon Road. The developed portions of the East Garrison polygon occupy approximately 153 acres with the remainder of the polygon in annual grasslands, oak woodland and maritime chaparral habitats (Table 1 and Figure 3). The polygon is located at a transition between oak woodland and maritime chaparral habitats.

TABLE 1: EAST GARRISON LAND USE SUMMARY

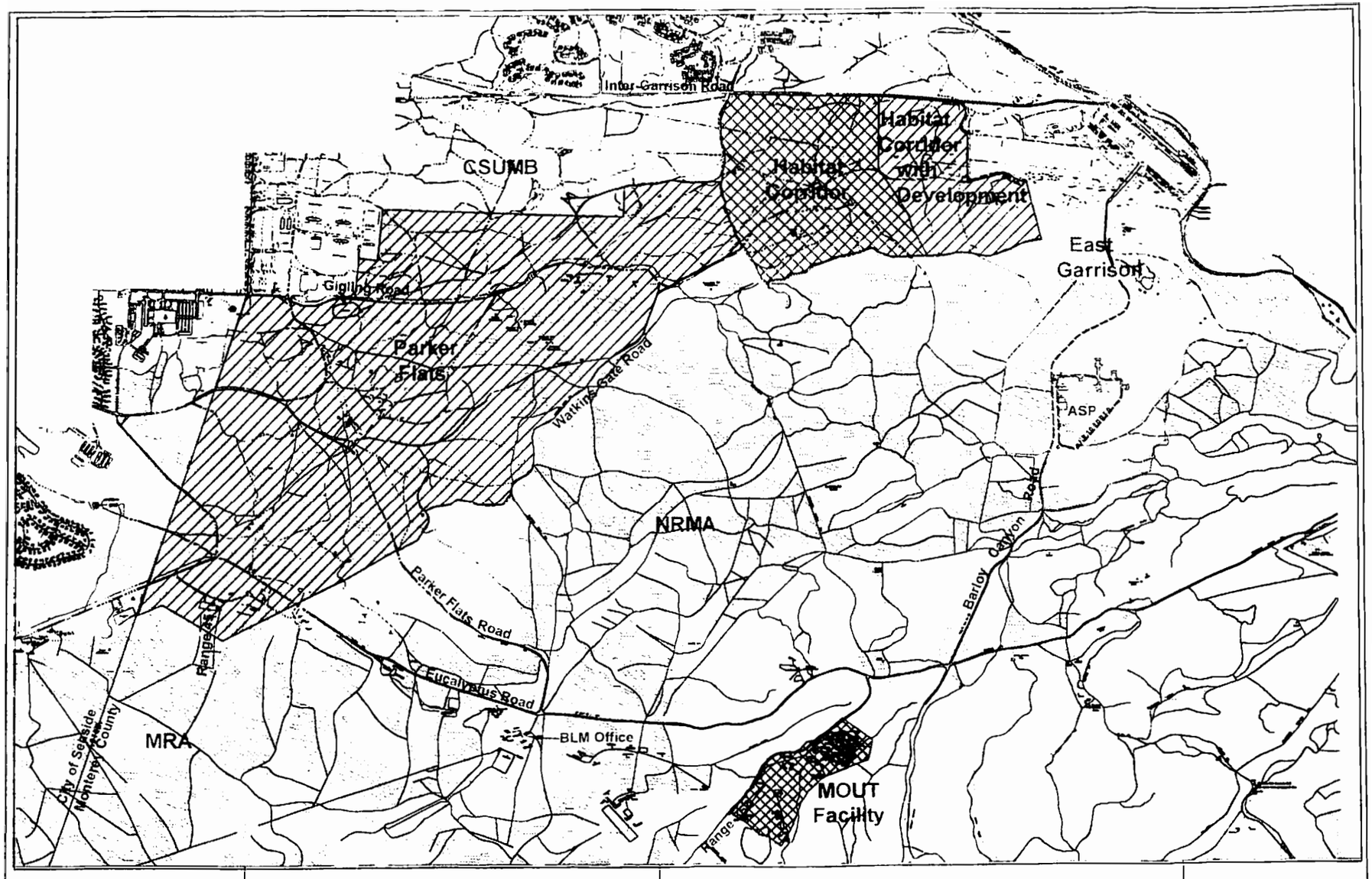
| Existing Conditions (acres*) | | HMP Assumptions (acres) | | Proposed Modifications (acres) | |
|---|---|---|---|---|---|
| **Development** | | **Development** | | **Development** | |
| Cantonment Area | 104 | Allowable Development | 200 | HMP Allowable | 241 |
| Treatment Plant/Facilities | 10 | Treatment Plant/Facilities | 10 | Additional Proposed | 210 |
| ASP Facility | 39 | Future Road Corridor | 31 | | |
| Total Development | 153 | Total Development | 241 | Total Development | 451 |
| **Remaining Habitat** | | **Remaining Habitat** | | **Remaining Habitat** | |
| Maritime Chaparral | 227 | Maritime Chaparral | n/d | Maritime Chaparral | 212 |
| Oak Woodlands | 264 | Oak Woodlands | n/d | Oak Woodlands | 51 |
| Grasslands | 86 | Grasslands | n/d | Grasslands | 16 |
| Total Habitat | 577 | Total Habitat | 489 | Total Habitat | 279 |
| Total Area | 730 | Total Area | 730 | Total Area | 730 |

*Acreages for existing conditions are calculated using habitat survey polygons developed by Jones & Stokes Associates for the Army.

The HMP designates the East Garrison polygon as development with reserve areas or restrictions and allows for up to 200 acres of total development. Areas occupied by existing water tanks and a former sewage treatment plant (approximately 10 acres) and a proposed future road corridor through the area (comprising about 31 acres) may also be developed in addition to the 200 acres according to the HMP (Table 1 and Figure 3). The rest of the parcel is to be retained as natural habitat and managed as a habitat reserve. Recognizing the conflicting requests for the land, the HMP designates either the County or MPC as the parties responsible for ensuring that all HMP conservation and management guidelines are implemented on lands transferred to them. Siting for development at East Garrison is to be coordinated with the U.S. Fish and Wildlife Service.

The Base Reuse Plan designates East Garrison as a Planned Development Mixed-Use District. This designation is intended to encourage the development of pedestrian-oriented community centers that support a wide variety of commercial, residential, retail, professional services, cultural and entertainment activities. The Base Reuse Plan concept for East Garrison envisions

[1] Acreage calculations are approximate and may include separate road parcels and easements or other minor parcels within the boundaries of the larger East Garrison polygon. East Garrison as discussed herein does not include the East Garrison Reserve parcel as identified in the HMP (HMP polygon E11a).




Scale: 1" = Approx. 2000'

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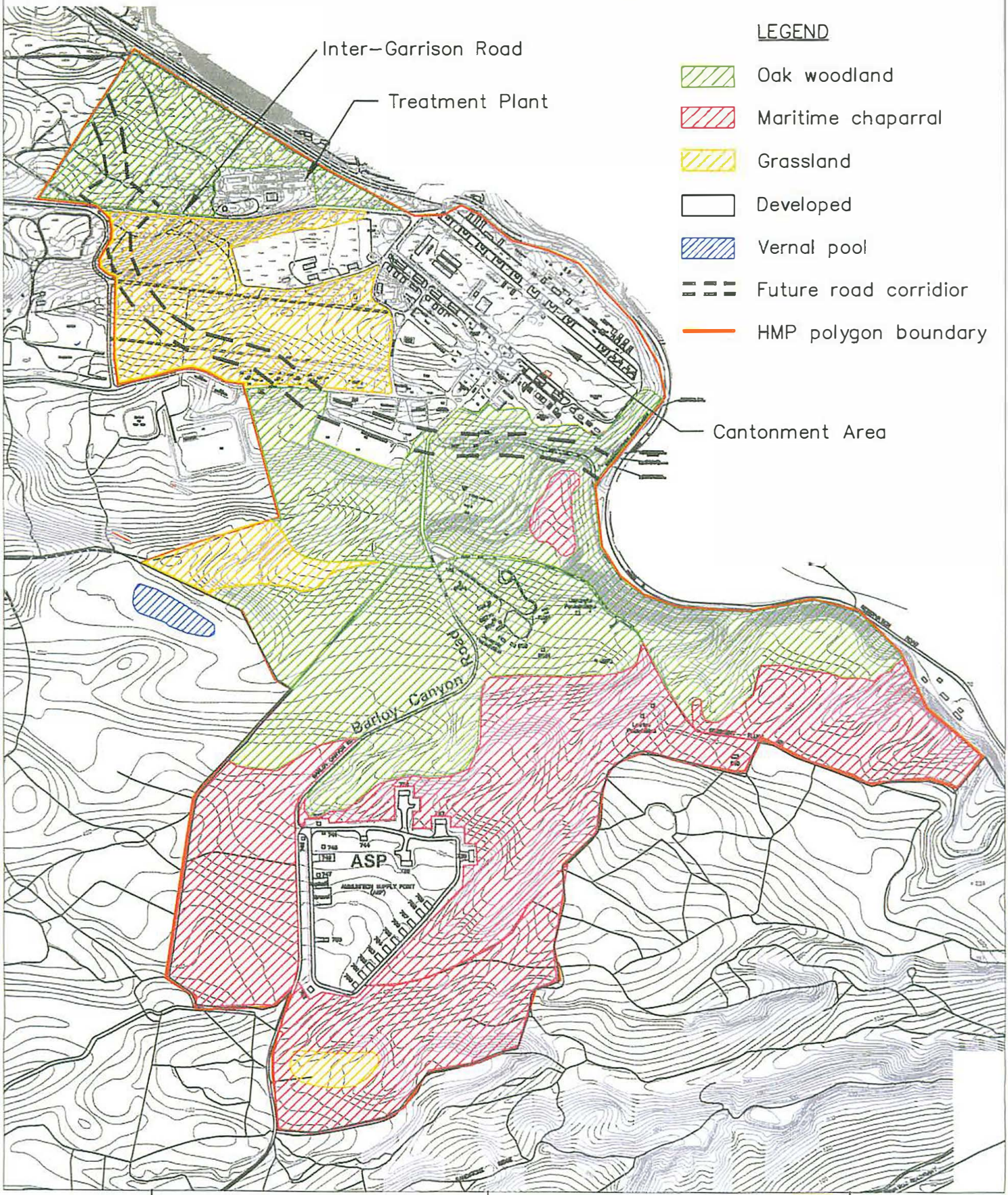
East Garrison, Parker Flats and MOUT Facility Locations

Figure 2




Scale: 1" = Approx. 1100'

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Habitat Types
at East Garrision

Figure
3

central core village with adjacent office and commercial uses transitioning (e.g. with equestrian staging areas, trailheads) from developed areas to HMP-designated habitat reserve lands. The Base Reuse Plan also acknowledges the potential land use conflicts with the outstanding conveyance request from MPC for law enforcement officer training facilities at East Garrison.

### *3.2.2 Proposed East Garrison Land Uses*

The modifications proposed for East Garrison would generally conform to the Base Reuse Plan by providing a mixed-use development plan with a central core village theme. The concept would accommodate the potential stakeholders identified previously with the exception of the MPC officer training and EVOC facility and the Monterey Horse Park, which would be located at Parker Flats (see below). To provide adequate area to meet the County's work-force housing and other needs (especially with all housing eliminated from Parker Flats - see below), separate, but linked development zones would be located along the Barloy Canyon Road corridor, maximizing effective use of the existing road connection, topography and the already developed ASP. As a result of the review process referenced above, the boundaries for the development footprint of the East Garrison polygon were adjusted and the development zones were connected to provide better definition between development and adjacent habitat areas. The combined footprint of the development zones, as adjusted, would total approximately 451 acres, which is about 210 acres more than the maximum development acreage allowed by the HMP (Table 1). However, the modifications at Parker Flats are intended to offset this acreage loss by establishing new designated habitat areas (see below). The proposed development footprint at East Garrison, as adjusted through discussions with resource agency personnel, is illustrated on Figure 4.

