**Appendix** A

# Species evaluated for coverage under the MSCP

Scientific Name Common Name Status	Conserved <sup>3</sup> (Based on the MSCP Plan)	Potentially Impacted/Developed (Based on the MSCP Plan)	General Basis for Analysis of Coverage	Monitoring Method(s) (Monitoring Plan and/or Management Plans/Directives)	Meets State and Federal Authorization Standards
Plants					
Acanthomintha ilicifolia	85% of 8 major populations	15% of major populations	Site-specific preserve design and special measures/ management	Monitoring Plan – Site Specific (4 populations) and Management Plan/Directives	YES

## DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because all major populations are within the MHPA and each of the eight major populations will be conserved from 80-100 percent, with 85 percent conserved overall. This species is on the list of narrow endemics<sup>1</sup> which requires jurisdictions to specify and implement measures in their Subarea Plans to avoid or minimize impacts to all populations (including Asphalt, Inc., Sky Mesa, El Capitan sites) during project design.

Notes: This species occurs on clay and gabbro soils which will be conserved at 28+ percent and 43+ percent respectively

**Conditions:** Area specific management directives and the SPA for the Otay Lakes Resort area must include specific measures to protect against detrimental edge effects from the surrounding development.

Agave shawii100% of majorNo major populationsPreserve design/landscapeMonitoring Plan –YESShaw's agavepopulationsNo major populationslevelHabitat BasedYES	
--	--

		Potentially		Monitoring Method(s)	Meets State
Scientific Name	Conserved <sup>3</sup>	Impacted/Developed		(Monitoring Plan	and Federal
Common Name	(Based on the	(Based on the	General Basis for	and/or Management	Authorization
Status	MSCP Plan)	<b>MSCP Plan</b> )	Analysis of Coverage	Plans/Directives)	Standards

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because all known extant populations are within protected public land (Torrey Pines State Preserve and Border Field State Park).

This species is on the MSCP's list of narrow endemics and therefore participating jurisdictions must specify in their Subarea Plans additional specific conservation measures<sup>1</sup> for the species.

**Notes:** Additional important populations are found on military lands (Pt. Loma) which are not part of the MSCP. Populations at Pt. Loma aer not part of the MSCP, but will be conserved at a minimum of 91 percent in the Pt. Loma Ecological Reserve Area.

**Conditions:** Area specific management directives must include specific measures to protect against detrimental edge effects.

Ambrosia pumila	90% of the only	10% of the only major	Site-specific preserve design	Monitoring Plan – Site	YES
San Diego ambrosia	major population	population	and special	Specific (major	
none			measures/management	population) and	
				Management	
				Plans/Directives	

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered because 90 percent of the only major population in the MSCP will be conserved and the adjoining population at the radio tower site will be 100 percent conserved. This major population occurs on public lands in the Mission Trails Regional Park. This species is on the MSCP's list of narrow endemics and therefore participating jurisdictions must specify in their Subarea Plans additional specific conservation measures<sup>1</sup> for species.

**Notes:** The conservation level of this species has changed due to new information. Occurrences in the Spring Canyon, Otay Mesa (East of Otay Lakes), Otay Valley (along the Otay River), and Hidden Trails were misidentified and are now known to be a common species of *Ambrosia*. The small population within the Sna Diego National Wildlife Refuge (Rancho San Diego) will also be conserved and managed by the USFWS.

**Conditions:** If more than 10 percent of the populations at the Mission Trails Regional Park is impacted, this species will no longer be a covered species. Area specific management directives must include monitoring of transplanted populations, and specific measures to protect against detrimental edge effects.

Scientific Name Common Name Status	Conserved <sup>3</sup> (Based on the MSCP Plan)	Potentially Impacted/Developed (Based on the MSCP Plan)	General Basis for Analysis of Coverage	Monitoring Method(s) (Monitoring Plan and/or Management Plans/Directives)	Meets State and Federal Authorization Standards
<i>Aphanisma blitoides</i> Aphanisma None	90% of potential habitat (261± acres) – 92% of southern foredunes (123± acres), 88% of southern coastal bluff scrub (138+ acres)	10% of potential habitat (28+ acres) – 8% of southern foredunes (9 $\pm$ acres), 12% of southern coastal bluff scrub (17 $\pm$ acres)	Preserve design/landscape level with site-specific conservations(s)/management	Monitoring Plan – Habitat Based and Incidental	YES

DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 90 percent of its potential habitat will be conserved.

Notes: Additional potential habitat occurs on military lands (Silver Strand, Imperial Beach) which are not a part of the MSCP. There are no known populations of this species.

crassifolia of south	major 9% of major populations ions and 67% hern maritime al habitat	Preserve design/landscape level with site-specific consideration(s)/management	Monitoring Plan – Site Specific	YES
----------------------	--	--	------------------------------------	-----

Scientific Name Common Name Status	Conserved <sup>3</sup> (Based on the MSCP Plan)	Potentially Impacted/Developed (Based on the MSCP Plan)	General Basis for Analysis of Coverage	Monitoring Method(s) (Monitoring Plan and/or Management Plans/Directives)	Meets State and Federal Authorization Standards
Astragalus deanei Dean's milk vetch None	Unknown conservatio	NO			
Astrogalus tener var. titi Coastal dunes milk vetch PE/CE	92% of southern foredunes ( $123\pm$ acres)	8% of southern foredunes $(11\pm acres)$	Preserve design/landscape level	Monitoring Plan – Habitat Based and Incidental	YES

## DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 92 percent of the vegetative community that is potential habitat for this species will be conserved.

Notes: This species is not known to occur within the MSCP.

**Conditions:** Area specific management directives must provide for reintroduction opportunities, identify potential reintroduction sites, and include measures to prevent non-native species introductions. Any newly found populations shall be evaluated for inclusion in the preserve strategy through acquisition, like exchange, etc.

Baccharis vanessae	92% of major	8% of major populations	Preserve design/landscape	Monitoring Plan – Site	YES
Encinitas baccharis	populations		level with site-specific	Specific (1 population)	
FT/CE			consideration(s)/management	and Management	
				Plans/Directives	

		Potentially		Monitoring Method(s)	Meets State
Scientific Name	Conserved <sup>3</sup>	Impacted/Developed		(Monitoring Plan	and Federal
Common Name	(Based on the	(Based on the	General Basis for	and/or Management	Authorization
Status	MSCP Plan)	MSCP Plan)	Analysis of Coverage	Plans/Directives)	Standards

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 92 percent of the major populations will be conserved. This species is on the MSCP's list of narrow endemics and therefore participating jurisdictions must specify in their Subarea Plans additional specific conservation measures<sup>1</sup> for the species.

**Conditions:** Based on BMPs, area specific management directives must include specific management measures to address the autecology and natural history of the species and to reduce the risk of catastrophic fire; and appropriate male/female plant ratios. Management measures to accomplish this may include prescribed fire.

Berberis nevinii	100% of populations	No natural populations	Site-specific preserve design	Monitoring Plan –	YES
Nevin's barberry	(occurrences are all	present	and special	Habitat Based	
none	persisting cultivars)		measures/management		

## DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED.

This species will be covered by the MSCP because persisting cultivars occurring in Spring Valley and Torrey Pines State Reserve will be conserved. This species is on the MSCP's list of narrow endemics and therefore participating jurisdictions must specify in their Subarea Plans additional specific conservation measures<sup>1</sup> for the species.

**Notes:** Since no known natural populations occur within the plan area, development covered by the plan will not impact the species. Persistence of naturally occurring populations in the San Diego County is dependent on conservation efforts outside the MSCP area.

Thread-leaved brodiaea h	88% of vernal pool habitat, 38% of grassland	12% of vernal pool habitat may be impacted, but his habitat is subject to no net loss of function and value and 404(b)1 guidelines	Preserve design/landscape level	Monitoring Plan – Habitat based	YES
--------------------------	--	--	------------------------------------	------------------------------------	-----

		Potentially		Monitoring Method(s)	Meets State
Scientific Name	Conserved <sup>3</sup>	Impacted/Developed		(Monitoring Plan	and Federal
Common Name	(Based on the	(Based on the	General Basis for	and/or Management	Authorization
Status	MSCP Plan)	MSCP Plan)	Analysis of Coverage	Plans/Directives)	Standards

## DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 88 percent of the vernal pool habitat and 38 percent of grassland habitat that are potential habitat for this species will be conserved.

This species is on the MSCP's list of narrow endemics and therefore participating jurisdictions must specify in their Subarea Plans additional specific conservation measures<sup>1</sup> for the species if a population is identified in the future.

**Notes:** This species is not known to occur within the MSCP area.

<i>Brodiaea orcuttii</i> Orcutt's brodiaea None	All major populations in the MSCP area, 88% of vernal pool habitat,	12% of vernal pool habitat may be impacted, but this habitat is subject to no net loss of function and value	Preserve design/landscape level with site-specific consideration(s)/management	Monitoring Plan – Site Specific (4 populations) and Management Plans/Directives	YES
	38% of grassland	and 404(b)1 guidelines.			

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because all of the major populations in the MSCP plan area (4 populations) will be conserved. This is Group A species in the County's proposed BMO<sup>2</sup>.

Notes: Three major populations occur on Miramar military lands which are not part of the MSCP. Participating jurisdiction's guidelines and ordinances, and state and federal wetland regulations will provide additional habitat protection resulting in no net loss of wetlands.

**Conditions:** The San Vincente population is identified as a critical population in the County's Subarea Plan and must be 100 percent conserved. Area specific management directives must include specific measures to protect against detrimental edge effects.

