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 Densities to 1 in Polygons 575, 637, 735, 749
May, 2002

CASE 2
Effect of Clearing

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		3.6				2	3	1		3		1
	735		8.9				1	1	1		1		1
	735		1.5				2	3	1		3		1
	735		2.1				1	1	1		1		1
	749		1.0				1	3	1		3		
	749		4.2				1	1	1		1		
Reserve	637		46.1				1	1		1	1		
	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	274.9	162.0	107.5	174.5	162.0	1.6	0.0
					2=		(11.0)				1.6		
TOTAL		447.1			3=		24.5	(10.0)			(10.0)		

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
TOTAL ACRES	246.7	66.3	177.6	2.8	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		
	246.7				3=	2.0	24.5	(10.0)	0.0	1.5	(10.6)		

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
Removal of all Species in Polygons 575, 637, 735, 749
May, 2002

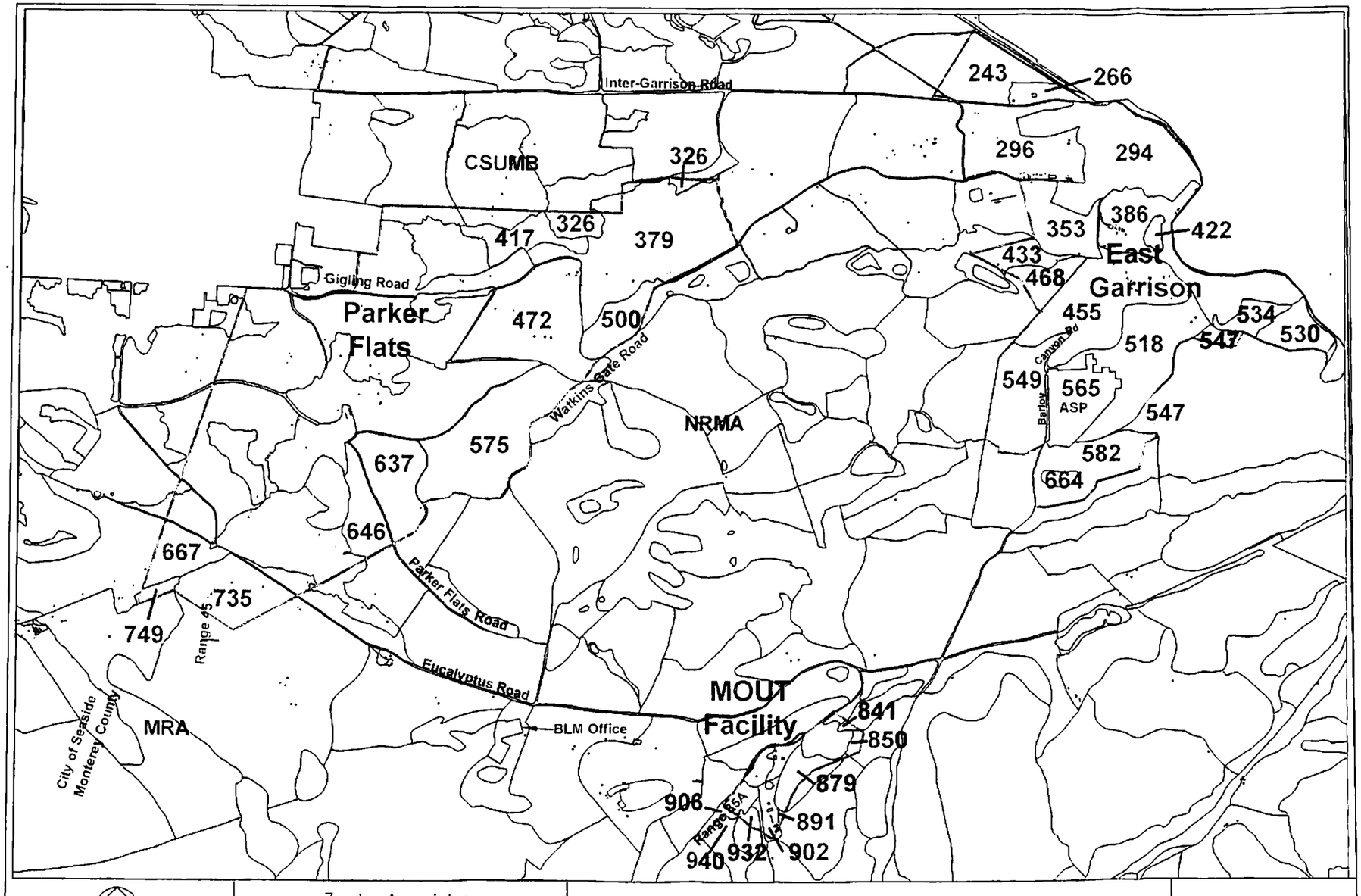
CASE 3
Effect of Clearing

East Garrisor	JSA#	OW	MC	G		Density	ARMO	CHPUP	ARPU	ERFA	ARHOH	CERI	GITEA	CORIL	LEGEND
Develop	243	(29.4)						(1)							
	266	(1.1)													1= Low Density
	296			(11.3)											2= Medium Density
	353	(33.8)													3= High Density
	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)			