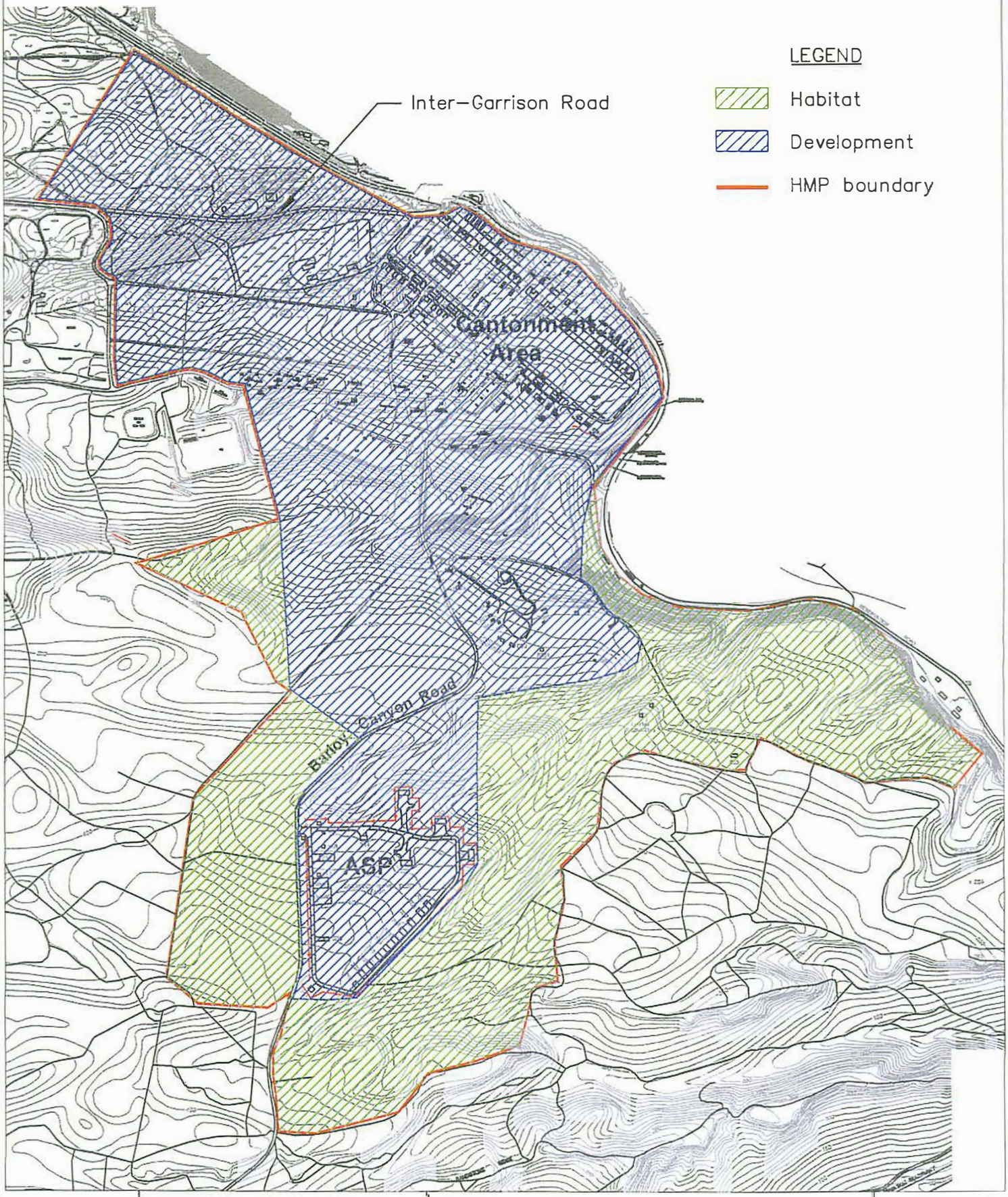
## 3.3 Parker Flats

### *3.3.1 Existing Conditions and Plans*

The Parker Flats area is comprised of several HMP polygons (E19a series, E21a, E21b series, L23.2) and Base Reuse Plan polygons (19a and 21 a, b, c) that are all designated for development without restrictions.[2] The Parker Flats area occupies about 1200 acres in the central part of the former base generally bounded by Watkins Gate Road, the Multi-Range Area (MRA) and the NRMA on the south, Gigling Road and lands of California State University (CSUMB) on the north, the City of Seaside city limits on the west and the primary HMP-designated habitat corridor (HMP polygon L20.2.1) on the east (Figure 2). The area is largely undeveloped but the central portion has been used as a staging and training area for various military activities. Like East Garrison, the area lies at a transition between oak woodland and maritime chaparral habitats.

There are no HMP habitat conservation or management requirements on any of the lands in the Parker Flats polygons established by either the HMP or the Base Reuse Plan. However, because the area borders the NRMA, the designated development lands along the boundary have "borderland" requirements, which include development of fire breaks and vehicle access

[2] The only area of Parker Flats considered here that is not designated for development without restrictions is the relatively small (about 16-acre) range extension area associated with existing Range 45.




Scale: 1" = Approx. 1100'

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Proposed Development Footprint at East Garrision

Figure 4

limitations. In addition, a relatively small (±15-acre) parcel (HMP polygon L23.2) is a PBC transfer as a plant reserve and outdoor teaching facility for the MPC Biology Department.

The Base Reuse Plan designates the Parker Flats area primarily for low density residential, commercial, office and light industrial development. It also anticipates opportunities for equestrian center, hotel resort and golf course development in the area.

### *3.3.2 Proposed Parker Flats Land Uses*

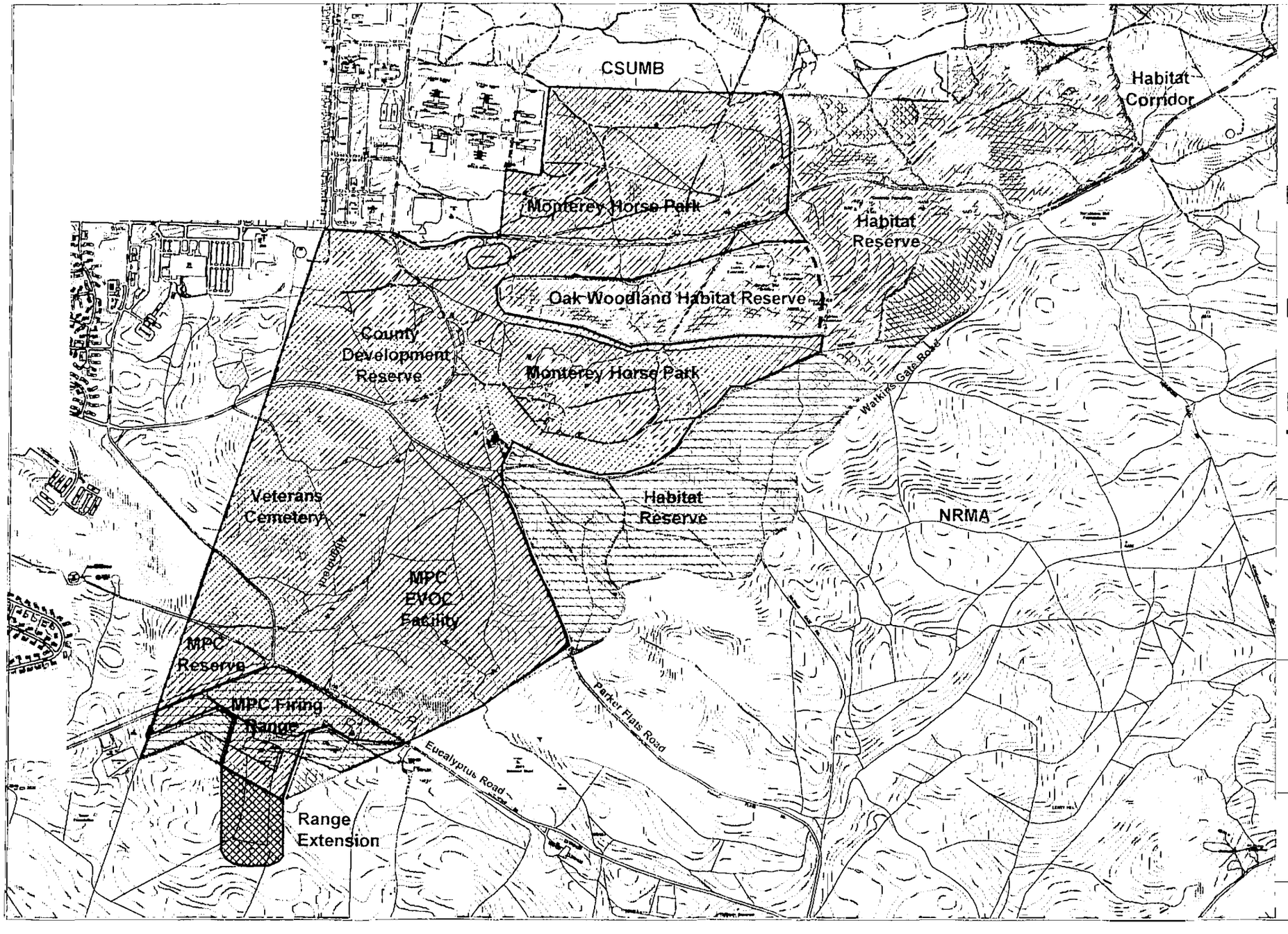
The modifications proposed for Parker Flats would change the Base Reuse Plan designations for the area by removing the residential, light industrial, golf course and other uses to accommodate the MPC officer training and EVOC facilities. Parker Flats would also provide areas for the Central Coast Veterans Cemetery, the Monterey Horse Park and other potential development (Figure 5). The MPC facilities would require minor adjustments to the existing HMP and Base Reuse Plan boundaries associated with Range 45 (HMP polygon E21b.3, Base Reuse Plan polygon 21b) to allow improvement and reuse of the existing range area (Figure 6). The line between HMP-designated development and habitat reserve areas, which currently bisects Range 45, would need to be extended to the south to accommodate the entire improved range area. The polygon boundaries would also be adjusted to balance species gains and losses and avoid recently identified populations of listed plants (see discussion below). This revised use concept for Parker Flats would reduce the development footprint originally envisioned for the area and resolve outstanding land use conflicts on properties at Fort Ord scheduled for transfer to the County. The revised use designations would also allow approximately 380 acres adjacent to the NRMA and primary habitat corridor area to be added to the existing habitat reserve areas. In addition, large areas within the Monterey Horse Park section of Parker Flats, notably a central oak woodland reserve area comprising about 70 acres would remain in native habitat. With development of appropriate resource conservation and management requirements and identification of suitable resource management entities, the new habitat reserve areas would provide greater than a 2:1 replacement ratio for the habitat acreage lost at East Garrison as a result of the proposed expanded development there.[3] These new reserve areas would also expand and enhance the habitat corridor connections to reserve areas (UC Natural Reserve, CSUMB, Landfill) to the north. However, because much of the maritime chaparral in the new reserve areas has been mechanically cleared to remove unexploded ordnance in preparation for transfer and development, the existing habitat values and species diversity in those areas may have been compromised (see further discussion below).

## 3.4 Military Operations/Urban Terrain Facility (MOUT)

### *3.4.1 Existing Conditions and Plans*

The MOUT facility is located in a relatively isolated valley on an approximately 63-acre parcel (Base Reuse Plan polygon 26, HMP polygon F1.7.2) near the intersection of Eucalyptus Road and Barloy Canyon Road (Figures 1 and 2). The MOUT is a purpose-built mock village used by

[3] Following the assumptions discussed above (see Table 1), approximately 210 acres of additional habitat beyond the allowances of the HMP would be lost at East Garrison because of the proposed modifications. Thus, 210 x 2 = 420 < 450.




Scale: 1" = Approx. 1200'

LEGEND

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

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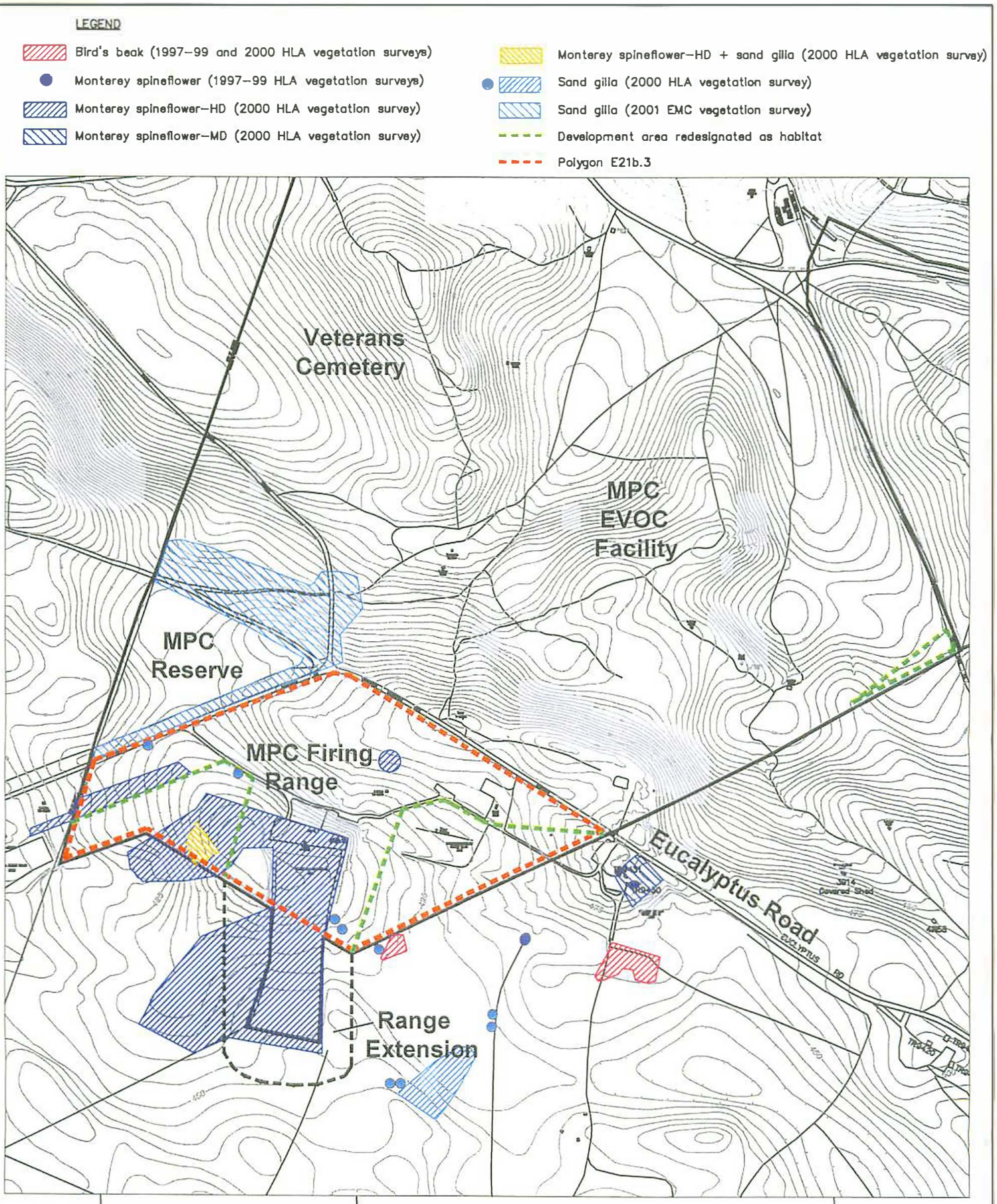
Parker Flats
Development Concept

Figure
5




Scale: 1" = Approx 750'

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MPC EVOC Facility and Firing Range with Listed Species Locations (1997–2001 Surveys)

Figure 6

the military for urban warfare training. The facility continues to be used by the Federal Bureau of Investigation (FBI) and various other law enforcement agencies under a lease arrangement with the Army. The undeveloped slopes surrounding the MOUT facility support oak woodland and maritime chaparral habitats.