Scientific Name Common Name Status	Conserved <sup>3</sup> (Based on the MSCP Plan)	Potentially Impacted/Developed (Based on the MSCP Plan)	General Basis for Analysis of Coverage	Monitoring Method(s) (Monitoring Plan and/or Management Plans/Directives)	Meets State and Federal Authorization Standards
Calamagrostis densa Dense reed grass	91% of major populations	9% of major populations	Preserve design/landscape level	Monitoring Plan – Habitat Based	YES

## DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 91% of major populations will be conserved.

Notes: Taxonomic reclassification has combined this taxon in a more common taxon, (Calamagrostis koeleriodes) which is widespread.

**Conditions:** Trail maintenance/placement to avoid human impacts must be addressed in area specific management directives. Enhancement opportunities using prescribed fire should be evaluated in the management plans. Area specific management directives must include specific management measures to address the autecology and natural history of the species and to reduce the risk of catastrophic fire.

Calochortus dunnii	100% of major	No major populations	Preserve design/landscape	Monitoring Plan –	YES
Dunn's mariposa lily	populations		level with site-specific	Habitat Based and	
*/CR			consideration(s)/management	Photo Plot and	
				Management	
				Plans/Directives	

		Potentially		Monitoring Method(s)	Meets State
Scientific Name	Conserved <sup>3</sup>	Impacted/Developed		(Monitoring Plan	and Federal
Common Name	(Based on the	(Based on the	General Basis for	and/or Management	Authorization
Status	MSCP Plan)	MSCP Plan)	Analysis of Coverage	Plans/Directives)	Standards

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 100 percent of the major populations will be conserved. This species is on the MSCP's list of narrow endemics and therefore participating jurisdictions must specify in their Subarea Plans additional specific conservation measures<sup>1</sup> for the species if a population is identified in the future.

**Notes:** Fifty-two percent of one of the three major populations occurs within a major amendment area in the Otay Mountain area. (Take authorization amendments will be subject to public review through CEWZ and NEPA processes and require approval by CDFG and USFWS.) This species occurs on gabbro and metavolcanic soils and 43+ percent of the gabbro soils in the MSCP plan area are within the MHPA.

Caulanthus stenocarpus	75% of major	25% of major populations	Site-specific preserve design	Monitoring Plan –	YES
Slender-pod	populations		and special	Habitat Based and	
jewelflower			measures/management	Incidental and	
/CR				Management/Directives.	

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 3 or 4 (75 percent) of the major populations and 89 percent of occurrences will be conserved. The Wildcat Canyon, Poway/Sanrex, and Fortuna Mountain populations are identified as critical and will be 100 percent protected (San Diego County Subarea Plan requirement).

Note: This tax has been combined with the more widespread and common Caulanthus heterophyllus var. heterophyllus.

**Conditions:** Area specific management directives must include specific management measures to address the autecology and natural history of the species and to reduce the risk of catastrophic fire. Management measures to accomplish this may include prescribed fire.

Scientific Name Common Name Status	Conserved <sup>3</sup> (Based on the MSCP Plan)	Potentially Impacted/Developed (Based on the MSCP Plan)	General Basis for Analysis of Coverage	Monitoring Method(s) (Monitoring Plan and/or Management Plans/Directives)	Meets State and Federal Authorization Standards
<i>Ceanothus cyaneus</i> Lakeside ceanothus none	75% of major populations	25% of major populations	Site-specific preserve design and special measures/management	Monitoring Plan – Habitat Based and Photo Plot	YES

### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSP because 3 of 4 (75 percent) of the major populations will be conserved. This species is on the MSCP's list of narrow endemics and therefore participating jurisdictions must specify in their Subarea Plans additional specific measures<sup>1</sup> for the species if a population is identified in the future. This is a Group A species in the County's proposed BMO<sup>2</sup>.

**Conditions:** Area specific management directives must include specific management measures to address the autecology and natural history of the species and to reduce the risk of catastrophic fire. Management measures to accomplish this may include prescribed fire.

<i>Ceanothus verrucosus</i> Wart-stemmed ceanothus none	67% of major populations, and 64% of known localities	33% of major populations, and 36% of known localities	Site-specific preserve design and special measures/management	Monitoring Plan – Habitat Based and Photo Plot and Management Plan/s Directives	YES
--	---	---	---	---	-----

		Potentially		Monitoring Method(s)	Meets State
Scientific Name	Conserved <sup>3</sup>	Impacted/Developed		(Monitoring Plan	and Federal
Common Name	(Based on the	(Based on the	General Basis for	and/or Management	Authorization
Status	MSCP Plan)	MSCP Plan)	Analysis of Coverage	Plans/Directives)	Standards

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 67 percent of the major populations will be conserved, and special management actions will increase populations. This is a Group B species in the County's proposed  $BMO^2$ .

Notes: Additional important populations (30 percent of known populations) are found on military lands (Pt. Loma, Miramar) which are not part of the MSCP.

**Conditions:** Revegetation efforts within appropriate habitats must include restoration of this species. Area specific management directives for the protected populations must include specific measures to increase populations. Area specific management directives must include specific management measures to address the autecology and natural history of the species and to reduce the risk of catastrophic fire. Management measures to accomplish this may include prescribed fire. Any newly found populations should be evaluated for inclusion in the preserve strategy through acquisition, like exchange, etc.

<i>Chorizanthe orcuttiana</i> Orcutt's spineflower	Unknown conservation	nown conservation level and therefore not covered by the plan.			NO
<i>Cordylanthus maritimus</i> ssp. <i>maritimus</i> Salt marsh bird's-beak FE/CE	100% of major populations	No major populations	Site-specific preserve design and special measures/management	Monitoring Plan – Site Specific (3 populations)	YES

		Potentially		Monitoring Method(s)	Meets State
Scientific Name	Conserved <sup>3</sup>	Impacted/Developed		(Monitoring Plan	and Federal
Common Name	(Based on the	(Based on the	General Basis for	and/or Management	Authorization
Status	MSCP Plan)	MSCP Plan)	Analysis of Coverage	Plans/Directives)	Standards

## DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 100 percent of major populations within the MSCP plan area will be conserved.

**Note:** Participating jurisdictions' guidelines and ordinances, and state and federal wetland regulations will provide additional protection. One population of this species also occurs on military lands (Naval Radar Receiving Facility) which are not part of the MSCP.

**Conditions:** Area specific management directives must 1) include measures to reduce threats and stabilize populations (e.g., relocation of footpaths, establishment of buffer areas, etc.), 2) address opportunities for reintroduction, and 3) include measures to enhance existing populations (e.g., protect and improve upland habitat for pollinators). There is a federal recovery plan for this species and management activities should to the extent possible help achieve the specified goals. Any newly found populations shall be evaluated for inclusion in the preserve strategy through acquisition, like exchange, etc.

orcuttianus populations le	•	Monitoring Plan – Site Specific (4 populations) and Management Plans/ Directives	YES
----------------------------	---	---	-----

## DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 3 of 4 (75 percent) major populations will be conserved. A portion of the Otay River Valley population lies outside of the MHPA but will be subject to the County's Biological Mitigation Ordinance (80-100 percent conservation). The Otay Ranch population (southeast of Lower Otay Lake) is considered conserved subject to landowner and agency agreement.

**Condition:** AT the time permit amendments are proposed, strategies to provide protection for this species within the amendment area must be included. (Take authorization amendments are subject to public review through CEWX and NEPA processes and require approval by CDFG and USFWS.)

Scientific Name Common Name Status	Conserved <sup>3</sup> (Based on the MSCP Plan)	Potentially Impacted/Developed (Based on the MSCP Plan)	General Basis for Analysis of Coverage	Monitoring Method(s) (Monitoring Plan and/or Management Plans/Directives)	Meets State and Federal Authorization Standards
<i>Corethrogyne filaginifolia</i> var. <i>linifolia</i> Del Mar Mesa sand aster	48% of major populations, 57% of known localities and 67% of southern maritime chaparral	52% of major populations, 43% of known localities and 33% of southern maritime chaparral	Preserve design/landscape level with site-specific consideration(s)/management	Monitoring Plan – Site Specific	YES

DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 48 percent of major populations and 67 percent of its potential habitat (southern maritime chaparral) will be conserved. This is a Group A species in the County's proposed BMO<sup>2</sup>.

Notes: This taxon has been merged with two other Corethrogyne filaginifolia varieties, and has been determined not to meet the taxonomic standards for listing.

**Conditions:** Area specific management directives for the protected populations must include specific measures to protect against detrimental edge effects to this species. Area specific management directives must include specific management measures to address the autecology and natural history of the species and to reduce the risk of catastrophic fire. Management measures to accomplish this may include prescribed fire.

Cupressus forbessi	98% Tecate cypress	2% Tecate cypress forest	Preserve design/landscape	Monitoring Plan –	YES
Tecate cypress	forest		level	Habitat Based and	
none				Photo Plot	

		Potentially		Monitoring Method(s)	Meets State
Scientific Name	Conserved <sup>3</sup>	Impacted/Developed		(Monitoring Plan	and Federal
Common Name	(Based on the	(Based on the	General Basis for	and/or Management	Authorization
Status	MSCP Plan)	<b>MSCP Plan</b> )	Analysis of Coverage	Plans/Directives)	Standards

## DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 98 percent of major populations will be conserved, primarily on lands administered by BLM.

**Conditions:** Area specific management directives for the protected populations will include specific measures to maintain or increase populations. Area specific management directives must include specific management measures to address the autecology and natural history of the species and to reduce the risk of catastrophic fire. Management measures to accomplish this may include prescribed fire.

Dudleya blochmaniae	100% of major	No major populations	Site-specific preserve design	Monitoring Plan –Site	YES
ssp. brevifolia	populations		and special	Specific (3 populations)	
Short-leaved dudleya			measures/management	and Management	
PE/CE				Plans/Directives	

## DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 100 percent of major populations will be conserved. This species is on the MSCP's list of narrow endemics and therefore participating jurisdictions must specify in their Subarea Plans additional conservation measures<sup>1</sup> for the species.