PF	JSA#	OW	MC	G			ARMO	CHPUP	ARPU	ERFA	ARHOH	CERI	GITEA	CORIL
Range 45	735		(16.1)					(2)	(3)	(1)		(3)		(1)
	735		3.6					2	3	1		3		1
	735		8.9											
	735		1.5					2	3	1		3		1
	735		2.1											
	749		1.0					1	3	1		3		
	749		4.2											
Reserve	637		46.1											
	646		1.6				1	1		1	1	2	1	
	575		100.7											
	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=	27.7	112.9		(8.4)	27.7		1.6	(11.0)
						2=		(11.0)				1.6		
TOTAL		447.1				3=		24.5	(10.0)			(10.0)		

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=	(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		
	246.7					3=	2.0	24.5	(10.0)		1.5	(10.6)		



Scale: 1" = Approx. 2000'

Zander Associates
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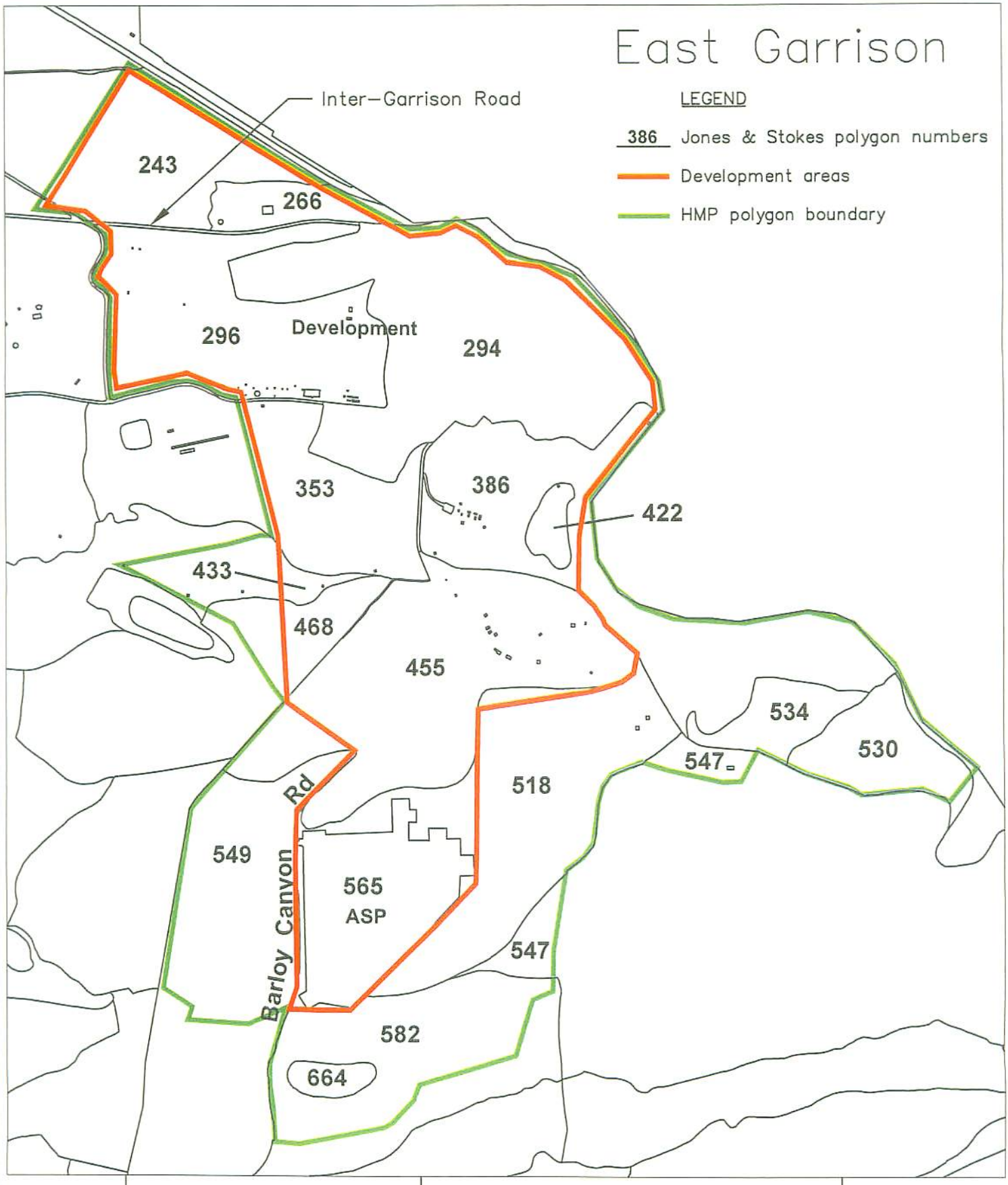
Jones & Stokes Polygon Locations at East Garrison, Parker Flats and MOUT Facility