The HMP designates the MOUT polygon as development with no restrictions and allows for its continued use as a training facility through lease arrangements with BLM. The Base Reuse Plan also acknowledges its continued use.

### *3.4.2 Proposed MOUT Land Uses*

With the proposed modifications, the MOUT would continue to be used for law enforcement training under the direction of MPC. No significant changes to the facility would occur but an adjustment to the HMP polygon boundary would be necessary to accommodate the full extent of existing Range 35A and generally secure the perimeter of the facility. The boundary would also be adjusted to add about 13½ acres of the polygon to the NRMA as habitat reserve since that area is not needed for the facility (Figure 7).

## 4.0 ASSESSMENT

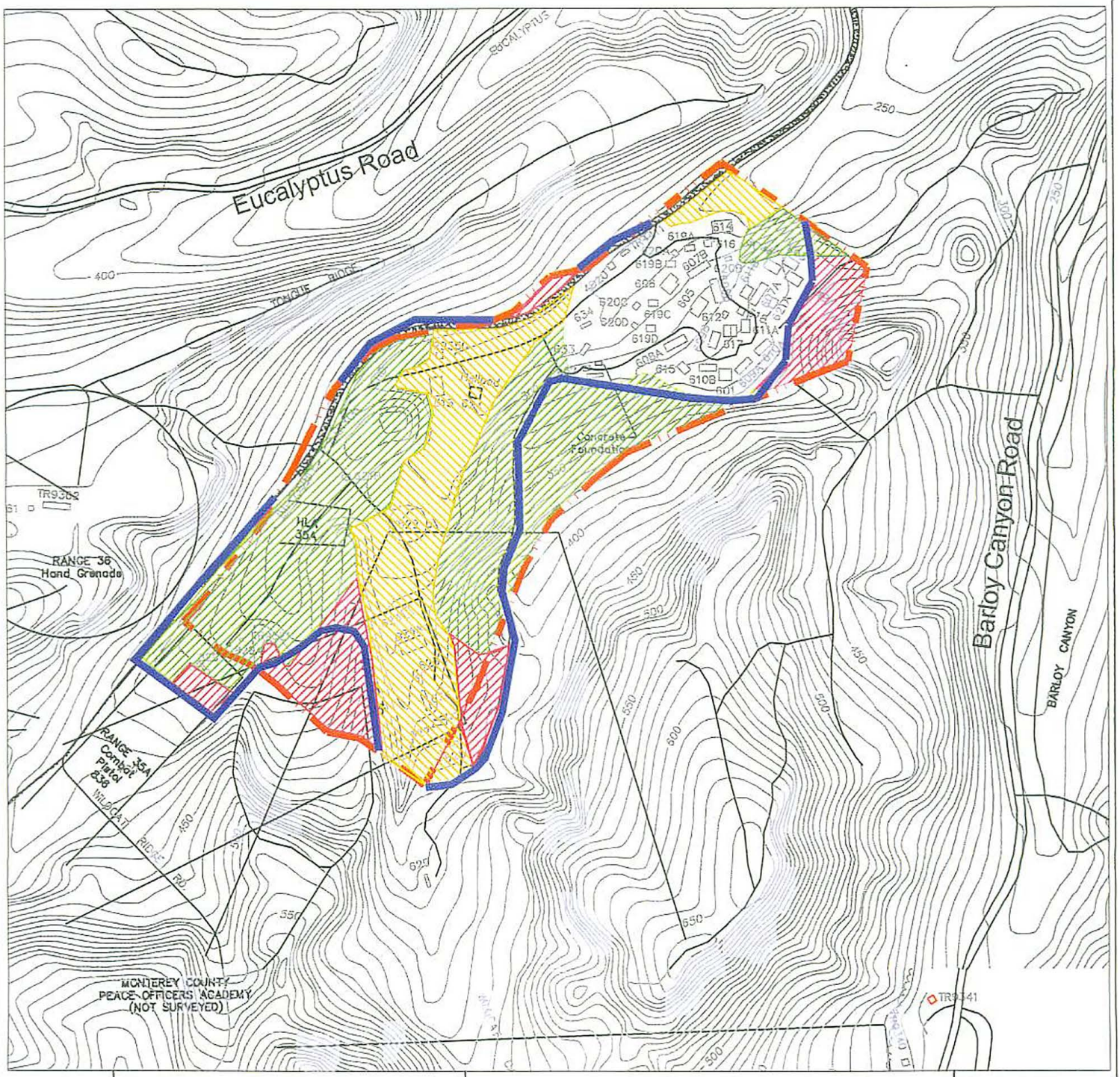
The following analysis was completed to evaluate the effects of the proposed land use modifications at East Garrison, Parker Flats and the MOUT facility relative to the requirements of the HMP and its goals and objectives for preservation of biological resources. Three levels of analysis were completed for each area: consideration of changes that might be needed to HMP land use designations and requirements, assessment of habitat losses and gains, and assessment of HMP Species losses and gains. The analysis benefited from review by key resource agency personnel and has been modified in response to comments received during that review process. In particular, boundary considerations at East Garrison and the habitat value assumptions at Parker Flats have been revised to address issues raised through that review.

HMP land use designations and resource conservation and habitat management requirements for the East Garrison, Parker Flats and MOUT polygons were reviewed to evaluate consistency with the HMP. New information (e.g. more recent survey data for California tiger salamander not included in the HMP) and recommendations from key reviewing agencies, especially the Fish and Wildlife Service were also considered. Section 4.1 addresses the consistency of the proposed modifications with the HMP's land use categories and requirements.

To quantify losses and gains of the various habitat types and HMP Species, habitat and species mapping completed for the Army's *Flora and Fauna Baseline Study of Fort Ord, California* (1992) was used. More current mapping was available in limited areas (e.g. the Range 45 area) and that information was also considered as appropriate. Polygons (GIS-based), developed by Jones and Stokes Associates (JSA polygons) to map biological resources for the baseline studies, were overlaid (electronically) on the proposed land use maps for East Garrison, Parker Flats and the MOUT to determine the extent of the effects of the proposed modifications on each resource type and its associated species. Results of this gain/loss analysis are presented in Sections 4.2 and 4.3. Polygon maps and polygon-specific tabulations (effects on high, medium and low densities of each HMP Species) are presented in Appendix B.

LEGEND

- Oak woodland
- Maritime chaparral
- Grassland
- Developed
- HMP polygon boundary
- Proposed boundary adjustments




Scale: 1" = Approx. 600'

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# Proposed Adjustments at MOUT Facility

Figure 7

## 4.1 HMP Land Use Categories and Requirements

### *4.1.1 East Garrison*

The existing HMP land use designation for the East Garrison polygon is development with reserve areas or restrictions. The maximum development area allowed by the HMP is about 241 acres with the remainder of the polygon to be managed as habitat reserve (see Table 1). The proposed modifications would not change the HMP designation but would add about 210 acres to the allowable development area. This additional development acreage represents a modification to the HMP's resource conservation requirements for East Garrison and would need approval from the Fish and Wildlife Service. No development boundary is specified by the HMP, but coordination with the Service in siting development is required. The Service has already directed some boundary adjustments to the proposed development footprint at East Garrison through the review process described above. Increased setbacks from vernal pool habitat to the west of the East Garrison polygon, better defined (more manageable) boundaries between habitat and development, and clear connections between development zones have all been incorporated into the proposal through coordination with the Service and other resource agencies. The resulting development boundary (Figure 4) is intended to represent a "maximum allowable" footprint for the purposes of this assessment; the Service recognized that some further boundary adjustments could be made in the future if all parties agreed that the adjustments were superior (e.g. allowed for more effective border conditions within the development footprint such as firebreaks, fire management access and better habitat setbacks). Further boundary adjustments would be coordinated with the Service as site-specific planning for East Garrison proceeds. The ultimate alignment of the future road corridor providing access into the East Garrison area from the north would also be coordinated with the Service to avoid isolating habitat reserve lands. This coordination is consistent with the HMP and could be handled through the Fort Ord Coordinated Resource Management and Planning (CRMP) program as site-specific planning for East Garrison proceeds.

A new HMP resource conservation requirement would need to be added to protect California tiger salamanders (CTS) known to occur in the vernal pool located west of the East Garrison polygon (see Figure 3). The requirement would specify construction of a low wall or other suitable barrier to CTS migration along the development/reserve boundary to the east of the vernal pool when development occurs in that area. No changes would be necessary to the HMP's existing management requirements or parties identified as responsible for managing the remaining habitat areas at East Garrison. However, habitat management requirements (in addition to the fire management requirements noted above) will need to be considered in any boundary adjustments or other site-specific borderland planning.

Finally, use of the minor roads from East Garrison that pass through habitat reserves would also need to be considered through the CRMP program. Inter-Garrison Road and Reservation Road (via the future road corridor connection) are expected to be the primary travel routes servicing East Garrison, consistent with the assumptions used for the HMP. However, increased development of the area could increase use of minor roads such as Barloy Canyon Road to the south and Watkins Gate Road to the west, potentially affecting HMP Species. Barloy Canyon

Road provides access to Laguna Seca raceway during events but is otherwise gated to through traffic at Eucalyptus. These conditions are not expected to change as a result of the proposed modifications at East Garrison.[4] Watkins Gate Road and Eucalyptus Road (via Barloy Canyon Road) connect East Garrison with Parker Flats. With the proposed modifications, Parker Flats would become less of a destination or source of traffic, almost certainly reducing travel on these connector roads below the levels that would have accompanied HMP buildout. While all parties recognize the potential effects on HMP Species of increased use of minor roads through habitat reserve areas, further road closures are not proposed here. However, FORA, the County, the Service and others have agreed to review the disposition and use of minor roads through the CRMP program, and to incorporate appropriate habitat protection measures into the Habitat Conservation Plan prepared through CRMP.

### *4.1.2 Parker Flats*

The existing HMP land use designation for most of the Parker Flats area is development with no restrictions.[5] The proposed modifications would require boundary adjustments to designate approximately 380 acres adjacent to BLM's NRMA and the central habitat corridor polygon (HMP polygon L20.2.1) as habitat reserve. Approximately 70 acres of oak woodlands within the proposed Monterey Horse Park area would also need to be designated as habitat reserve, or possibly, development with reserve areas or restrictions along with the rest of the Horse Park area (see below). Finally, the boundary between development and habitat areas around Range 45 (HMP polygon E21.b.3) would need to be adjusted to accommodate MPC's plans for reuse of that range, balance habitat losses and gains, and avoid known locations of certain listed species.

The existing borderland development requirements along the NRMA would need to move (and possibly be modified) in concert with the adjusted boundary lines. In addition, internal habitat boundary management agreements among habitat managers could be necessary, depending, in part, on the responsible management entities identified for the newly adjusted habitat areas. For example, through the review process noted above, BLM expressed a willingness to consider extending its management responsibility (and possibly ownership) to a well-defined boundary north of the existing NRMA boundary, but not necessarily to all newly adjusted habitat areas. In such a case, the County or another designated habitat manager would be responsible for enforcing borderland restrictions in developed areas adjacent to habitat reserve areas and coordinating internal habitat boundary issues with BLM. BLM also expressed concern about public access in proximity to live fire at Range 45 and suggested that MPC (or the County) may need to assume management responsibility (and enforce access restrictions) within a defined perimeter habitat reserve area surrounding the range. The 70 acre oak woodland preserve within the Horse Park area also poses particular boundary management issues because of its relatively large edge to area ratio and its setting within an active use area. Details of boundary requirements and suitable management entities for each component of the new habitat areas will need to be defined and coordinated with the Service and others through the CRMP program.

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[4] 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.

[5] The only area associated with the proposed modifications at Parker Flats not designated for development by the HMP is the small (approximately 16-acre) area associated with Range 45 that would be incorporated into the MPC plans through a minor boundary adjustment as noted in the discussion.

Resource conservation and management requirements, similar to those specified for the NRMA, would need to be developed for the newly adjusted habitat reserve areas. The areas would be managed to maintain and restore native habitat, especially maritime chaparral habitat. Because much of the maritime chaparral habitat (approximately 162 acres) in the Parker Flats area has been mechanically cleared in preparation for transfer, controlled burning, which is already a management requirement in the NRMA, would be critical for the restoration and maintenance of habitat values in these areas (see discussion below). Other management requirements associated with the NRMA (e.g. invasive weed control, erosion control, access control, monitoring) would also apply in these areas, with the exception of the 2% development allowance for the NRMA. While existing roads and trails through the habitat areas could remain, be realigned and used for recreational activities (e.g. equestrian trails/courses), no areas with natural vegetation would be converted to development-oriented uses in the new habitat areas. Any proposed trail or road realignments would be coordinated with the Service through the CRMP program. The oak woodland reserve in the Horse Park area (or possibly the adjacent oak woodlands and grasslands to the east) would include an allowance for a section of the proposed cross-country course. The course section would require two lanes, each approximately 75 feet wide. However, no buildings, grandstands, corrals, parking areas or other developments would be allowed in the habitat reserves. Requirements to minimize removal of native vegetation and maintain an aggressive weed control program over the entire Horse Park use area would be included as a development condition (through designation of the area as development with reserve or restrictions). A Natural Resources Management Plan would need to be prepared for all the newly adjusted habitat areas in coordination with BLM's planning efforts for the NRMA. Additional costs and funding for habitat management, beyond funds previously allocated, would need to be included in the planning.