**Notes:** The populations on Del Mar Mesa, Carmel Mountain, and Crestview Canyon are subject to considerable edge effects. The wildlife agencies will work with the University of California, San Diego to protect and manage the University of California property adjacent to Skeleton Canyon for this species.

**Conditions:** Area specific management directives must include 1) specific measures to protect against detrimental edge effects to this species, 2) species-specific monitoring and 3) maintenance of surrounding habitat for pollinators.

Scientific Name Common Name Status	Conserved <sup>3</sup> (Based on the MSCP Plan)	Potentially Impacted/Developed (Based on the MSCP Plan)	General Basis for Analysis of Coverage	Monitoring Method(s) (Monitoring Plan and/or Management Plans/Directives)	Meets State and Federal Authorization Standards
<i>Dudleya variegata</i> Variegated dudleya none	56% of major populations, 75% of known localities	44% of major populations, 25% of known localities	Site-specific preserve design and special measures/management	Monitoring Plan – Site Specific (5 populations) and Management Plans/Directives	YES

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 56 percent of major populations and 75 percent of known localities will be conserved. This species is on the MSCP's list of narrow endemics and therefore participating jurisdictions must specify in their Subarea Plans additional conservation measures<sup>1</sup> for the species.

**Conditions:** Area specific management directives must include species-specific monitoring and specific measures to protect against detrimental edge effects to this species, including effects caused by recreational activities. Some populations now occur within a major amendment area (Otay Mountain) and at the time permit amendments aer proposed, strategies to provide protection for this species within the amendment area must be included. (Proposed take authorization amendments will have public review through CEWX and NEPA processes and require approval by CDFG and USFWS.)

<i>Dudleya viscida</i> Sticky dudleya	100% of major population	No major populations	Preserve design/landscape level	Monitoring Plan – Habitat Based	YES
none					

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 100 percent of the only major population within the MSCP will be conserved.

Notes: Persistence of this species in San Diego County depends largely on conservation efforts in the MHCP and Camp Pendleton areas.

Conditions: Area specific management directives must address specific measures to protect against detrimental edge effects.

Scientific Name Common Name Status	Conserved <sup>3</sup> (Based on the MSCP Plan)	Potentially Impacted/Developed (Based on the MSCP Plan)	General Basis for Analysis of Coverage	Monitoring Method(s) (Monitoring Plan and/or Management Plans/Directives)	Meets State and Federal Authorization Standards
<i>Ericameria palmeri</i> ssp. <i>palmeri</i> Palmer's ericameria None	66% of major populations	34% of major populations	Site-specific preserve design and special measures/management	Monitoring Plan – Habitat based and Photo Plot and Management Plans/Directives	YES

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 66 percent of major populations will be conserved. This species is on the MSCP's list of narrow endemics and therefore participating jurisdictions must specify in their Subarea Plans additional conservation measures<sup>1</sup> for the species.

**Notes:** Impacts from these projects will be fully mitigated through avoidance, minimization and compensation. Two of the six major populations are subject to potential impacts from proposed road widening projects (Jamacha Blvd., Highways 54/94).

Eryngium aristulatum var. <i>parishii</i> San Diego button-celery FE/CE	82% of major populations, 88% of vernal pool habitat	18% of major populations may be impacted, but vernal pool habitat is subject to no net loss of function and value and 404(b)1 guidelines	Preserve design/landscape level with site-specific consideration(s)/management	Area Specific Management Directives (wetlands)	YES
--	--	---	--	--	-----

		Potentially		Monitoring Method(s)	Meets State
Scientific Name	Conserved <sup>3</sup>	Impacted/Developed		(Monitoring Plan	and Federal
Common Name	(Based on the	(Based on the	General Basis for	and/or Management	Authorization
Status	MSCP Plan)	MSCP Plan)	Analysis of Coverage	Plans/Directives)	Standards

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 82 percent of major populations and 8 percent of vernal pool habitat will be conserved.

**Notes:** Additional important populations are found on military lands (Miramar) which are not part of the MSCP. Four populations (Proctor Valley, Otay River Valley, Del Mar Mesa, Spring Canyon) are likely to be subject to edge effects. This species has been added to the City of San Diego's list of narrow endemic species. Vernal pools which become part of the National Wildlife Refuge would be managed for the recovery of this species.

Conditions: Area specific management directives must include specific measures to protect against detrimental edge effects.

2 ··· · · · · · · · · · · · · · · · · ·	92% of southern foredunes, 67 <sup>^</sup> of	8% of southern foredunes, 33% of southern maritime	Preserve design/landscape level	Monitoring Plan – Habitat Based and	YES
none	southern maritime chaparral	chaparral		Incidental	

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 92 percent of southern foredunes and 67 percent of southern maritime chaparral vegetation communities (that are potential habitat for this species) will be conserved.

Notes: Populations from San Diego County aer now being treated as *Erysimum capitatum*, a common species of wallflower.

Ferocactus viridescens San Diego barrel cactus	81% of major populations	19% of major populations	Preserve design/landscape level	Monitoring Plan – Habitat Based and	YES
none				Photo Plot	

		Potentially		Monitoring Method(s)	Meets State
Scientific Name	Conserved <sup>3</sup>	Impacted/Developed		(Monitoring Plan	and Federal
Common Name	(Based on the	(Based on the	General Basis for	and/or Management	Authorization
Status	MSCP Plan)	<b>MSCP Plan</b> )	Analysis of Coverage	Plans/Directives)	Standards

## DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 81 percent of major populations will be conserved. This is a Group B species in the County's proposed BMO<sup>2</sup>.

**Notes:** This is an abundant species that will be protected at varying levels in several subareas: Carmel Mountain, 64 percent; East Elliot, 75 percent; Marron Valley, 90 percent; Mission Trails Regional Park, 94 percent; Otay Mesa, 70 percent; Otay River Valley, 100 percent; Sweetwater Reservoir, 100 percent; Sycamore Canyon-Fanita Ranch, 50 percent.

**Conditions:** Area specific management directives must include measures to protect this species from edge effects, unauthorized collection, and include appropriate fire management/control practices to protect against a too frequent fire cycle.

Fremontodendron mexicanum Mexican flannel bush	Insufficient distri	Insufficient distribution data and unknown conservation level; therefore, the species is not covered by the plan.				
PE/CR						
<i>Githopsis diffusa</i> ssp. <i>filicaulis</i> Mission Canyon bluecup none	Unknown conserva	tion level and therefore not covere	d by the plan.		NO	
<i>Hemizonia conjugens</i> Otay tarplant PE/CE	66% of major populations	34% of major populations	Site-specific preserve design and special measures/management	Monitoring Plan – Site Specific (5 populations) and Management Plans/Directives	YES	

		Potentially		Monitoring Method(s)	Meets State
Scientific Name	Conserved <sup>3</sup>	Impacted/Developed		(Monitoring Plan	and Federal
Common Name	(Based on the	(Based on the	General Basis for	and/or Management	Authorization
Status	MSCP Plan)	MSCP Plan)	Analysis of Coverage	Plans/Directives)	Standards

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 66 percent of major populations will be conserved. This species is on the MSCP's list of narrow endemics and therefore participating jurisdictions must specify in their Subarea Plans additional conservation measures<sup>1</sup> for the species.

**Conditions:** MSCP coverage of this species requires avoidance of populations in the Otay River Valley through sensitive design and development of the active recreations areas as described in the Otay Ranch RMP and GDP. One of the seven major populations occurs within an amendment area (Proctor Valley). AT the time permit amendments are proposed, strategies to provide protection for this species within the amendment area must be include (proposed take authorization amendments will be subject to public review through CEWA and NEPA processes and take authorization amendments require approval by CDFG and USFWS). Area specific management directives must include specific measures for monitoring of populations and adaptive management of preserves (taking into consideration the extreme population fluctuations from year to year), and specific measures to protect against detrimental edge effects to this species.

Hemizonia floribunda	Unknown conservatio	NO				
Tecate tarplant						
none						
Lepechinia cardiophylla	85% of major	15% of major populations	Preserve design/landscape	Monitoring Plan –	YES	
Heart-leaved pitcher	populations		level	Habitat Based and		
sage				Photo Plot		
none						

		Potentially		Monitoring Method(s)	Meets State
Scientific Name	Conserved <sup>3</sup>	Impacted/Developed		(Monitoring Plan	and Federal
Common Name	(Based on the	(Based on the	General Basis for	and/or Management	Authorization
Status	MSCP Plan)	MSCP Plan)	Analysis of Coverage	Plans/Directives)	Standards

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 85 percent of major populations will be conserved. The Iron Mountain population falls within a 100 percent conservation area. The other three major populations fall within the County's area of undetermined development status and will receive 80-100 percent conservation based on the County's proposed BMO<sup>2</sup> (Group A species).

**Conditions:** Area specific management directives must include: 1) specific measures to protect against detrimental edge effects; 2) specific measures to promote increase of populations; and 3) specific management measures to address the autecology and natural history of the species and to reduce the risk of catastrophic fire ( management measures to accomplish this may include prescribed fire).

<i>Lepechinia ganderi</i> Gander's pitcher sage none	All known locations	No known locations	Preserve design/landscape level with site-specific consideration(s)/management	Monitoring Plan – Habitat Based and Photo Plot and Management	YES
				Plans/Directives	

## DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 100 percent of the known locations will be conserved. This species is on the MSCP's list of narrow endemics and therefore participating jurisdictions must specify in their Subarea Plans additional conservation measures<sup>1</sup> for the species.

**Conditions:** Area specific management directives must include: 1) specific measures to protect against detrimental edge effects and uncontrolled access; 2) measures to promote the increase of populations; and 3) specific management measures to address the autecology and natural history of the species and to reduce the risk of catastrophic fire (management measures to accomplish this may include prescribed fire). One of the five major populations occurs within a major amendment (Otay Mountain). At the time permit amendments are proposed, strategies to provide protection for this species within the amendment area must be included (proposed take authorization amendments are subject to public review through CEWX and NEPA processes and require approval by CDFG and USFWS).