Figure B-1



Scale: 1" = Approx. 1100'

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Proposed Development and Jones & Stokes Polygon Locations at East Garrison

Figure B-2

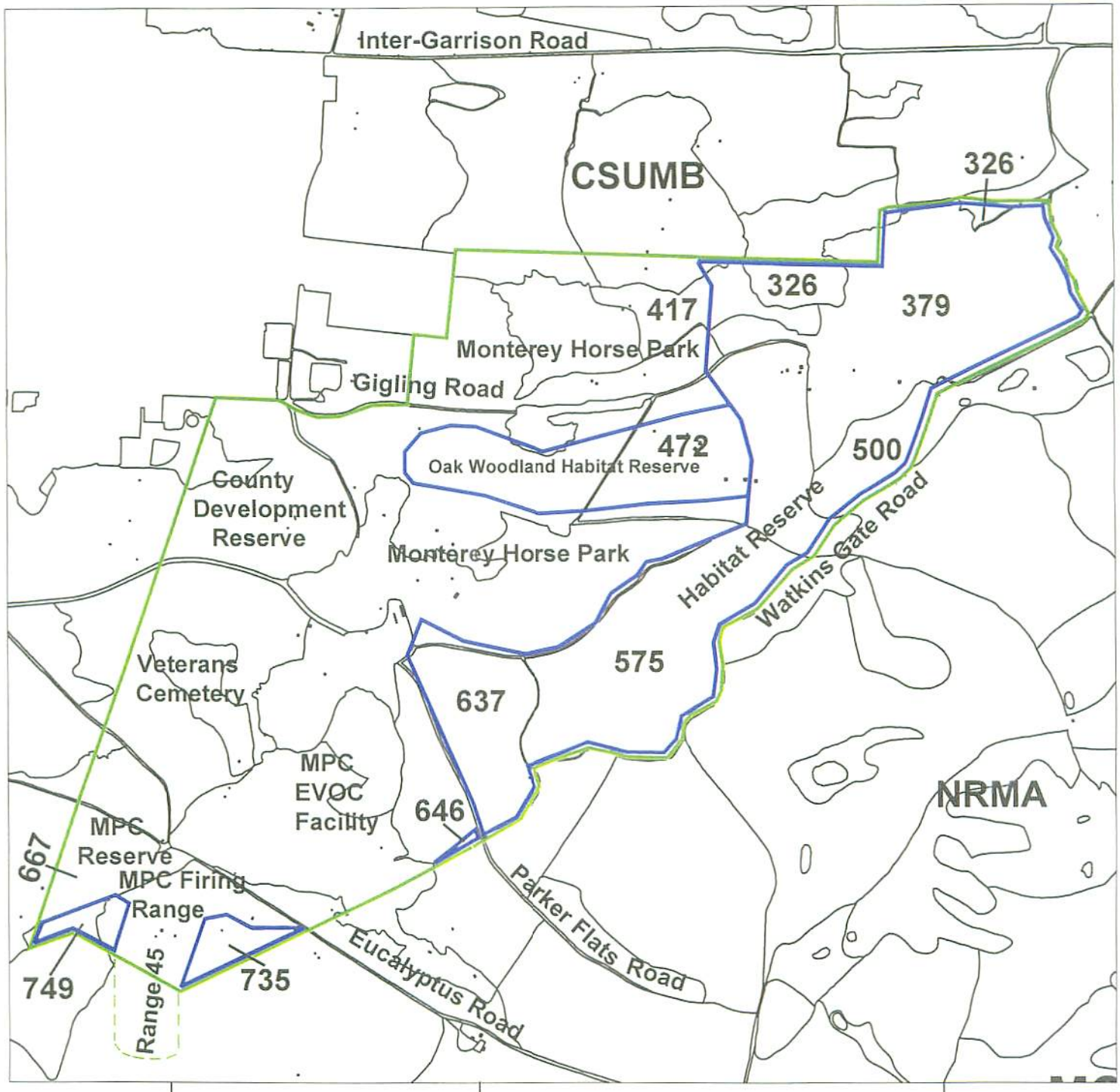
Parker Flats

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

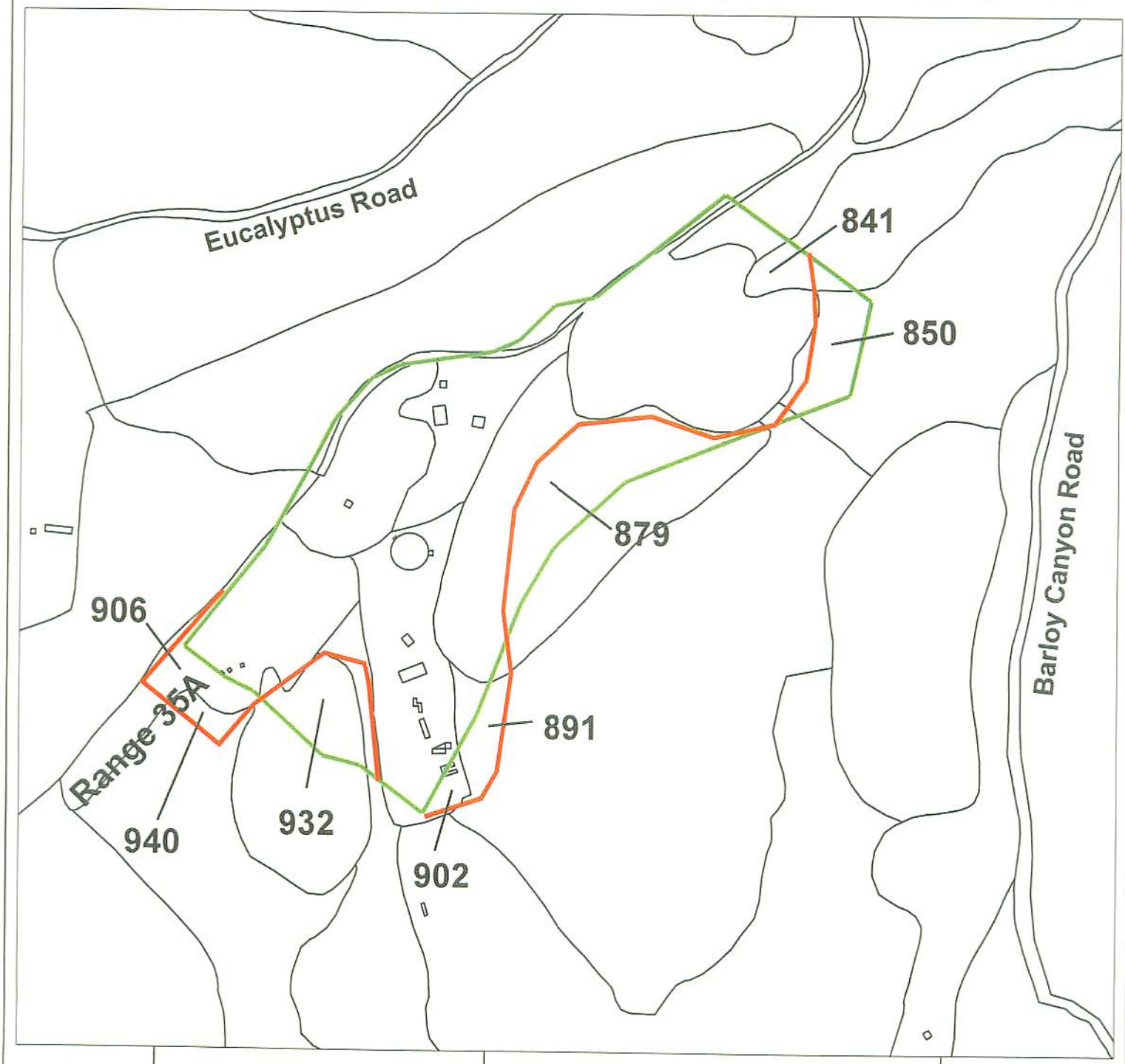
MOUT Facility

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.