### *4.1.3 MOUT*

The existing HMP land use designation for the MOUT facility is development with no restrictions. The proposed modifications would require a boundary adjustment to designate approximately 13½ acres adjacent to the NRMA as habitat reserve. The boundary adjustment would also need to incorporate the existing part of Range 35A and other areas that are currently outside of designated development (totaling just under four acres) into the MOUT polygon to secure the perimeter of the facility and accommodate MPC's plans (Figure 7). BLM would need to agree to the boundary adjustments and to the management responsibilities associated with an addition to the NRMA.

## 4.2 Habitat Acreage

### *4.2.1 East Garrison*

The East Garrison development footprint as proposed (Figure 4) would maximize use of existing developed areas but would also result in the loss of about 298 acres of habitat. About 213 acres of oak woodland, 15 acres of maritime chaparral and 70 acres of non-native grasslands would be lost in addition to the 153 acres of existing developed areas located in the Cantonment Area and the ASP (Table 2). Assuming that the HMP also anticipated maximum use of the Cantonment Area and ASP, approximately 88 acres of habitat loss would accompany buildout of East

Garrison as allowed by the HMP. Thus, the proposed modifications result in about 210 more acres of habitat loss than allowable HMP buildout. However, the impact of HMP buildout on specific habitat types was not quantified because no specific development plan (beyond the allowable 241 acres) was identified in the HMP. While some of that loss would be attributable to the designated future road corridor, which passes through grasslands and oak woodlands (Figure 3), the remaining habitat loss was not assigned in the HMP.

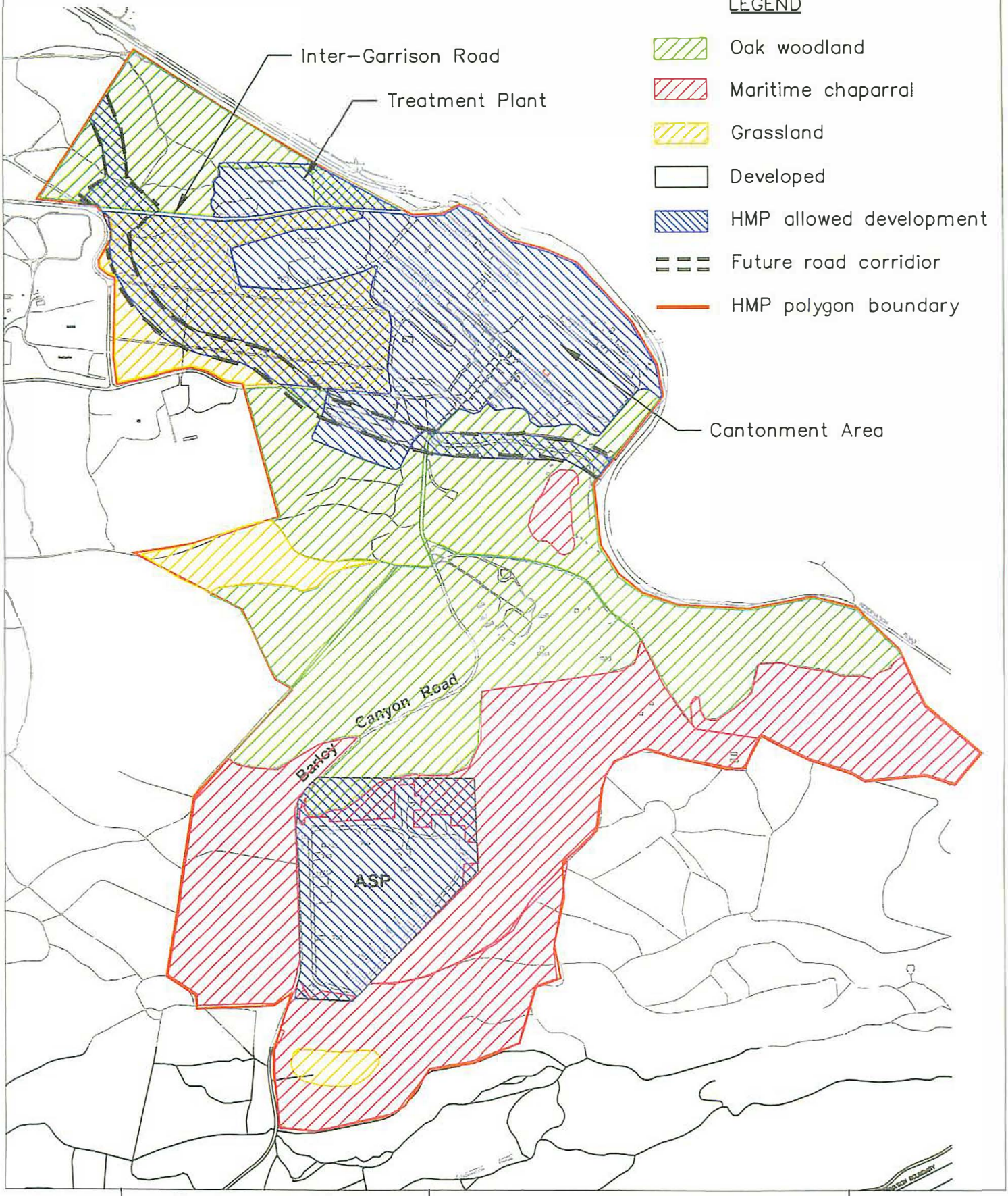
TABLE 2: EAST GARRISON HABITAT LOSS SUMMARY

| | Existing Development (acres) | Habitat (acres) | | | | Total (acres) |
|---|---|---|---|---|---|---|
| | | Maritime Chaparral | Oak Woodland | Grassland | Total | |
| Proposal | 153 | 15 | 213 | 70 | 298 | 451 |
| HMP Buildout | 153 | 9 | 23 | 56 | 88 | 241 |
| Difference | 0 | 6 | 190 | 14 | 210 | 210 |

For the purposes of this assessment, we assume that allowable HMP buildout at East Garrison would be concentrated near the developed Cantonment Area and the ASP and that habitat losses would occur in adjacent areas. Expansion of the development footprint in these areas would take advantage of existing disturbance and minimize further encroachment into habitat areas. We further assume that the alignment and size of the future road corridor would remain as mapped in the HMP. Following these assumptions, relying on the principle of well-defined, manageable boundaries, and allocating the 88 developable habitat acres accordingly, we produced an HMP buildout alternative against which to compare the proposed modifications. Figure 8 illustrates the HMP buildout alternative and Table 2 provides a summary of its effects on HMP habitat types. Based on these assumptions, net losses of about 190 acres of oak woodland, 6 acres of maritime chaparral and 14 acres of grasslands beyond the HMP allowances would result from the proposed modifications at East Garrison. These losses would need to be replaced in kind for consistency with the HMP.

### *4.2.2 Parker Flats*

Since all of Parker Flats (except for the small area associated with Range 45) is designated for development, the proposed reduction in the development footprint provides an opportunity for boundary adjustment and redesignation that could compensate for habitat acreage losses at East Garrison and result in a net gain in habitat reserve area adjacent to the NRMA. This new reserve area would also increase opportunities for habitat corridor connections through the CSUMB property to the landfill polygon (HMP polygon E8a.1) as well as expanding the existing corridor connection (HMP polygon L20.2.1) to the northern reserve areas along Reservation Road. The Parker Flats development footprint as proposed (Figure 4) 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 not anticipated for preservation in the HMP (Table 3). Subtracting the loss of about 16 acres of area mapped as maritime chaparral associated with the improvement and reuse of Range 45, the net gain in maritime chaparral habitat acreage at Parker Flats, beyond that




Scale: 1" = Approx 1100'

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HMP Buildout Alternative

Figure 8

anticipated by the HMP, would be about 180 acres. Thus, total habitat available as credit at Parker Flats to offset the 210 acres of losses at East Garrison is about 447 acres (Table 3).

TABLE 3: OVERALL HABITAT LOSSES/GAINS

| | Maritime Chaparral | Oak Woodland | Grassland | Total |
|---|---|---|---|---|
| East Garrison | | | | |
| Loss | **(5.6)** | **(189.9)** | **(14.5)** | **(210)** |
| Parker Flats | | | | |
| Gain | 195.8 | 249.5 | 17.9 | 463.2 |
| Loss | (16.1) | 0 | 0 | (16.1) |
| **Net** | **179.7** | **249.5** | **17.9** | **447.1** |
| MOUT | | | | |
| Gain | 5.2 | 8.2 | 0 | 13.4 |
| Loss | (1.7) | (1.5) | (0.6) | (3.8) |
| **Net** | **3.5** | **6.7** | **(0.6)** | **9.6** |
| **Overall Net** | **177.6** | **66.3** | **2.8** | **246.7** |

However, most of the maritime chaparral habitat in the newly adjusted reserve area (about 162 acres) has been mechanically cleared for ordnance and explosives removal prior to transfer (Figure 5). Consequently, while actual acreage of maritime habitat would increase, it may not currently support the habitat quality (as determined by diversity and densities of species) necessary to compensate for losses at East Garrison. Therefore, controlled burning and monitoring in the mechanically cleared chaparral habitat areas indicated on Figure 5 would need to be specified as priority HMP management requirements in an effort to recover full habitat value in those areas and realize full compensation credit for the proposed modifications (see further discussions below).

### *4.2.3 MOUT*

The proposed boundary adjustments at the MOUT facility would result in an additional gain of approximately eight acres of oak woodland and five acres of maritime chaparral habitats along its southern boundary adjacent to the NRMA. The extension of the boundary to accommodate exiting Range 35A would result in loss of an approximately two-acre area mapped as both oak woodland and maritime chaparral (even though the area has been cleared and graded for range use). Other minor boundary adjustments along the perimeter of the MOUT would result in losses of maritime chaparral (about one acre) and grasslands (about half an acre), resulting in a net gain in overall habitat reserve acreage of about nine and one half acres at the MOUT.

## 4.3 HMP Species

### *4.3.1 East Garrison*

One federally listed threatened plant, Monterey spineflower (*Chorizanthe pungens* var. *pungens*), has been mapped within the East Garrison polygon boundary defined by the HMP. No other federally or state listed species have been recorded in the polygon area. However, several other HMP species are known to occur in the East Garrison polygon according to the HMP (p. 4-50). They include Toro manzanita (*Arctostaphylos montereyensis*), sandmat manzanita (*A. pumila*),

Monterey ceanothus (*Ceanothus rigidus*), Eastwood's ericameria (*Ericameria fasciculata*) and Hooker's manzanita (*A. hookeri* ssp *hookeri*). Potential habitat for the Monterey ornate shrew (*Sorex ornatus solarius*), based on the presence of oak woodlands, is also noted in the HMP. More recent surveys have also identified the presence of California tiger salamanders in the vernal pond to the west of the East Garrison polygon.

The effects of the proposed East Garrison land use footprint on acreage mapped for HMP Species are summarized on Table 4 with further detail provided in Appendix B. The extent of the impact was quantified based on comparison with the HMP buildout alternative discussed above (Figure 8). For the purposes of this assessment, we assume that all losses to acreage supporting HMP Species over and above the losses associated with the HMP buildout alternative will need to be offset by replacement (through reserve designation and appropriate management) of equal or greater acreage for these species.

TABLE 4: SUMMARY OF HABITAT AND SPECIES LOSSES/GAINS

| **HABITAT (acres)** | | **HMP SPECIES[1] (acres)** | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | **Armo** | **Chpu** | **Arpu** | **Erfa** | **Arho** | **Ceri** | **Gitea** | **Coril** |
| **East Garrison** | | | | | | | | | |
| OW | (189.9)[2] | (88.5) | (29.4) | | | | | | |
| MC | (5.6) | (5.6) | | | (0.9) | | (0.9) | | |
| G | (14.5) | | (3.2) | (3.2) | | | | | |
| **NET** | **(210)** | **(94.1)** | **(32.6)** | **(3.2)** | **(0.9)** | | **(0.9)** | | |
| **Parker Flats** | | | | | | | | | |
| OW | 249.5 | | 116.9 | | | | | | |
| MC | 195.8<br>(16.1) | 174.5 | 169.7<br>(16.1) | 168.1<br>(16.1) | 123.6<br>(16.1) | 174.5 | 169.7<br>(16.1) | 1.6 | 16.1<br>(16.1) |
| G | 17.9 | | 17.9 | | | | | | |
| **NET** | **447.1** | **174.5** | **288.4** | **152** | **107.5** | **174.5** | **153.6** | **1.6** | **0** |
| **MOUT** | | | | | | | | | |
| OW | (1.5)<br>8.2 | (1.5)<br>8.2 | | | | (1.5)<br>7.0 | | | |
| MC | (1.7)<br>5.2 | (0.6)<br>5.2 | (0.6)<br>2.6 | | (0.6) | (1.7)<br>2.6 | (1.7)<br>5.2 | (0.6) | |
| G | (0.6) | | | | | | | | |
| **NET** | **9.6** | **11.3** | **2.0** | | **(0.6)** | **6.4** | **3.5** | **(0.6)** | |
| **TOTAL NET** | **OW = 66.3<br>MC = 177.6<br>G = 2.8** | **91.7** | **257.8** | **148.8** | **106** | **180.9** | **156.2** | **1.0** | **0** |

1. Definition of species acronyms: Armo (*Arctostaphylos montereyensis*), Chpu (*Chorizanthe pungens* var. *pungens*), Arpu (*Arctostaphlos pumila*), Erfa (*Ericameria fasciculata*), Arho (*Arctostaphlos hookeri* ssp. *hookeri*), Ceri (*Ceanothus rigidus*), Gitea (*Gilia tenuiflora* ssp. *arenaria*), Coril (*Cordylanthus rigidus* var. *littoralis*)

2. Parentheses indicate negative numbers or losses.

### *4.3.2 Parker Flats*

Three federally and/or state listed plant species, Monterey spineflower, sand gilia (*Gilia tenuiflora* ssp. *arenaria*) and seaside bird's beak (*Cordylanthus rigidus* ssp. *littoralis*) have been recorded from the Parker Flats area. Monterey spineflower (mostly low densities) is relatively widespread throughout the area, while sand gilia and seaside bird's beak are limited to specific locations toward the southerly end of the area. In recent years, the Army and others have conducted focused surveys in selected areas of Parker Flats to update the record for these listed species. The results of these surveys are illustrated on Figure 6. Numerous other HMP Species are also known from Parker Flats. With the exception of losses associated with the boundary adjustment for Range 45 (see Table 2), all losses of HMP Species in Parker Flats were anticipated by the HMP.