Scientific Name Common Name Status	Conserved <sup>3</sup> (Based on the MSCP Plan)	Potentially Impacted/Developed (Based on the MSCP Plan)	General Basis for Analysis of Coverage	Monitoring Method(s) (Monitoring Plan and/or Management Plans/Directives)	Meets State and Federal Authorization Standards
<i>Lotus nuttallianus</i> Nuttal's lotus none	80-100% of major populations; 92% of southern foredune habitat	0-20% of major populations; 8% of southern foredune habitat	Preserve design/landscape level	Monitoring Plan – Site Specific (1 population)	YES

## DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 80-100 percent of the major populations will be conserved and 92 percent of the habitat (southern foredunes) will be conserved.

Notes: Additional important populations are found on military lands (Imperial Beach, Silver Strand) which are not part of the MSCP. The USFWS is currently working with the Navy to provide protection for this species on Silver Strand.

Conditions: Area specific management directives must include specific measures to protect against detrimental edge effects.

		Potentially		Monitoring Method(s)	Meets State
Scientific Name	Conserved <sup>3</sup>	Impacted/Developed		(Monitoring Plan	and Federal
Common Name	(Based on the	(Based on the	General Basis for	and/or Management	Authorization
Status	MSCP Plan)	MSCP Plan)	Analysis of Coverage	Plans/Directives)	Standards

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 89 percent of major populations will be conserved. The Sequan Peak and Iron Mountain populations are identified as critical populations which will be 100 percent protected (San Diego County Subarea Plan). This species is on the MSCP's list of narrow endemics and therefore participating jurisdictions must specify in their Subarea Plans additional specific conservation measures<sup>1</sup> for this species. This is a Group A species in the County's proposed BMO<sup>2</sup>.

Notes: Persistence of this species in San Diego County depends, in part, on conservation effects outside the MSCP area.

Conditions: Area specific management directives must also include measures to protect against detrimental edge effects and uncontrolled access.

<i>Monardella linoides</i> ssp. <i>viminea</i> Willowy monardella PE/CE	100% of major populations	No major populations	Preserve design/landscape level	Monitoring Plan – Site Specific (2 populations) and Management Plans/Directives	YES
PE/CE				Plans/Directives	

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 100 percent of major populations will be conserved. Additional important populations are found on military lands (Miramar) which are not included as part of the MSCP. This species occurs in drainages and would receive protected based on Fish and Game Code 1600 agreements and federal wetlands permitting. This is a Group A species in the County's proposed BMO<sup>2</sup>.

Conditions: Area specific management directives must include specific measures to protect against detrimental edge effects.

Muilla clevelandii	73% of major	27% of major populations	Preserve design/landscape	Monitoring Plan – Site	YES
San Diego goldenstar	populations and 38%		level with site-specific	Specific (4 populations)	
none	of grasslands		consideration(s)/management		

Scientific Name Common Name Status	Conserved <sup>3</sup> (Based on the MSCP Plan)	Potentially Impacted/Developed (Based on the MSCP Plan)	General Basis for Analysis of Coverage	Monitoring Method(s) (Monitoring Plan and/or Management Plans/Directives)	Meets State and Federal Authorization Standards		
DETAILS OF RATIONA	LE FOR IDENTIFYING	G SPECIES AS COVERED					
This species will be covered by the MSCP because 8 of 11 major populations, 125 of 144 occurrences, and 38 percent of the grassland vegetation community will be conserved. The City of San Diego will avoid populations within its 25 percent encroachment area. The 4S Ranch population will be transplanted into an appropriate preserve area. This is a Group A species in the County's proposed BMO <sup>2</sup> .							
<b>Conditions:</b> Area specifiedge effects to this specie		s must include monitoring of the	e transplanted population(s), and	specific measures to protect ag	ainst detrimental		
<i>Myosurus minimus</i> ssp. <i>apus</i> Little mousetail none	The MSCP preserve d	oes not include adequate habitat	t to conserve the species.		NO		
<i>Navarretia fossalis</i> Prostrate navarretia PT/	63% of only major population, 88% of vernal pool habitat	37% of only major population, 12% of vernal pool habitat may be impacted, but this habitat is subject to no net loss of function and value and 404(b)1 guidelines	Site-specific preserve design and special measures/management	Area Specific Management Directives (wetlands)	YES		

Scientific Name	Conserved <sup>3</sup>	Potentially Impacted/Developed		Monitoring Method(s) (Monitoring Plan	Meets State and Federal
Common Name	(Based on the	(Based on the	General Basis for	and/or Management	Authorization
Status	MSCP Plan)	MSCP Plan)	Analysis of Coverage	Plans/Directives)	Standards

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 63 percent of the one major population and 88 percent of vernal pool habitat will be conserved. Federal wetland regulations will provide additional protection for vernal pool habitats. This is a Group A species in the County's proposed BMO<sup>2</sup>.

**Notes:** State and federal transportation agencies will need to avoid or adequately mitigate the impacts to this species from the extension of State Route125. An additional small population is found on military lands (Miramar) and is not included as part of the MSCP. Vernal pools incorporated into the National Wildlife Refuge System would be managed for the recovery of this species.

**Conditions:** Area specific management directives must include specific measures to protect against detrimental edge effects to this species, and must incorporate measures to conserve and maintain surrounding habitat for 1) pollinators and 2) as part of the hydrological system for the vernal pools.

Nolina interrata	90-100% of major	<10% of major populations	Preserve design/landscape	Monitoring Plan –	YES
Dehesa bear-grass	populations		level	Habitat Based and	
PT/CE				Photo Plot and	
				Management	
				Plans/Directives	

		Potentially		Monitoring Method(s)	Meets State
Scientific Name	Conserved <sup>3</sup>	Impacted/Developed		(Monitoring Plan	and Federal
Common Name	(Based on the	(Based on the	General Basis for	and/or Management	Authorization
Status	MSCP Plan)	<b>MSCP Plan</b> )	Analysis of Coverage	Plans/Directives)	Standards

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because: 100 percent of the McGinty Mountain population will be conserved; half of the Sequan Peak population is under protected ownership and 80-100 percent of the other half will be conserved; and 80-100 percent of the Dehesa Peak population will be conserved under the County's proposed BMO (Group A species)<sup>2</sup>. This species is on the MSCP's list of narrow endemics and therefore participating jurisdictions must specify in their Subarea Plans additional specific conservation measures<sup>1</sup> for this species.

Notes: Acquisition of the remaining portions of the population on Sequan Peak is important and efforts are underway by CDFG.

**Conditions:** Area specific management directives must include specific measures to protect against detrimental edge effects and management measures to maintain surrounding habitats for pollinators.

<i>Opuntia parryi</i> var.	75% of major	25% of major populations	Preserve design/landscape	Area Specific	YES
serpentina	populations and 67%	and 33% of southern	level with site-specific	Management Directives	
Snake cholla	of southern maritime	maritime chaparral	consideration(s)/management		
none	chaparral				

		Potentially		Monitoring Method(s)	Meets State
Scientific Name	Conserved <sup>3</sup>	Impacted/Developed		(Monitoring Plan	and Federal
Common Name	(Based on the	(Based on the	General Basis for	and/or Management	Authorization
Status	MSCP Plan)	MSCP Plan)	Analysis of Coverage	Plans/Directives)	Standards

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 75 percent of major populations and 67 percent of the southern maritime chaparral vegetation community will be conserved. This species is on the MSCP's list of narrow endemics and therefore participating jurisdictions must specify in their Subarea Plans additional specific conservation measures<sup>1</sup> for this species.

Notes: Additional important populations are found on military lands (Pt. Loma) which are not part of the MSCP.

**Conditions:** Area specific management directives must include specific measures to protect against detrimental edge effects to this species, and promote translocation opportunity where appropriate. The Otay Ranch project GDP and RMP require protection of 80 percent of existing occurrences, and transplantation of any impacted occurrences to restored areas of comparable size.

California Orcutt grass po	ernal pool habitat		Preserve design/landscape level with site-specific consideration(s)/management	Area Specific Management Directives (wetlands)	YES
----------------------------	--------------------	--	--	--	-----

		Potentially		Monitoring Method(s)	Meets State
Scientific Name	Conserved <sup>3</sup>	Impacted/Developed		(Monitoring Plan	and Federal
Common Name	(Based on the	(Based on the	General Basis for	and/or Management	Authorization
Status	MSCP Plan)	<b>MSCP Plan</b> )	Analysis of Coverage	<b>Plans/Directives</b> )	Standards

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 86 percent of the one major population will be conserved. This species is on the MSCP's list of narrow endemics and therefore participating jurisdictions must specify in their Subarea Plans additional specific conservation measures<sup>1</sup> for this species.

**Notes:** A population outside of the MHPA (J-13N pool complex) is conserved with dedicated open space as mitigation for the Ramona K-mart. The USFWS will work with the border patrol to minimize impacts to this species. An additional small population is found on military lands (Miramar) and is not part of the MSCP.

**Conditions:** Area specific management directives must include specific measures to protect against detrimental edge effects to this species and measures to maintain surrounding habitats for pollinators.

Pinus torreyana100% of nativeNo major populationsTorrey pinepopulationnone	Preserve design/landscape level	Monitoring Plan – Habitat Based	YES
--	------------------------------------	------------------------------------	-----

DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because the single naturally occurring population at Torrey Pines State Reserve will be conserved and appropriately managed.

<i>Pogogyne abramsii</i> San Diego mesa mint FE/CE	88% of vernal pool habitat	12% of vernal pool habitat may be impacted, but this habitat is subject to no net loss of function and value and 404(b)1 guidelines	Preserve design/landscape level with site-specific consideration(s)/management	Area Specific Management Directives	YES
--	-------------------------------	---	--	--	-----

		Potentially		Monitoring Method(s)	Meets State
Scientific Name	Conserved <sup>3</sup>	Impacted/Developed		(Monitoring Plan	and Federal
Common Name	(Based on the	(Based on the	General Basis for	and/or Management	Authorization
Status	MSCP Plan)	MSCP Plan)	Analysis of Coverage	Plans/Directives)	Standards

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 88 percent of its potential habitat (vernal pool habitat) will be conserved. Federal wetland regulations will provide additional protection for vernal pool habitats.

**Notes:** The three major populations in the county occur on military lands (Miramar) which are not part of the MSCP. The City of San Diego has added this species to its narrow endemics list. The population at Montgomery Field was mistakenly omitted from the original mapping and now has been included. This population will be conserved and managed by the City of San Diego. Vernal pools included in the National Wildlife Refuge would be managed for recovery of this species.

**Conditions:** Preserve management plan must include measures to: 1) protect against detrimental effects; 2) maintain surrounding habitat for pollinators; and 3) maintain pool watershed areas.

<i>Pogogyne nudiuscula</i> Otay Mesa mint FE/CE	91% of the major population, 88% of vernal pool habitat	0% of the major population may be impacted, and this habitat is subject to no net loss of function and value and 404(b)1 guidelines	Preserve design/landscape level with site-specific consideration(s)/management	Area Specific Management Directives	YES
---	---	---	--	--	-----

		Potentially		Monitoring Method(s)	Meets State
Scientific Name	Conserved <sup>3</sup>	Impacted/Developed		(Monitoring Plan	and Federal
Common Name	(Based on the	(Based on the	General Basis for	and/or Management	Authorization
Status	MSCP Plan)	MSCP Plan)	Analysis of Coverage	Plans/Directives)	Standards

### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 91 percent of the one major population will be conserved, and federal wetland regulations will provide additional protection for vernal pool habitats.

**Notes:** Twenty-six percent of the stockpan soils will be conserved, which will provide for enhancement opportunities for this species. The City of San Diego has added this species to their narrow endemics list. Vernal pools included in the National Wildlife Refuge would be managed for recovery of this species. The RMP for the Otay Ranch project includes protection for vernal pools with sensitive species.

**Conditions:** Preserve management plan must include measures to: protect against detrimental edge effects; maintain surrounding habitat for pollinators; and maintain pool watershed areas.

<i>Rosa minutifolia</i>	Only known MSCP	Site-specific preserve design	Area Specific	YES
Small-leaved rose	occurrence	and special	Management Directives	
/CE	transplanted into	measures/management	(1 population)	
	preserve, propagation and restoration in appropriate habitat			

		Potentially		Monitoring Method(s)	Meets State
Scientific Name	Conserved <sup>3</sup>	Impacted/Developed		(Monitoring Plan	and Federal
Common Name	(Based on the	(Based on the	General Basis for	and/or Management	Authorization
Status	MSCP Plan)	MSCP Plan)	Analysis of Coverage	Plans/Directives)	Standards

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERD

There is only one known occurrence of this species in the MSCP on Otay Mesa near Dennery Canyon. The occurrence may be a single clone, and some evidence suggests it may be a cultivar. This species will be covered by the MSCP because the only known occurrence will be conserved through the California Terraces project.

The following conditions for small-leaved rose conservation are required in the CDFG 2081 as part of the California Terraces project:

- 1. The rose population shall be salvaged, propagated, and transplanted to a new location that will support a healthy, reproducing population in perpetuity. This goal shall be achieved through a five year program that includes site improvement, propagation, transplantation, and monitoring. (a) The rose population shall be transplanted to a suitable open space preserve location on the Otay Mesa or to an alternative location subject to Department approval. Criteria in site selection shall include similar habitat, slope, aspect, soils, and hydrology as present on the existing rose site. (b) Propagation and transplanting of the rose population shall be implemented by a qualified native plant nursery/habitat restoration contractor (hereinafter Restoration Contractor), acceptable to the department, and under supervision of a qualified botanist. The rose propagation shall take place over a two year period. Rose plants to be extirpated shall be salvaged through: (i) seed collection; (ii) preparation of cuttings from rose canes; and (iii) salvage of underground parts and transplantation. (d) Transplantation of the rose clone shall commence during the period of October-December 1997. The remaining rose clone shall be cut into a minimum of 200 clumps. Each clump possessing roots and de-caned stems shall be planted on the HM lands as prescribed by a qualified botanist.
- 2. No removal of the rose population for a two (2) year period commencing from the date of planting propagated rose plants at the approved locations.
- 3. The progress of the rose mitigation effort shall be assessed through measurements and observations for a period of at least five (5) years following implementation of rose transplantation commencing in December 1997 and ending in July 2002. Factors to be monitored shall include growth, survival and/or establishment rate of the species, presence of introduced weeds, erosion, effects of herbivores, and any other factors important to the success of the mitigation effort. Community structure and species diversity at the mitigation site shall also be assessed. (a) Transplant success criteria over a five (5) year period shall include: (i) measurable annual growth on a minimum of 50 percent of the rose plants; and (ii) flowering of 50 percent of the rose plants during a minimum of one flowering season. In the event that success criteria are not met, the project applicant shall implement remedial measures subject to department approval.

Scientific Name Common Name Status	Conserved <sup>3</sup> (Based on the MSCP Plan)	Potentially Impacted/Developed (Based on the MSCP Plan)	General Basis for Analysis of Coverage	Monitoring Method(s) (Monitoring Plan and/or Management Plans/Directives)	Meets State and Federal Authorization Standards
Santureja chandleri San Miguel savory	80-100% of future identified	0-20%	Preserve design/landscape level with site-specific	Monitoring Plan – Habitat Based and	YES
none	occurrences		consideration(s)/management	Photo Plot	

### DETAILS OF RATIONALE FOR IDENTIFY SPECIES AS COVERED

This species will be covered by the MSCP because it will be conserved at the 80+ percent level. The County will add this species to Group A or B of the County's proposed BMO<sup>2</sup>.

**Conditions:** Area specific management directives must include specific management measures to address the autecology and natural history of the species and to reduce the risk of catastrophic fire. Management measures to accomplish this may include prescribed fire. This species will be conserved at the 80+ percent level.

Senecio ganderi	90-100% of major	<10% of major populations	Preserve design/landscape	Monitoring Plan –	YES
Gander's butterweed	populations		level with site-specific	Habitat Based and	
*/CR			consideration(s)/management	Photo Plot	

		Potentially		Monitoring Method(s)	Meets State
Scientific Name	Conserved <sup>3</sup>	Impacted/Developed		(Monitoring Plan	and Federal
Common Name	(Based on the	(Based on the	General Basis for	and/or Management	Authorization
Status	MSCP Plan)	MSCP Plan)	Analysis of Coverage	Plans/Directives)	Standards

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 90-100 percent of known major populations would be conserved. Half of the Sequan Peak population is under protected ownership and 80-100 percent of the other half will be conserved, and 90-100 percent of the McGinty Mountain populations will be conserved. The El Cajon Mountain (between El Capitan and San Vicente Reservoir) population is identified as critical which requires 100 percent protection based on the San Diego County Subarea Plan. Occurrences in the County's areas of undetermined development status will receive 80-100 percent protection under the County's proposed BMO<sup>2</sup> (Group A species).

**Notes:** This species is often associated with gabbro soils which will be conserved at the 43+ percent level. Acquisition of the remaining portions of the population on Sequan Peak is important and efforts are underway by CDFG.

**Conditions:** Area specific management directives must include: 1) specific measures to protect against detrimental edge effects to this species; and 2) measures to address the autecology and natural history of the species.

DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 90 percent of major populations will be conserved. Two smaller populations, Silverwood and Fernbrook, are identified as critical and will be 100 percent protected in the San Diego County Subarea Plan.

Notes: This species is now taxonomically included in Solanum xanti.

Scientific Name Common Name Status	Conserved <sup>3</sup> (Based on the MSCP Plan)	Potentially Impacted/Developed (Based on the MSCP Plan)	General Basis for Analysis of Coverage	Monitoring Method(s) (Monitoring Plan and/or Management Plans/Directives)	Meets State and Federal Authorization Standards
<i>Tetracoccus dioicus</i> Parry's tetracoccus none	80-100% of major populations	0-20% of major populations	Preserve design/landscape level	Monitoring Plan – Habitat Based and Photo Plot	YES

## DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 80-100 percent of major populations will be conserved.

**Notes:** Fourteen of 33 (43 percent) small populations are already under protected ownership. The Dehesa population is identified as critical and will be 100 percent protected in the San Diego County Subarea Plan. Occurrences in the County's areas of undetermined development status will receive 80-100 percent protection under the County's proposed BMO<sup>2</sup> (Group A species). Acquisition of the remaining portions of the population on Sequan Peak is important and efforts are underway by CDFG. This species is often associated with gabbro soils and 43+ percent of the gabbro soils are within the MHPA.

Conditions: Area specific management directives must include specific measures to protect against detrimental edge effects to this species.

## ANIMALS

#### Invertebrates

<i>Euphydryas editha quino</i> Quino checkerspot butterfly PE/	Unknown conservation level and lack of assurances that plan will protect preferred habitat (mesa tops/grassland) and connection to known sources populations. Therefore, not covered by the plan.	NO
Euphyes vestries	Unknown conservation level and therefore not covered by the plan based on insufficient distribution and life	NO
harbisoni	history data.	
Harbison's dun skipper		
none		

Scientific Name Common Name Status	Conserved <sup>3</sup> (Based on the MSCP Plan)	Potentially Impacted/Developed (Based on the MSCP Plan)	General Basis for Analysis of Coverage	Monitoring Method(s) (Monitoring Plan and/or Management Plans/Directives)	Meets State and Federal Authorization Standards
<i>Lycaena thornei</i> Hermes copper butterfly none	Unknown conservation history data.	n level and therefore not covered	l by the plan based on insufficien	t distribution and life	NO
<i>Mitoura thronei</i> Thorne's hairstreak butterfly none	98% of Tecate cypress forest (larval host plant)	2% of Tecate cypress forest	Preserve design/landscape level with site-specific consideration(s)/management	Monitoring Plan – Habitat Based	YES

## DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 98 percent of the major populations of its larval host plant, Tecate cypress, will be conserved. Most of the Tecate cypress forest occurs on BLM lands.