The proposed improvements and reuse of Range 45 and associated boundary adjustments merit special consideration here. The Army's baseline studies identified a variety of HMP Species in a large, approximately 300-acre polygon (JSA polygon #735) that includes existing Range 45 and almost all of HMP polygon E21b.3 (Figure 9). While polygon E21b.3, containing a part of Range 45, is designated for development without restrictions, the remainder of the range is designated as habitat reserve. Consequently, Table 4 indicates that some losses of HMP Species at Parker Flats will result from the proposed range reuse. However, polygon boundaries have been adjusted to balance these losses by gains for all species (and species densities) recorded in the baseline studies. In addition, the subsequent focused plant surveys referenced above identified specific locations of Monterey spineflower, seaside bird's beak and sand gilia in the vicinity of Range 45. Spineflower, an aggressive colonizer of suitable disturbed areas, was mapped within and around the existing range footprint; small colonies of gilia and bird's beak were found in surrounding areas, including inside unrestricted development areas (Figure 6). MPC's proposal to improve and reuse the existing range in its same general footprint would preclude long-term sustainability of most HMP Species within the active range area.[6] However, the polygon boundaries have also been adjusted to avoid these recently mapped locations of bird's beak and gilia so that these areas will be included in the adjacent NRMA.

As originally mapped, HMP Species distribution and densities in the additional acreage proposed as new habitat reserve could not only offset the acreage losses in East Garrison, but could result in a net gain for most HMP Species overall (Table 4). However, because the Army has already completed mechanical vegetation clearance to facilitate unexploded ordnance removal in much of the maritime chaparral area (about 162 acres) within the adjusted habitat reserve, habitat quality may be compromised. Especially for certain fire-dependent species such as Toro manzanita, sandmat manzanita and Monterey ceanothus, there may be differences between species distributions and densities as originally mapped for the baseline studies and current conditions. Further evaluation of HMP Species gains and losses assuming reduced and no (zero) values for certain HMP Species in mechanically cleared areas at Parker Flats were conducted at the direction of the Fish and Wildlife Service in an effort to quantify these differences (Appendix B). Net losses of several species, particularly Toro manzanita, would result with these reduced values. Consequently, controlled burning and monitoring in these chaparral habitat areas will be

[6] Monterey spineflower and other species could persist even with use of the area as a firing range.

Species of Concern

Polygon 735:
ARPU
CERI
CHPUP
CORIL
ERFA

Polygon 646:
ARHOH
ARMO
CERI
CHPUP
ERFA
GITEA

LEGEND

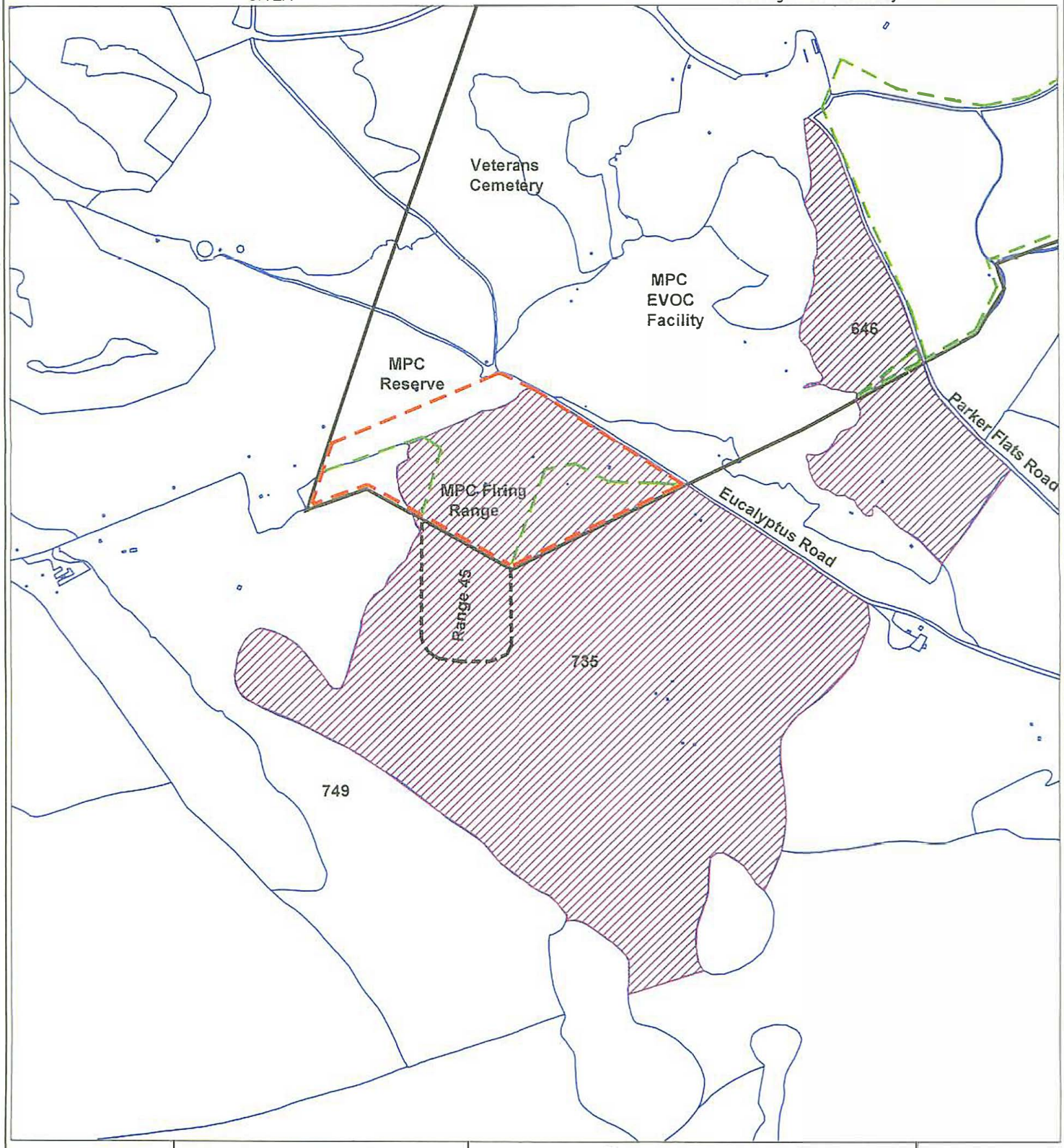
735 JSA polygons and numbers

Habitat Reserve areas

Polygon E21b.3

Range extension area

Planning area boundary

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MPC Boundary Adjustments in Relation to JSA Polygons at Parker Flats

Figure 9

required in a relatively short term (3-5 years) to assure continued habitat sustainability for these species and to realize full compensation credit for the proposed modifications.

FORA and the County recognize the need for prescribed burning in the chaparral areas at Parker Flats and would apply for a burn permit from the Monterey Bay Area Unified Air Pollution Control District within six months of a preferred burn date established by a professional fire specialist working through the CRMP program. Prior to burning (and no later than September 1, 2003), FORA and the County would quantitatively characterize the condition of the HMP Species in the mechanically cleared areas at Parker Flats to establish a pre-burn monitoring baseline for addressing success criteria and prescribed burn goals. Post-burn monitoring would be conducted following procedures and a schedule established in coordination with the designated fire specialist through the CRMP program. Success criteria, established in coordination with the CRMP program, would be used to determine whether restoration goals are met through the prescribed burn.

If FORA and the County are unable to perform the prescribed burn or if restoration goals are not met following a burn, certain contingency measures, coordinated through the CRMP program, could be undertaken such as habitat restoration of eroded, unused trails, roads or other degraded sites within habitat reserve lands. Alternatively, FORA and the County could decide to comply with the existing habitat conservation and management requirements of the executed HMP if development has not yet proceeded beyond the allowances of those requirements, effectively abandoning the proposed exchange of habitat areas for development areas (see Appendix C).

### *4.3.3 MOUT*

The area in and around the MOUT polygon supports numerous HMP Species. The proposed boundary adjustments at the MOUT facility would result in both small losses and gains of habitat mapped as supporting these species (Table 2). The net result of the proposed modifications (which are primarily being done to rectify the inaccuracies of past, large-scale mapping error) would be a small gain for most HMP Species with the exception of two species (Eastwood's ericameria and sand gilia). These species are mapped as occurring in the range extension area following the same principles discussed above (i.e. relatively large polygons and large scale mapping effort for general planning purposes). Following the methodology used to calculate net losses and gains for other species (Table 4 and Appendix B), losses to both ericameria and gilia are offset by designating additional reserve areas at Parker Flats.[7]

## 5.0 CONCLUSIONS AND RECOMMENDATIONS

The proposed boundary adjustments and other modifications discussed herein could enable appropriate uses in appropriate areas at Fort Ord without compromising the overall goals and objectives of the HMP and the Base Reuse Plan. No material changes to the HMP or to the general HMP land use designations should be necessary. Rather, existing designations coupled

[7] Low density sand gilia was recorded in both JSA polygon #646 at Parker Flats and JSA polygon #940 at the MOUT. Approximately 1.6 developable acres of polygon #646 will be dedicated as habitat to replace about 0.6 acres of loss in polygon #940 at the MOUT, an almost 3:1 replacement ratio (see Figures 8 & 9 and Appendix B).

with boundary adjustments in selected areas could accommodate the proposed modifications. However, depending on the preferred management entities for the newly adjusted habitat reserve areas (e.g. BLM, the County), revised ownership or polygon designations may be warranted. In addition, some redesignation (equivalent to "down-zoning") in certain polygons (e.g. change from development to development with restrictions in the Monterey Horse Park area) would provide greater assurances for long-term habitat protection.

Approximately 210 acres of habitat and species losses could occur at East Garrison that were not contemplated by the HMP, but these could be offset by equivalent or better gains in kind at Parker Flats, assuming a controlled burn program is initiated in a timely manner (see above). On a habitat level, protected acreage for both oak woodland and maritime chaparral would increase within newly adjusted habitat reserve areas at Parker Flats comprising about 447acres, 380 acres of which is directly adjacent to the NRMA. With implementation of habitat management and other measures discussed herein, especially with the use of prescribed fire as a management tool, there could be no net loss in HMP Species and potentially considerable gain in some species such as Monterey spineflower, Hooker's manzanita, sandmat manzanita and Monterey ceanothus. An expanded and enhanced corridor connection between the NRMA and reserve areas to the north would result and borderland areas along the NRMA would support compatible uses.

The HMP allows for changes within designated development parcels without the need for revisions to the HMP or formal consultation with the U.S. Fish and Wildlife Service. Other modifications can be (and have been) made with support and concurrence from the Army and the Service (HMP, p. 1-14 & Appendix C). For the proposed modifications presented herein to proceed, the Army and BLM will need to support them and the Service will need to determine that they are consistent with the goals and objectives of the HMP. The California Department of Fish and Game and other agencies and organizations with direct involvement or interest in habitat management at the former base, will also be key parties in the approval of this proposal.

Through the review process described in this report, various conditions that would allow the U.S Fish and Wildlife Service and other agencies referenced above to support and approve these proposed modifications were discussed and ultimately agreed to in concept by FORA and County staff. Many of these conditions have already been discussed in this analysis. A complete listing of these conditions is attached as Appendix C. Based on this assessment and on initial coordination with resource agencies and other interested parties, FORA and the County would need to agree to these conditions for the proposed modifications to be approved. Doing so would provide the necessary assurances to the Service and others that no net loss of HMP Species or habitat would result from the proposed modifications.