**Conditions:** Area specific management directives must manage for the host species (Tecate cypress). Management measures to accomplish this may include prescribed fire.

Panoquina errans Salt marsh skipper none	93% of salt marsh habitat (1,700 <u>+</u> acres)	7% of salt marsh habitat $(120\pm acres)$ may be impacted, but is subject to no net loss of function and value and 404(b)1 guidelines	Preserve design/landscape level	Monitoring Plan – Habitat Based	YES
		guidennes			

		Potentially		Monitoring Method(s)	Meets State
Scientific Name	Conserved <sup>3</sup>	Impacted/Developed		(Monitoring Plan	and Federal
Common Name	(Based on the	(Based on the	General Basis for	and/or Management	Authorization
Status	MSCP Plan)	<b>MSCP Plan</b> )	Analysis of Coverage	Plans/Directives)	Standards

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 93 percent of its potential habitat will be conserved.

**Conditions:** Area specific management directives must include measures to: control exotic weeds and invertebrate predators (where appropriate), and control access to saltmarsh habitat.

<i>Branchinecta</i> <i>sandiegoensis</i> San Diego fairy shrimp PE/	88% of vernal pool habitat	12% of vernal pool habitat may be impacted, but this habitat is subject to no net loss of function and value and 404(b)1 guidalings	Preserve design/landscape level	Area Specific Management Directives	YES
		and 404(b)1 guidelines			

## DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 88 percent of its potential habitat (vernal pool habitat) will be conserved. Federal and local wetland regulations will provide additional protection for vernal pool habitats. The Otay Ranch project RMP and GDP require protection for vernal pools with sensitive species.

Notes: Additional important habitat for this species occurs on military lands (Miramar) and is not part of the MSCP.

Conditions: Area specific management directives must include specific measures to protect against detrimental edge effects to this species.

Scientific Name Common Name Status	Conserved <sup>3</sup> (Based on the MSCP Plan)	Potentially Impacted/Developed (Based on the MSCP Plan)	General Basis for Analysis of Coverage	Monitoring Method(s) (Monitoring Plan and/or Management Plans/Directives)	Meets State and Federal Authorization Standards
Streptocephalus woottonii Riverside fairy shrimp FE/	88% of vernal pool habitat	12% of vernal pool habitat may be impacted, but this habitat is subject to no net loss of function and value and 404(b)1 guidelines	Preserve design/landscape level	Area Specific Management Directives	YES

## DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 88 percent of its potential habitat (vernal pool habitat) will be conserved. Federal and local wetland regulations will provide additional protection for vernal pool habitats. The Otay Ranch project RMP and GDP require protection for vernal pools with sensitive species.

Notes: Additional important habitat for this species occurs on military lands (Miramar) and is not part of the MSCP.

Conditions: Area specific management directives must include specific measures to protect against detrimental edge effects to this species.

**Reptiles and Amphibians**
Scientific Name Common Name Status	Conserved <sup>3</sup> (Based on the MSCP Plan)	Potentially Impacted/Developed (Based on the MSCP Plan)	General Basis for Analysis of Coverage	Monitoring Method(s) (Monitoring Plan and/or Management Plans/Directives)	Meets State and Federal Authorization Standards
Bufo microscaphus californicus Arroyo southwestern toad FE/SSC	All known locations (Cottonwood Creek in Marron Valley, San Vicente Creek and Santa Ysabel Creek in San Pasqual Valley, Sweetwater River, and Otay River), 78% riparian wetland areas in suitable habitat	Upland habitats adjacent to riparian wetlands (potential habitat) in undetermined status areas in Sloan Canyon – wetlands are subject to no net loss of function and value and 404(b)1 guidelines	Preserve design/landscape level with site-specific consideration(s)/management	Monitoring Plan – Site Specific (7 locations) and Management Plans/Directives	YES

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because the MHPA preserves all known locations, and 90-95 percent of the upland habitats within the Marron Valley area will be conserved. Impacts to upland habitats within 1 km of riparian corridors within the MHPA will be minimized during project review by CDFG and USFWS. Take authorization holders must minimize impacts to upland habitats which provide habitat for this species which are: within the MHPA and are within 1 km of riparian habitat which supports or is likely to support Arroyo toad. Participating jurisdictions' guidelines and ordinances, and state and federal wetland regulations will provide additional habitat protection resulting no net loss of wetlands.

Notes: Important habitat areas include the San Diego River below El Capitan Reservoir, San Vicente Creek between Sweetwater Reservoir and Loveland Reservoir, Dulzura Creek, San Pasqual Valley from Lake Hodges to Boden Canyon, Otay River, Jamul Creek, Cedar Creek and Sycamore Creek.

**Conditions:** Area specific management directives must address the maintenance of Arroyo toad through control of non-native predators, protection and maintenance of sufficient suitable low gradient sandy stream habitat (including appropriate water quality) to meet breeding requirements, and preservation of sheltering and foraging habitat within 1 km of occupied breeding habitat within preserved lands. Area specific management directives must include measures to control human impacts to the species within the preserve (e.g., public education, patrol, etc.).

Scientific Name Common Name Status	Conserved <sup>3</sup> (Based on the MSCP Plan)	Potentially Impacted/Developed (Based on the MSCP Plan)	General Basis for Analysis of Coverage	Monitoring Method(s) (Monitoring Plan and/or Management Plans/Directives)	Meets State and Federal Authorization Standards
<i>Rana aurora draytoni</i> California red0-legged frog FT/SSC	72% of riparian habitats and fresh water marsh (9,500 <u>+</u> acres	28% of riparian habitats and fresh water marsh (3,800± acres) - ) wetlands are subject to no net loss of function and value and 404(b)1 guidelines	Preserve design/landscape level	Monitoring Plan – Habitat Based	YES

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species is believed to be extirpated from the County. Although unlikely, additional survey effort may detect red-legged frog. Therefore, this species will be covered by the MSCP because 70 percent of its potential habitat will be conserved. Participating jurisdictions' guidelines and ordinances, and state and federal wetland regulations will provide additional habitat protection resulting in no net loss of wetlands.

Conditions: Area specific management directives must provide for management of any new discovered populations within the preserve.

<i>Clemmys marmorata</i> <i>pallida</i> Southwestern pond turtle /SSC	72% of riparian habitats and fresh water marsh (9,501 acres)	28% of riparian habitats and fresh water marsh $(3,800\pm acres) -$ wetlands are subject to no net loss of function and value and	Preserve design/landscape level with site-specific consideration(s)/management	Monitoring Plan – Habitat Based and Management Plans/Directives	YES
		404(b)1 guidelines			

		Potentially		Monitoring Method(s)	Meets State
Scientific Name	Conserved <sup>3</sup>	Impacted/Developed		(Monitoring Plan	and Federal
Common Name	(Based on the	(Based on the	General Basis for	and/or Management	Authorization
Status	MSCP Plan)	MSCP Plan)	Analysis of Coverage	Plans/Directives)	Standards

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 72 percent of its potential habitat will be conserved. Participating jurisdictions' guidelines and ordinances, and state and federal wetland regulations will provide additional habitat protection resulting in no net loss of wetlands.

**Conditions:** Maintain and manage a 1500 foot area around known locations within preserve lands for the species. Within this impact avoidance area, human impacts will be minimized, non-native species detrimental to pond turtles controlled/removed and habitat restoration/enhancement measures implemented.

Cnemidophorus hyperythrus beldingi Orange-throated	59% of potential habitat (129,600 <u>+</u> acres) – 38% of	41% of potential habitat (89,800 <u>+</u> acres) – 38% of known point occurrences	Preserve design/landscape level	Monitoring Plan – Site Specific (pit traps at 12 locations)	YES
whiptail /SSC	known point occurrences	kilown point occurrences			

		Potentially		Monitoring Method(s)	Meets State
Scientific Name	Conserved <sup>3</sup>	Impacted/Developed		(Monitoring Plan	and Federal
Common Name	(Based on the	(Based on the	General Basis for	and/or Management	Authorization
Status	MSCP Plan)	<b>MSCP Plan</b> )	Analysis of Coverage	Plans/Directives)	Standards

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 59 percent of its potential habitat and 62 percent of known point occurrences will be conserved. Habitat linkages between large blocks of protected lands are conserved in a functional manner. Monitoring of populations and adaptive management of preserves will occur as a result of plan implementation.

Notes: This species also occurs extensively on military lands.

Conditions: Area specific management directives must address edge effects.

Phrynosoma coronatum blainvillei San Diego horned lizard /SSC	60% of potential habitat $(132,000\pm)$ acres) – 64% of coastal sage scrub, 54% of chaparral, 44% of coastal sage/chapparal, 80% of riparian scrub – 63% of known point occurrences	40% of potential habitat (89,700 <u>+</u> acres) – 37% of known point occurrences	Preserve design/landscape level	Monitoring Plan – Site Specific (pit traps at 12 locations)	YES
--	--	---	------------------------------------	---	-----

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 60 percent of its potential habitat and 63 percent of known point occurrences will be conserved. Habitat linkages between large blocks of protected lands are conserved in a functional manner. Monitoring of populations and adaptive management of preserves will occur as a result of plan implementation.

**Conditions:** Area specific management directives must include specific measures to maintain native ant species, discourage the Argentine ant, and protect against detrimental edge effects to this species.