# APPENDIX A

# HMP SPECIES

## HMP SPECIES

| Common Name | Scientific Name | Status[1] Federal/State/Other |
|---|---|---|
| **Plants** | | |
| Sand gilia | *Gilia tenuiflora* ssp. *arenaria* | E/T/CNPS 1B |
| Monterey spineflower | *Chorizanthe pungens* var. *pungens* | T/--/CNPS 1B |
| Robust spineflower | *Chorizanthe robusta* var. *robusta* | E/--/CNPS 4 |
| Seaside bird's-beak | *Cordylanthus rigidus* var. *littoralis* | SC/E/CNPS 1B |
| Toro manzanita | *Arctostaphylos montereyensis* | SC/--/CNPS 1B |
| Sandmat manzanita | *Arctostaphylos pumila* | SC/--/CNPS 1B |
| Monterey ceanothus | *Ceanothus cuneatus* var. *rigidus* | SC/--/CNPS 4 |
| Eastwood's ericameria | *Ericameria fasciculata* | SC/--/CNPS 1B |
| Coast wallflower | *Erysimum ammophilum* | SC/--/CNPS 1B |
| Yadon's piperia | *Piperia yadoni* | E/--/CNPS 1B |
| Hooker's manzanita | *Arctostaphylos hookeri* | --/--/CNPS 1B |
| **Animals** | | |
| Smith's blue butterfly | *Euphilotes enoptes smithi* | E/-- |
| California linderiella | *Linderiella occidentalis* | no status |
| California red-legged frog | *Rana aurora draytoni* | T/CSC |
| California tiger salamander | *Ambystoma tigrinum californiense* | C/CSC |
| California black legless lizard | *Anniella pulchra nigra* | --/CSC |
| Western snowy plover | *Charadrius alexandrinus nivosus* | T/CSC |
| Monterey ornate shrew | *Sorex ornatus salarius* | SC/-- |

1. Status Explanations

**Federal**

E = listed as endangered under the federal Endangered Species Act (ESA)
T = listed as threatened under the federal ESA
C = candidate for federal listing as threatened or endangered under the federal ESA
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 ESA.

**State**

E = listed as endangered under the California Endangered Species Act (CESA)
T = listed as threatened under the CESA
CSC = California Department of Fish and Game species of special concern

**Other**

CNPS 1B = California Native Plant Society list 1B: plants listed as rare, threatened or endangered in California and elsewhere
CNPS 4 = California Native Plant Society list 4: plants of limited distribution in California - a watch list

# APPENDIX B

# DATA CALCULATIONS AND MAPS

## DATA CALCULATIONS

Included in this appendix are the spreadsheets used to provide the acreage figures summarized in Table 4 of the text. Maps are also included that indicate the location and numbers of the polygons used for the *Army's Flora and Fauna Baseline Study of Fort Ord, California* (1992),– referred to as the Jones & Stokes (JSA) Polygons – in relationship to the proposed development boundaries for East Garrison, Parker Flats and the MOUT. JSA polygons (GIS-based) from the baseline studies, identifying each mapped resource type, were overlaid (electronically) on the proposed land use maps for East Garrison, Parker Flats and the MOUT to determine the effects of the proposed modifications on each type.

The spreadsheets in this appendix provide a polygon-specific tabulation of the effects on oak woodland, maritime chaparral and grassland habitats as well as the effects on high, medium and low densities for each HMP Species. Three separate cases are illustrated. Case 1 is the baseline condition, assuming that diversity and density of HMP Species remain as originally mapped by Jones & Stokes Associates for the Army. Case 2 shows reduced values for some HMP Species in mechanically cleared areas at Parker Flats based on brief site reconnaissance of those areas during March and April 2002. Case 3 is a worst case scenario that eliminates values for all HMP Species in mechanically cleared areas at Parker Flats.

The numbers of the polygons used for the baseline studies are shown in the left-hand column for each land use area. Acreage numbers for each polygon are assigned by habitat type. Finally, species densities for each polygon, as recorded by JSA for the Army, are indicated in columns under each HMP Species. For species-specific numbers, 1 = low density, 2 = medium density and 3 = high density. The numbers shown in red and in parentheses represent losses while the numbers in black are gains. Numbers that change as a result of the reduced (Case 2) or zero (Case 3) values assigned because of mechanical clearing are shown in blue and the polygon numbers representing the changed areas are highlighted.

The baseline case shows gains in all categories of all species and habitats except for a minor (1.5-acre) loss of medium density habitat for one species (*Ericameria fasciculata*). This apparent loss is well within the margin of error associated with the field sampling techniques and map scale limitations of the baseline studies and the analysis completed herein. Moreover, the apparent loss would be more than offset by a gain of 107 acres of low density habitat for the same species. However, net losses of HMP Species increase beyond the margin of error and map limitation factors in Cases 2 & 3, demonstrating the potential effects of mechanical clearing and the absence of prescribed burning. Accordingly, we have based our no net loss determination on an assumption that prescribed burning in mechanically cleared chaparral areas would occur in a timely manner.

East Garrison/Parker Flats/MOUT
Gain/Loss of Habitats and
Sensitive Plant Species
East Garrison Alternative 1
May, 2002

**CASE 1**
**Baseline**

| East Garrison | JSA# | OW | MC | G | Density | ARMO | CHPUP | ARPU | ERFA | ARHOH | CERI | GITEA | CORIL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Develop | 243 | (29.4) | | | | | (1) | | | | | | |
| | 266 | (1.1) | | | | | | | | | | | |
| | 296 | | | (11.3) | | | | | | | | | |
| | 353 | (33.8) | | | | | | | | | | | |
| | 386 | (37.1) | | | | | | | | | | | |
| | 422 | | (4.7) | | | (1) | | | | | | | |
| | 433 | | | (3.2) | | | 1) | (1) | | | | | |
| | 455 | (78.9) | | | | (1) | | | | | | | |
| | 468 | (9.6) | | | | (1) | | | | | | | |
| | 518 | | (0.9) | | | (2) | | | (2) | | (2) | | |
| TOTAL ACRES | | (189.9) | (5.6) | (14.5) | 1= | (93.2) | (32.6) | (3.2) | | | | | |
| TOTAL | | (210.0) | | | 2= | (0.9) | | | (0.9) | | (0.9) | | |

| Parker Flats | JSA# | OW | MC | G | ARMO | CHPUP | ARPU | ERFA | ARHOH | CERI | GITEA | CORIL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Range 45 | 735 | | (16.1) | | | (2) | (3) | (1) | | | (3) | (1) |
| | 735 | | 12.5 | | | 2 | 3 | 1 | | | 3 | 1 |
| | 735 | | 3.6 | | | 2 | 3 | 1 | | | 3 | 1 |
| | 749 | | 5.2 | | | 1 | 3 | 1 | | | 3 | |
| Reserve | 637 | | 46.1 | | 2 | 1 | 2 | | 2 | 2 | | |
| | 646 | | 1.6 | | 1 | 1 | | 1 | 1 | 2 | 1 | |
| | 575 | | 100.7 | | 1 | 1 | 1 | 1 | 1 | 1 | | |
| | 500 | | 26.1 | | 1 | | | | 1 | | | |
| | 326 | | | 17.9 | | 3 | | | | | | |
| | 379 | 132.6 | | | | | | | | | | |
| | 472 | 40.8 | | | | 1 | | | | | | |
| | 417 | 6.6 | | | | 3 | | | | | | |
| Oak oval | 472 | 31.5 | | | | 1 | | | | | | |
| | 519 | 38.0 | | | | 1 | | | | | | |
| TOTAL ACRES | | 249.5 | 179.7 | 17.9 | 1= | 128.4 | 263.9 | 100.7 | 107.5 | 128.4 | 100.7 | 1.6 | (0.0) |
| | | | | | 2= | 46.1 | | 46.1 | | 46.1 | 47.7 | | |
| | | 447.1 | | | 3= | | 24.5 | 5.2 | | | 5.2 | | |

| MOUT | JSA# | OW | MC | G | ARMO | CHPUP | ARPU | ERFA | ARHOH | CERI | GITEA | CORIL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Reserve | 850 | | 2.6 | | | 3 1 | | | | 2 | | |
| | 841 | 1.2 | | | 1 | | | | | | | |
| | 879 | 7.0 | | | 2 | | | | 1 | | | |
| | 932 | | 2.6 | | 2 | | | | 3 | 1 | | |
| | 891 | | (1.1) | | | | | | (3) | (2) | | |
| | 902 | | | (0.6) | | | | | | | | |
| Range 35 | 906 | (1.5) | | | (1) | | | | (2) | | | |
| | 940 | | (0.6) | | | (3) (1) | | (2) | (1) | (3) | (1) | |
| TOTAL ACRES | | 6.7 | 3.5 | (0.6) | 1= | (0.3) | 2.0 | | 6.4 | 2.6 | (0.6) | |
| TOTAL | | 9.6 | | | 2= | 9.6 | | (0.6) | (1.5) | 1.5 | | |
| | | | | | 3= | 2.0 | | | 1.5 | (0.6) | | |

| Summary | Acres | OW | MC | G | | ARMO | CHPUP | ARPU | ERFA | ARHOH | CERI | GITEA | CORIL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 246.7 | 66.3 | 177.6 | 2.8 | 1= | 34.9 | 233.3 | 97.5 | 107.5 | 134.8 | 103.3 | 1.0 | 0.0 |
| | | | | | 2= | 54.8 | 0.0 | 46.1 | (1.5) | 44.6 | 48.3 | | |
| | 246.7 | | | | 3= | 2.0 | 24.5 | 5.2 | | 1.5 | 4.6 | | |

LEGEND

1= Low Density
2= Medium Density
3= High Density

East Garrison/Parker Flats/MOUT
Gain/Loss of Habitats and
Sensitive Plant Species
East Garrison Alternative 1
Effect of Clearing at Parker Flats
Reduce Densi tiesto 1 in Polygons 575, 637, 735, 749
May, 2002

**CASE 2**
**Effect of Clearing**

| East Garrison | JSA# | OW | MC | G |
|---|---|---|---|---|
| Develop | 243 | (29.4) | | |
| | 266 | (1.1) | | |
| | 290 | | | (11.3) |
| | 353 | (33.8) | | |
| | 386 | (37.1) | | |
| | 422 | | (4.7) | |
| | 433 | | | (3.2) |
| | 455 | (78.9) | | |
| | 468 | (9.6) | | |
| | 518 | | (0.9) | |
| TOTAL ACRES | | (189.9) | (5.6) | (14.5) |
| TOTAL | | (210.0) | | |

| Density | ARMO | CHPUP | ARPU | ERFA | ARHOH | CERI | GITEA | CORIL |
|---|---|---|---|---|---|---|---|---|
| | | (1) | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | (1) | | | | | | | |
| | | (1) | (1) | | | | | |
| | (1) | | | | | | | |
| | (1) | | | | | | | |
| | (2) | | | (2) | | (2) | | |
| 1= | (93.2) | (32.6) | (3.2) | | | | | |
| 2= | (0.9) | | | (0.9) | | (0.9) | | |

| LEGEND |
|---|
| 1= Low Density |
| 2= Medium Density |
| 3= High Density |

| Parker Flats | JSA# | OW | MC | G |
|---|---|---|---|---|
| Range 45 | 735 | | (16.1) | |
| | 735 | | 3.6 | |
| | 735 | | 8.9 | |
| | 735 | | 1.5 | |
| | 735 | | 2.1 | |
| | 749 | | 1.0 | |
| | 749 | | 4.2 | |
| Reserve | 637 | | 46.1 | |
| | 646 | | 1.6 | |
| | 575 | | 100.7 | |
| | 500 | | 26.1 | |
| | 326 | | | 17.9 |
| | 379 | 132.6 | | |
| | 472 | 40.8 | | |
| | 417 | 6.6 | | |
| Oak oval | 472 | 31.5 | | |
| | 519 | 38.0 | | |
| TOTAL ACRES | | 249.5 | 179.7 | 17.9 |
| TOTAL | | 447.1 | | |

| | ARMO | CHPUP | ARPU | ERFA | ARHOH | CERI | GITEA | CORIL |
|---|---|---|---|---|---|---|---|---|
| | | (2) | (3) | (1) | | (3) | | (1) |
| | | 2 | 3 | 1 | | 3 | | 1 |
| | | 1 | 1 | 1 | | 1 | | 1 |
| | | 2 | 3 | 1 | | 3 | | 1 |
| | | 1 | 1 | 1 | | 1 | | 1 |
| | | 1 | 3 | 1 | | 3 | | |
| | | 1 | 1 | 1 | | 1 | | |
| | | 1 | 1 | | 1 | 1 | | |
| | 1 | 1 | | 1 | 1 | 2 | 1 | |
| | 1 | 1 | 1 | 1 | 1 | 1 | | |
| | 1 | | | | 1 | | | |
| | | 3 | | | | | | |
| | | 1 | | | | | | |
| | | 3 | | | | | | |
| | | 1 | | | | | | |
| | | 1 | | | | | | |
| 1= | 128.4 | 274.9 | 162.0 | 107.5 | 174.5 | 162.0 | 1.6 | 0.0 |
| 2= | | (11.0) | | | | 1.6 | | |
| 3= | | 24.5 | (10.0) | | | (10.0) | | |

| MOUT | JSA# | OW | MC | G |
|---|---|---|---|---|
| Reserve | 850 | | 2.6 | |
| | 841 | 1.2 | | |
| | 879 | 7.0 | | |
| | 932 | | 2.6 | |
| | 891 | | (1.1) | |
| | 902 | | | (0.6) |
| Range 35 | 9.06 | (1.5) | | |
| | 940 | | (0.6) | |
| TOTAL ACRES | | 6.7 | 3.5 | (0.6) |
| TOTAL | | 9.6 | | |

| | ARMO | CHPUP | ARPU | ERFA | ARHOH | CERI | GITEA | CORIL |
|---|---|---|---|---|---|---|---|---|
| | 3 | 1 | | | | 2 | | |
| | 1 | | | | | | | |
| | 2 | | | | 1 | | | |
| | 2 | | | | 3 | 1 | | |
| | | | | | (3) | (2) | | |
| | (1) | | | | (2) | | | |
| | | (3) | (1) | (2) | (1) | (3) | (1) | |
| 1= | (0.3) | 2.0 | | | 6.4 | 2.6 | (0.6) | |
| 2= | 9.6 | | | (0.6) | (1.5) | 1.5 | | |
| 3= | 2.0 | | | | 1.5 | (0.6) | | |

| Summary | Acres | OW | MC | G |
|---|---|---|---|---|
| TOTAL ACRES | 246.7 | 66.3 | 177.6 | 2.8 |
| | 246.7 | | | |

| | ARMO | CHPUP | ARPU | ERFA | ARHOH | CERI | GITEA | CORIL |
|---|---|---|---|---|---|---|---|---|
| 1= | 34.9 | 244.3 | 158.8 | 107.5 | 180.9 | 164.6 | 1.0 | 0.0 |
| 2= | 8.7 | (11.0) | | (1.5) | (1.5) | 2.2 | | |
| 3= | 2.0 | 24.5 | (10.0) | 0.0 | 1.5 | (10.6) | | |