Scientific Name Common Name Status	Conserved <sup>3</sup> (Based on the MSCP Plan)	Potentially Impacted/Developed (Based on the MSCP Plan)	General Basis for Analysis of Coverage	Monitoring Method(s) (Monitoring Plan and/or Management Plans/Directives)	Meets State and Federal Authorization Standards
Birds Pelecanus occidentalis californicus California brown pelican FE/CE	91% of roosting and foraging habitat (2,800± acres) – 93% of southern coastal saltmarsh, 88% of natural flood channel, 90-95% of beach outside of intensively used recreational beaches	9% of roosting and foraging habitat $(270\pm acres) -$ wetlands are subject to no net loss of function and value and 404(b)1 guidelines	Preserve design/landscape level	Monitoring Plan – Habitat Based	YES

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 91 percent of roosting and foraging habitat within the plan area will be conserved. No new development of beaches is authorized which will result in 90-95 percent protection of beach habitat that is outside of intensively used beach areas.

**Notes:** Most of the important roosting and foraging habitat occurs on military lands and waters under Port Authority jurisdiction which are not included as part of the MSCP. Participating jurisdictions' guidelines and ordinances, and state and federal wetland regulations will provide additional habitat protection resulting in no net loss of wetlands. This species is a common to very common non-breeding visitor which uses mud flats, piers, jetties, etc., to roost and forages primarily in coastal ocean waters and San Diego.

Scientific Name Common Name Status	Conserved <sup>3</sup> (Based on the MSCP Plan)	Potentially Impacted/Developed (Based on the MSCP Plan)	General Basis for Analysis of Coverage	Monitoring Method(s) (Monitoring Plan and/or Management Plans/Directives)	Meets State and Federal Authorization Standards
<i>Egretta rufescens</i> Reddish egret none	92% of potential habitat (2,700 <u>+</u> acres) – 93% of southern coastal saltmarsh, 99% of salt pan, 88% of natural flood channel	8% of potential habitat $(230\pm acres) -$ wetlands are subject to no net loss of function and value and 404(b)1 guidelines	Preserve design/landscape level	Monitoring Plan – Habitat Based	YES

DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 90 percent of its potential habitat will be conserved.

**Notes:** Additional important habitat occurs in waters under Port Authority and military jurisdiction which are not included as part of the MSCP. Participating jurisdictions' guidelines and ordinances, and state and federal wetland regulations will provide additional habitat protection resulting in no net loss of wetlands. This species forages is shallow lagoons, mud flats, tidal channels and salt marsh. This species is a rare visitor in fall and winter and a casual visitor in spring and summer, but does not nest in San Diego County.

Plegadis chihi       78% of potential         white-faced ibis       habitat (1,200± acres)         */SSC       - 68% of freshwater         marsh, 88% of       natural flood channel,         additionally 1,800±       acres of potentially         habitat agricultural       land will be         conserved       conserved	26% of potential habitat (300 <u>+</u> acres) – wetlands are subject to no net loss of function and value and 404(b)1 guidelines	Preserve design/landscape level	Monitoring Plan – Habitat Based	YES
---	--	------------------------------------	------------------------------------	-----

		Potentially		Monitoring Method(s)	Meets State
Scientific Name	Conserved <sup>3</sup>	Impacted/Developed		(Monitoring Plan	and Federal
Common Name	(Based on the	(Based on the	General Basis for	and/or Management	Authorization
Status	MSCP Plan)	MSCP Plan)	Analysis of Coverage	Plans/Directives)	Standards

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 78 percent of its potential habitat will be conserved. Participating jurisdictions' guidelines and ordinances, and state and federal wetland regulations will provide additional habitat protection resulting in no net loss of wetlands. The preserve management plan for the City of San Diego cornerstone lands must include protection and management of potential nesting habitat at Lake Hodges.

Conditions: Area specific management directives must include specific measures to protect against detrimental edge effects to this species.

Branta canadensis8,200± acres of potencial habitat none	1,100 <u>+</u> acres of potential habitat – wetlands are subject to no net loss of function and value and 404(b)1 guidelines	Preserve design/landscape level	Monitoring Plan – Habitat Based	YES
---	--	------------------------------------	------------------------------------	-----

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

Although not considered sensitive, this species has aesthetic and intrinsic values, and is a regulated game species thereby being an important species to protect. This species will be covered by the MSCP because  $8,200\pm$  acres of its potential habitat will be conserved, including open water areas for loafing. Participating jurisdiction's guidelines and ordinances, and state and federal wetland regulations will provide additional habitat protection resulting in no net loss of wetlands.

Scientific Name Common Name Status	Conserved <sup>3</sup> (Based on the MSCP Plan)	Potentially Impacted/Developed (Based on the MSCP Plan)	General Basis for Analysis of Coverage	Monitoring Method(s) (Monitoring Plan and/or Management Plans/Directives)	Meets State and Federal Authorization Standards
Haliaeetus leucocephalus Bald eagle FT/CE	89% of potential foraging habitat (wetlands) $(5,719\pm$ acres), 68% of freshwater marsh, 92% of open water. In addition, foraging opportunities (carrion, etc.) on 100,000+ acres will be conserved.	11% of potential foraging habitat (wetlands) (692 <u>+</u> acres) – wetlands are subject to no net loss of function and value and 404(b)1 guidelines	Preserve design/landscape level	Monitoring Plan – Habitat Based	YES

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 89 percent of its potential foraging habitat (open water and freshwater marsh) will be conserved. Bald eagles are a rare winter visitor which require perching and roosting sites adjacent to open water and marshes. Participating jurisdictions' guidelines and ordinances, and state and federal wetland regulations will provide additional habitat protection resulting in no net loss of wetlands.

Circus cyaneus42% of potentialNorthern harriernesting habitat/SSC $(12,000\pm acres) -$ 93% of saltmarsh,68% of freshwatermarsh and 38% ofgrasslands, - 85,000±acres of potentialforaging habitat	48% of potential nesting habitat (16,300 <u>+</u> acres) – wetlands are subject to no net loss of function and value and 404(b)1 guidelines	Preserve design/landscape level with site-specific consideration(s)/management	Monitoring Plan – Habitat Based and Management Plans/Directives (nest sites)	YES
---	--	--	--	-----

		Potentially		Monitoring Method(s)	Meets State
Scientific Name	Conserved <sup>3</sup>	Impacted/Developed		(Monitoring Plan	and Federal
Common Name	(Based on the	(Based on the	General Basis for	and/or Management	Authorization
Status	MSCP Plan)	MSCP Plan)	Analysis of Coverage	Plans/Directives)	Standards

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species is an uncommon migrant and winter visitor, and rare summer resident/breeder. This species will be covered by the MSCP because 42 percent of its potential nesting habitat, and  $85,000\pm$  acres of its potential foraging habitat will be conserved. The plan will not adversely affect the <u>species</u>' long-term survival.

**Notes:** Harriers tolerate patchiness in their habitat, exhibit nest area fidelity, and forage within four miles of their nests. Additional conservation of grassland habitats should be a priority and one of the primary factors in the design of preserves in the major amendment areas. Participating jurisdiction's guidelines and ordinances, and state and federal wetland regulations will provide additional habitat protection resulting in no net loss of wetlands. Active nesting areas include:

Tijuana River Valley – The City of San Diego Subarea Plan includes conservation of two known nesting sites in the Tijuana River Valley, and maintenance of some agricultural lands (available for foraging harriers) within the Tijuana River Valley Regional Park. The Tijuana National Estuarine Sanctuary will continue to enhance marshlands and manage for nesting harriers. Some existing grasslands and agricultural lands at the outer limits of the foraging distance for nesting harriers will be developed. With the addition of over 4,000 acres of agricultural and disturbed lands to the City of San Diego's preserve (in comparison with the March 1995 preserve design), adequate foraging areas within this area are conserved. Food production for harriers on preserve lands can be enhanced.

South San Diego Bay/Sweetwater Marsh – The City of San Diego Subarea Plan includes conservation of one known nesting site in the Sweetwater Marsh area. All nesting and foraging habitat within four miles of the known nesting site will be preserved. Upland habitat enhancement exist at the D Street fill area.

Proctor Valley – Proctor Valley includes an historical nesting location (1970s). Over 80 percent of the Proctor Valley area will be conserved with most of the development occurring in the upper portion of the valley, away from the more likely nesting areas.

**Conditions:** Area specific management directives must: manage agricultural and disturbed lands (which become part of the preserve) within four miles of nesting habitat to provide foraging habitat; include an impact avoidance area (900 foot or maximum possible within the preserve) around active nests; and include measures of maintaining winter foraging habitat in preserve areas in Proctor Valley, around Sweetwater Reservoir, San Miguel Ranch, Otay Ranch east of Wueste Road, Lake Hodges, and San Pasqual Valley. The preserve management coordination group shall coordinate efforts to manage for wintering northern harriers' foraging habitat within the MSCP preserves.

Scientific Name Common Name Status	Conserved <sup>3</sup> (Based on the MSCP Plan)	Potentially Impacted/Developed (Based on the MSCP Plan)	General Basis for Analysis of Coverage	Monitoring Method(s) (Monitoring Plan and/or Management Plans/Directives)	Meets State and Federal Authorization Standards
<i>Accipiter cooperii</i> Cooper's hawk /SSC	59% of potential foraging habitat $(133,400\pm acres)$ (47% of oak woodland, 58% of oak riparian, 64% of coastal sage scrub, 54% of chapparal, 44% of coastal sage scrub/chaparral – 57% of known localities) and 52% $(5,705\pm acres)$ of potential nesting habitat (58% of oak riparian and 47% of oak woodland)	41% of potential foraging (93,900± acres) and 48% of potential nesting habitat (5,200± acres)	Preserve design/landscape level with the site-specific consideration(s)/management	Monitoring Plan – Habitat Based and Management Plans/Directives (site specific nest territories)	YES

DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 59 percent of potential foraging and 52 percent of potential nesting habitat and 92 percent of known occurrences will be conserved.