East Garrison/Parker Flats/MOUT
Gain/Loss of Habitats and
Sensitive Plant Species
East Garrison Alternative 1
Effect of Clearing at Parker Flats
Removal of all Species in Polygons 575, 637, 735, 749
May, 2002

**CASE 3**
**Effect of Clearing**

| East Garrisor | JSA# | OW | MC | G |
|---|---|---|---|---|
| Develop | 243 | (29.4) | | |
| | 266 | (1.1) | | |
| | 296 | | | (11.3) |
| | 353 | (33.8) | | |
| | 386 | (37.1) | | |
| | 422 | | (4.7) | |
| | 433 | | | (3.2) |
| | 455 | (78.9) | | |
| | 468 | (9.6) | | |
| | 518 | | (0.9) | |
| TOTAL ACRES | | (189.9) | (5.6) | (14.5) |
| TOTAL | | (210.0) | | |

| Density | ARMO | CHPUP | ARPU | ERFA | ARHOH | CERI | GITEA | CORIL |
|---|---|---|---|---|---|---|---|---|
| | | (1) | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | (1) | | | | | | | |
| | | (1) | (1) | | | | | |
| | (1) | | | | | | | |
| | (1) | | | | | | | |
| | (2) | | | (2) | | (2) | | |
| 1= | (93.2) | (32.6) | (3.2) | | | | | |
| 2= | (0.9) | | | (0.9) | | (0.9) | | |

| LEGEND |
|---|
| 1= Low Density |
| 2= Medium Density |
| 3= High Density |

| PF | JSA# | OW | MC | G |
|---|---|---|---|---|
| Range 45 | 735 | | (16.1) | |
| | 735 | | 3.6 | |
| | 735 | | 8.9 | |
| | 735 | | 1.5 | |
| | 735 | | 2.1 | |
| | 749 | | 1.0 | |
| | 749 | | 4.2 | |
| Reserve | 637 | | 46.1 | |
| | 646 | | 1.6 | |
| | 575 | | 100.7 | |
| | 500 | | 26.1 | |
| | 326 | | | 17.9 |
| | 379 | 132.6 | | |
| | 472 | 40.8 | | |
| | 417 | 6.6 | | |
| Oak oval | 472 | 31.5 | | |
| | 519 | 38.0 | | |
| TOTAL ACRES | | 249.5 | 179.7 | 17.9 |
| TOTAL | | 447.1 | | |

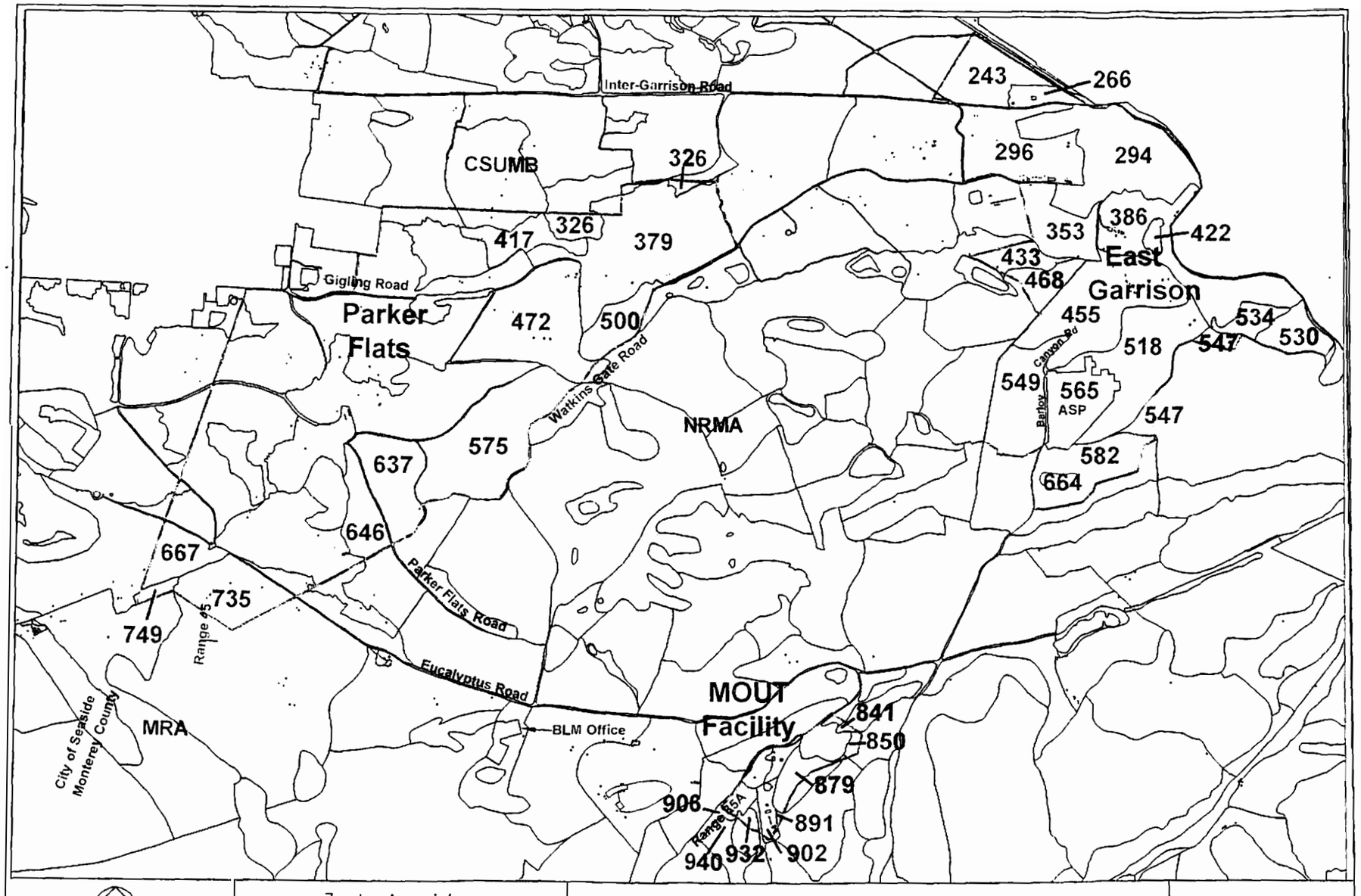
| | ARMO | CHPUP | ARPU | ERFA | ARHOH | CERI | GITEA | CORIL |
|---|---|---|---|---|---|---|---|---|
| | | (2) | (3) | (1) | | (3) | | (1) |
| | | 2 | 3 | 1 | | 3 | | 1 |
| | | | | | | | | |
| | | 2 | 3 | 1 | | 3 | | 1 |
| | | | | | | | | |
| | | 1 | 3 | 1 | | 3 | | |
| | | | | | | | | |
| | | | | | | | | |
| | 1 | 1 | | 1 | 1 | 2 | 1 | |
| | 1 | | | | 1 | | | |
| | | 3 | | | | | | |
| | | 1 | | | | | | |
| | | 3 | | | | | | |
| | | 1 | | | | | | |
| | | 1 | | | | | | |
| 1= | 27.7 | 112.9 | | (8.4) | 27.7 | | 1.6 | (11.0) |
| 2= | | (11.0) | | | | 1.6 | | |
| 3= | | 24.5 | (10.0) | | | (10.0) | | |

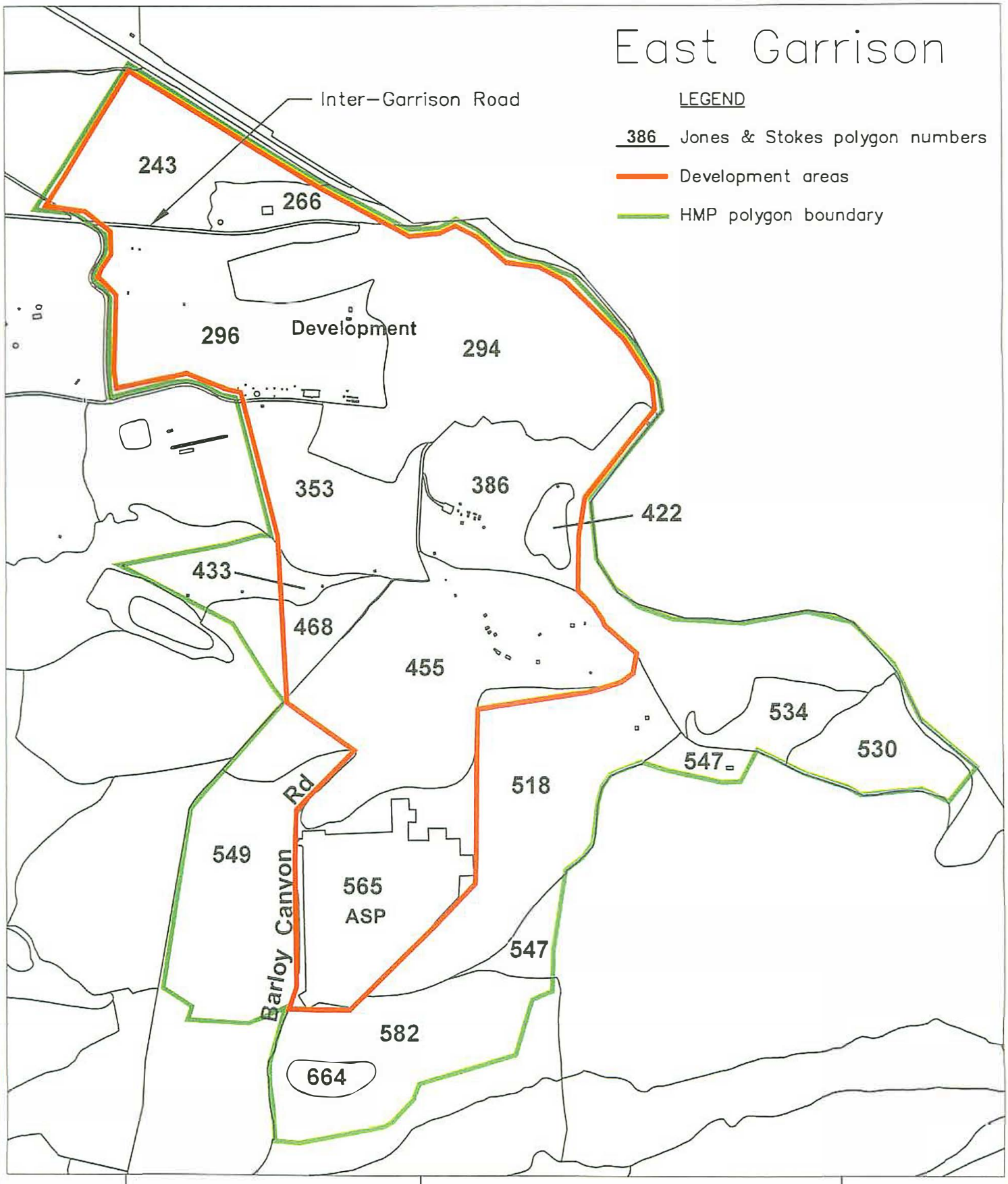
| MOUT | JSA# | OW | MC | G |
|---|---|---|---|---|
| Reserve | 850 | | 2.6 | |
| | 841 | 1.2 | | |
| | 879 | 7.0 | | |
| | 932 | | 2.6 | |
| | 891 | | (1.1) | |
| | 902 | | | (0.6) |
| Range 35 | 906 | (1.5) | | |
| | 940 | | (0.6) | |
| TOTAL ACRES | | 6.7 | 3.5 | (0.6) |
| TOTAL | | 9.6 | | |

| | ARMO | CHPUP | ARPU | ERFA | ARHOH | CERI | GITEA | CORIL |
|---|---|---|---|---|---|---|---|---|
| | | 3 | 1 | | | 2 | | |
| | 1 | | | | | | | |
| | 2 | | | | 1 | | | |
| | 2 | | | | 3 | 1 | | |
| | | | | | (3) | (2) | | |
| | | | | | | | | |
| | (1) | | | | (2) | | | |
| | | (3) | (1) | (2) | (1) | (3) | (1) | |
| 1= | (0.3) | 2.0 | | | 6.4 | 2.6 | (0.6) | |
| 2= | 9.6 | | | (0.6) | (1.5) | 1.5 | | |
| 3= | 2.0 | | | | 1.5 | (0.6) | | |

| Summary | Acres | OW | MC | G |
|---|---|---|---|---|
| | 246.7 | 66.3 | 177.6 | 2.8 |
| | | | | |
| | 246.7 | | | |

| | ARMO | CHPUP | ARPU | ERFA | ARHOH | CERI | GITEA | CORIL |
|---|---|---|---|---|---|---|---|---|
| 1= | (65.8) | 82.3 | (3.2) | (8.4) | 34.1 | 2.6 | 1.0 | (11.0) |
| 2= | 8.7 | (11.0) | | (1.5) | (1.5) | 2.2 | | |
| 3= | 2.0 | 24.5 | (10.0) | | 1.5 | (10.6) | | |


Inter-Garrison Road
243
266
296
294
CSUMB
326
326
417
379
386
353
422
433
East
Garrison
468
Gigling Road
Parker
Flats
472
500
455
534
547
530
518
Watkins Gate Road
549
565
ASP
547
NRMA
575
637
582
664
646
667
Parker Flats Road
735
749
Range 45
Eucalyptus Road
MOUT
Facility
841
850
879
906
891
902
940
932
Range 55A
MRA
BLM Office
City of Seaside
Monterey County
Scale: 1" = Approx. 2000'
Zander Associates
Environmental Consultants
150 Ford Way, Suite 101
Novato, CA 94945
(415) 897-8781
Jones & Stokes Polygon Locations at
East Garrison, Parker Flats and MOUT Facility
Figure
B-1




Scale: 1" = Approx. 1100'

Zander Associates
Environmental Consultants
150 Ford Way, Suite 101
Novato, CA 94945
(415) 897-8781

Proposed Development and Jones & Stokes Polygon Locations at East Garrison

Figure B-2

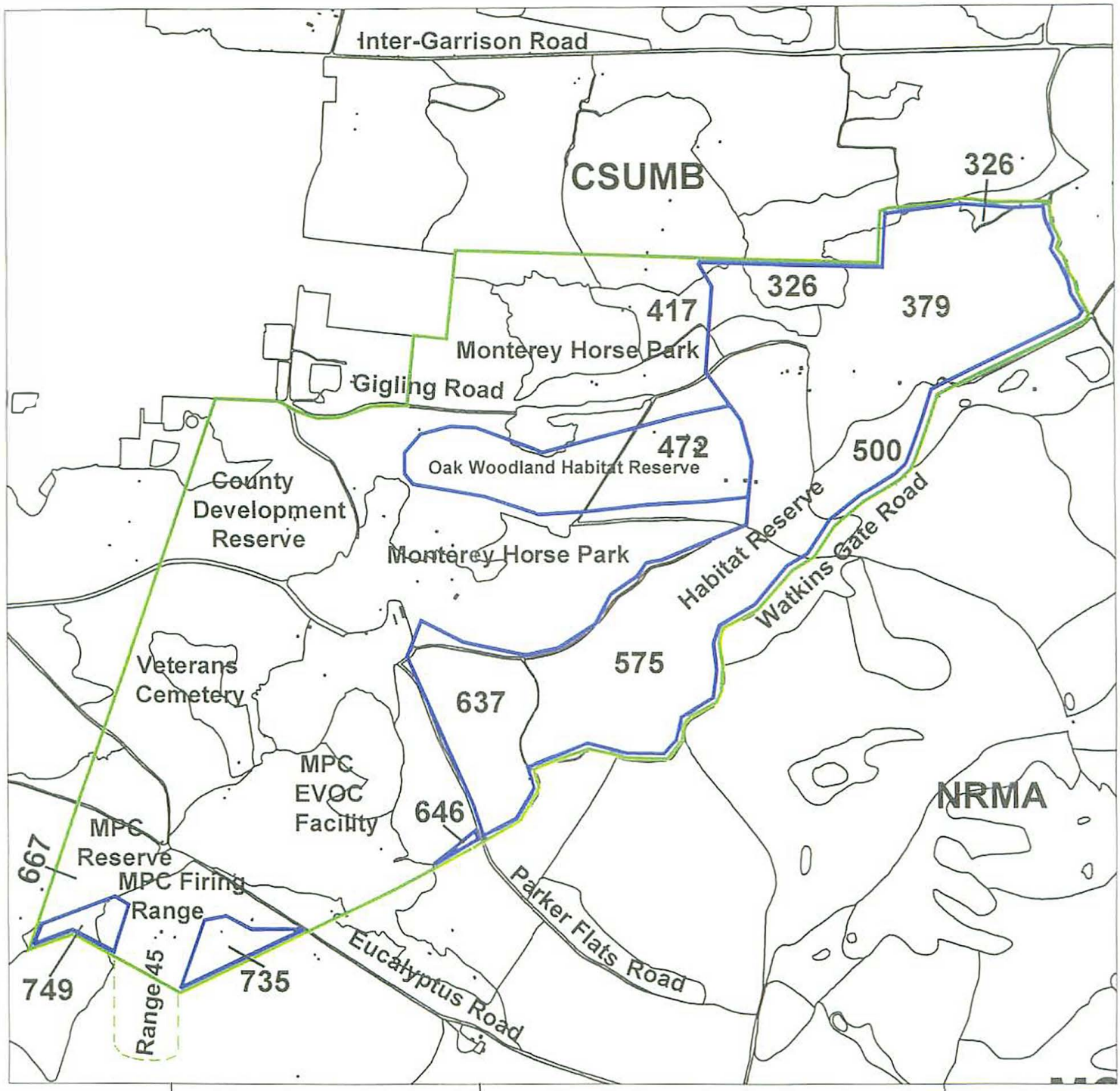
# Parker Flats

LEGEND

637 Jones & Stokes polygon numbers

Habitat Reserve areas

Planning area boundary




Scale: 1" = Approx. 1600'

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Jones & Stokes Polygon and Habitat Preserve Locations at Parker Flats

Figure B-3

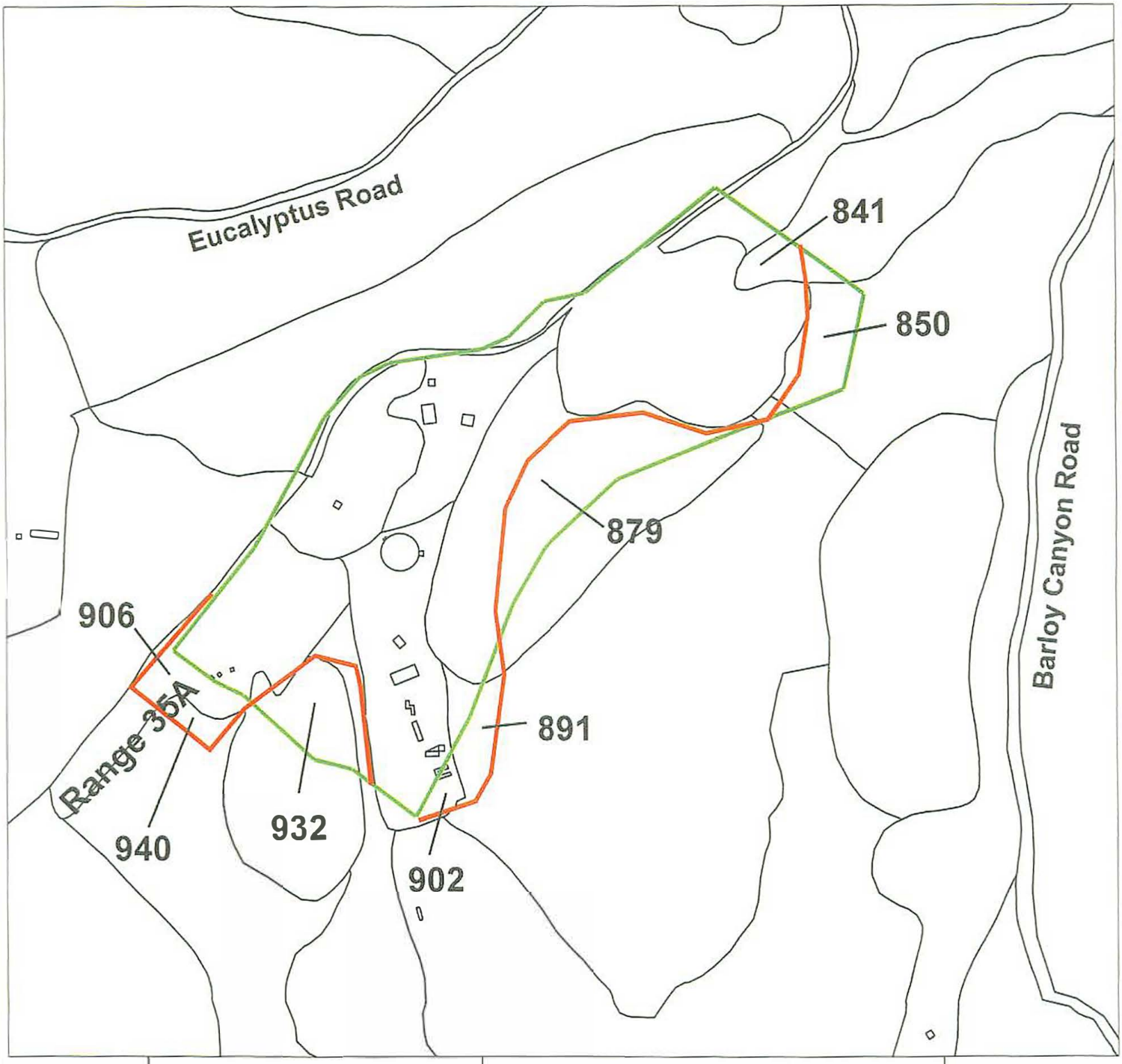
# MOUT Facility

LEGEND

841 Jones & Stokes polygon numbers

HMP polygon boundary

Proposed boundary adjustment




Scale: 1" = Approx. 600'

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Proposed Boundary Adjustments and Jones & Stokes Polygon Locations at MOUT Facility

Figure B-4

# APPENDIX C

# CONDITIONS

## CONDITIONS

Based on this assessment and on initial coordination among resource agencies and other interested parties including staff of the U.S. Fish and Wildlife Service, U.S. Army, Bureau of Land Management, California Department of Fish and Game, Monterey Peninsula College, Fort Ord Reuse Authority and County of Monterey, the following conditions will provide the necessary assurances to the Service that the proposed modifications will not compromise the overall goals of the Fort Ord Habitat Management Plan or result in a net loss of HMP Species or habitat. The assessment presented in this report, along with signed agreement to these conditions and concurrence from the Service, shall be the basis for modifications to the April 1997 HMP and the Habitat Conservation Plan and Implementing Agreement currently in preparation through the Coordinated Resource Management Planning program at Fort Ord.

### General

1. The County of Monterey shall sign 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.

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.

### East Garrison

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 this report. 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.

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.

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.

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.

**Parker Flats**

1. Borderland requirements between the development and habitat reserve areas and suitable management entities for the new habitat reserve areas at Parker Flats shall be established in coordination with the Service, CDFG and BLM through the CRMP program.

2. BLM and MPC shall agree on an appropriate perimeter area around Range 45 that will provide for public safety and also allow for habitat protection and management. The party responsible for the management of this perimeter area shall also be identified.

3. The area proposed for use as the Monterey Horse Park, as illustrated on Figure 5 in this report, shall be designated as development with reserve area and restrictions with requirements to maintain an aggressive non-native plant species eradication program and preserve a 70-acre oak woodland habitat area approximating the boundaries of the Oak Woodland Habitat Reserve illustrated on Figure 5. An approximately 150-foot wide section of a proposed cross-country course shall be allowed through the eastern end of oak woodland reserve, or possibly through the oak woodlands and grasslands to the east of the Horse Park area, but shall be sited and designed to minimize vegetation removal and maintain wildlife movement corridors between habitat reserves. Any other trails and courses through habitat reserves shall use existing or realigned roads and trails. No buildings, grandstands, corrals, parking areas or other developments shall be allowed in designated habitat reserves. The siting and design of Horse Park trails and courses through habitat reserves shall be approved by the Service, CDFG and BLM through the CRMP program.

4. Habitat management requirements in the new habitat reserve areas shall be the same as those specified for the NRMA, except that there shall be no 2%development allowance in the new reserve areas. All parties recognize the need for the use of prescribed fire to restore habitat values in the mechanically cleared chaparral areas at Parker Flats shown on Figure 5 of this report.

5. The County and/or FORA shall submit an application for a prescribed burn in the mechanically cleared chaparral areas at Parker Flats within six months of the date determined by a designated burn specialist and the CRMP biological working group to be most beneficial for a burn (e.g. the site can carry a fire, smoke impacts would be minimized, species would still have restoration potential).

6. The County and/or FORA shall quantitatively characterize the condition of the HMP Species in the mechanically cleared areas by September 1, 2003 and prior to an actual burn of the area to adequately establish a pre-burn monitoring baseline to assist the CRMP in addressing success criteria and prescribed burn goals.

7. The County and/or FORA shall monitor the results of the prescribed burn in the mechanically cleared areas following procedures and a schedule established in coordination with a designated burn specialist and the CRMP biological working group. Success criteria established in coordination with the CRMP program shall be used to determine if habitat restoration goals are met through the prescribed burn.

8. If FORA and/or the County are unable to perform the prescribed burn or if restoration goals are not met following a burn, FORA and/or the County shall inform the Service, the Army, BLM, CDFG and others through the CRMP program that they shall either: 1.) Complete a series of habitat restoration projects on eroded, unused trails, roads or other degraded sites on other lands transferred or to be transferred as habitat reserve that support appropriate HMP Species; or 2.) Comply with existing resource conservation requirements of the executed HMP for East Garrison if development has not yet proceeded beyond the allowances of those requirements, effectively abandoning the proposed exchange of development acreage between Parker Flats and East Garrison, but retaining the modifications to Range 45 and the MOUT facility, including the establishment of new reserve lands adjacent to both areas as described in this report.

**MOUT**

1. BLM and MPC shall review the proposed boundary modifications at the MOUT facility described in this report and agree (through the MOU or equivalent binding agreement referenced above) that both habitat management and safe operation of the facility can be achieved with the proposed modifications.

2. BLM, MPC, FORA and the County shall agree on the ultimate disposition and management of the MOUT facility in accordance with the MOU or equivalent binding agreement referenced above.