**Conditions:** In the design of future projects within the Metro-Lakeside-Jamul segment, design of preserve areas shall conserve patches of oak woodland and oak riparian forest of adequate size for nesting and foraging habitat. Area specific management directives must include 300-foot impact avoidance areas around the active nests, and minimization of disturbance in oak woodlands and oak riparian forests.

Scientific Name Common Name Status	Conserved <sup>3</sup> (Based on the MSCP Plan)	Potentially Impacted/Developed (Based on the MSCP Plan)	General Basis for Analysis of Coverage	Monitoring Method(s) (Monitoring Plan and/or Management Plans/Directives)	Meets State and Federal Authorization Standards
<i>Buteo swainsoni</i> Swainson's hawk /CT	22% of foraging habitat (11,600 <u>+</u> acres) – 38% of grassland, 6% of agricultural fields	78% of foraging habitat (42,000 <u>+</u> acres)	Preserve design/landscape level	Monitoring Plan – Habitat Based (10 grassland locations)	YES

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species is an extremely rare visitor during migration which forages in grasslands and agricultural fields. This species will be covered by the MSCP because more than 11,000 acres of potential foraging habitat will be conserved.

**Notes:** The plan will not adversely affect the <u>species</u>' long-term survival. Additional conservation of grassland habitats should be a priority and one of the primary factors in the design of preserves in the major amendment areas. This species is a rare migrant through the area.

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered because  $11,600 \pm$  acres of potential foraging habitat will be conserved. This species is an uncommon winter visitor which forages in grasslands and agricultural fields.

**Notes:** The plan will not adversely affect the <u>species</u>' long-term survival. Additional conservation of grassland habitats should be a priority and one of the primary factors in the design of preserves in the major amendment areas. This species is not known to nest within the MSCP study area.

Scientific Name Common Name Status	Conserved <sup>3</sup> (Based on the MSCP Plan)	Potentially Impacted/Developed (Based on the MSCP Plan)	General Basis for Analysis of Coverage	Monitoring Method(s) (Monitoring Plan and/or Management Plans/Directives)	Meets State and Federal Authorization Standards
Aquila chrysaetos Golden eagle BEPA/SSC	53% of potential foraging/nesting habitat (coastal sage scrub, chaparral, grassland and oak woodland) 139,000 <u>+</u> acres) – large blocks of habitat conserved in the eastern portion of the plan area where active nesting territories exist. Of the 11 active nesting territories (based on information from the Golden Eagle Survey Project, San Diego) which are fully or partially within the MSCP plan area, 7 nesting territories should remain viable.	Viability of 4 of the 11 active nesting territories (partially or fully within the plan area)	Preserve design/landscape level with the site-specific consideration(s)/management	Monitoring Plan – Habitat Based and Management Plans/Directives (site specific nest territories)	YES

		Potentially		Monitoring Method(s)	Meets State
Scientific Name	Conserved <sup>3</sup>	Impacted/Developed		(Monitoring Plan	and Federal
Common Name	(Based on the	(Based on the	General Basis for	and/or Management	Authorization
Status	MSCP Plan)	MSCP Plan)	Analysis of Coverage	Plans/Directives)	Standards

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 53 percent of potential foraging and nesting habitat will be conserved. Local populations are not critical to, and the plan will not adversely affect the <u>species</u>' long-term survival.

**Notes:** Fourteen active nesting territories occur primarily outside of the MSCP area (east and northeast of the plan area). Plans developed for these areas should include measures to conserve adequate habitat to maintain their viability. The following is an analysis of the plan's effects on each nesting territory.

- 1. Rancho San Diego development under the plan will result in <10 percent loss of habitat in the nesting territory, nesting territory should remain viable;
- 2. East Otay Mountain development under the plan will result in <5 percent loss of habitat in the nesting territory, nesting territory should remain viable;
- 3. Sequan Peak between 30 percent and 40 percent of the habitat in the nesting territory could be developed, the nesting territory <u>may not remain viable</u>, but the steepness of the areas which could be developed may preclude enough development to keep the territory viable;
- 4. Loveland Reservoir development of under the plan will result in >20 percent loss of habitat in the nesting territory, nesting territory should remain viable;
- 5. Lake Jennings between 40 percent and 60 percent of the habitat in the nesting territory could be developed under the plan, the nesting territory <u>may not remain</u> <u>viable</u>;
- 6. El Capitan territory development under the plan will result in <15 percent loss of habitat within the nesting territory, the territory should remain viable;
- 7. San Vicente Reservoir development under the plan will result in <30 percent of the high quality golden eagle habitat being developed, although low quality habitat (steep chaparral) could be developed resulting in greater habitat loss within the nesting territory (although high density development is not likely to occur because of the steep sloes), the nesting territory is <u>may not be viable</u>;
- 8 and 9. San Pasqual (two nesting territories) development under the plan will result in <20 percent loss of habitat in the nesting territory and <u>both nesting</u> <u>territories should remain viable</u>:
- 10. Santee development under the plan could result in 30 percent-40 percent loss of habitat in the nesting territory and the nesting territory <u>may not remain</u> <u>viable</u>, although a significant amount of foraging habitat (Miramar and Mission Trails) occurs just outside of the territory and within normal foraging distances; and
- 11. Lake Hodges development under the plan will result in <20 percent loss of habitat in the nesting territory, the nesting territory should remain viable.

**Conditions:** Area specific management directives for areas with nest sites must include measures to avoid human disturbance while the nest is active, including establishing a 4,000 foot disturbance avoidance area within preserve lands. Area specific management directives must also include monitoring of nest sites to determine use/success.

Scientific Name Common Name Status	Conserved <sup>3</sup> (Based on the MSCP Plan)	Potentially Impacted/Developed (Based on the MSCP Plan)	General Basis for Analysis of Coverage	Monitoring Method(s) (Monitoring Plan and/or Management Plans/Directives)	Meets State and Federal Authorization Standards
Falco peregrinus anatum American peregrine falcon FE/CE	61% of historic nesting sites – 58% of foraging habitat (89,400 <u>+</u> acres) – 93% southern coastal saltmarsh, 99% of saltpan, 68% of freshwater marsh, 91% of open water, 88% of natural flood channel, 64% of coastal sage scrub, 38% of grassland	39% of foraging habitat (57,000 <u>+</u> acres) – wetlands are subject to no net loss of function and value and 404(b)1 guidelines	Preserve design/landscape level	Monitoring Plan – Habitat Based	YES

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because more than 89,000 acres of potential foraging habitat will be conserved.

**Notes**: This species has very low population numbers in the County, being primarily a rare fall and winter visitor. All three nest sites occur outside of the MHPA: one on Coronado Bridge, one on a crane in Port Authority jurisdiction, and one on Pt. Loma federal lands. Participating jurisdictions; guidelines and ordinances, and state and federal wetland regulations will provide additional habitat protection resulting in no net loss of wetlands.

<i>Rallus longirostris levipes</i> Light-footed clapper rail FE/CE	93% of potential habitat (1,700 <u>+</u> acres of southern coastal saltmarsh)	7% of potential habitat $(120\pm$ acres) – wetlands are subject to no net loss of function and value and	Site-specific preserve design and special measures/management	Management Plans/Directives	YES
	)	404(b)1 guidelines			

Scientific Name Common Name Status	Conserved <sup>3</sup> (Based on the MSCP Plan)	Potentially Impacted/Developed (Based on the MSCP Plan)	General Basis for Analysis of Coverage	Monitoring Method(s) (Monitoring Plan and/or Management Plans/Directives)	Meets State and Federa Authorizatio Standards
Status	MSCP Plan)	MSCP Plan)	Analysis of Coverage	Plans/Directives)	Stan

DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 93 percent of its habitat will be conserved.

**Notes:** Additional important habitat is found on military lands (Silver Strand) which are not included as part of the MSCP. Participating jurisdictions' guidelines and ordinances, and state and federal wetland regulations will provide additional habitat protection resulting in no net loss of wetlands.

**Conditions:** Area specific management directives must include active management of wetlands to ensure a healthy tidal saltmarsh environment, and specific measures to protect against detrimental edge effects to this species.

Charadrius93% of potentialalexandrinus nivosushabitat (650± acres)Western snowy plover99% of saltpan, 90-FT/SSC95% of beach outsideof intensively usedrecreational beaches	7% of potential habitat (467% of potential habitat (46 $\pm$ acres) –wetlands are subject to no net loss of function and value and 404(b)1 guidelines	Preserve design/landscape level with site-specific consideration(s)/management	Area Specific Management Directives	YES
--	--	--	--	-----

		Potentially		Monitoring Method(s)	Meets State
Scientific Name	Conserved <sup>3</sup>	Impacted/Developed		(Monitoring Plan	and Federal
Common Name	(Based on the	(Based on the	General Basis for	and/or Management	Authorization
Status	MSCP Plan)	MSCP Plan)	Analysis of Coverage	Plans/Directives)	Standards

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 93 percent of its potential habitat will be conserved. All breeding activity of western snowy plovers in the County occurs in saltpan habitat. No new development of beaches is authorized which will result in 90-95 percent conservation of beach habitat that is outside of intensively used beach areas.

**Notes:** Additional important habitat is found on military lands (Silver Strand) which are not part of the MSCP. Participating jurisdictions' guidelines and ordinances, and state and federal wetland regulations will provide additional habitat protection resulting in no net loss of wetlands.

**Conditions:** Area specific management directives must include protection of nesting sites from human disturbance during the reproductive season, and specific measures to protect against detrimental edge effects to this species. Incidental take (during the breeding season) associated with maintenance/removal of levees/dikes is not authorized except as specifically approved on a case-by-case basis by the wildlife agencies.

<i>Charadrius montanus</i> Mountain plover C/SSC	22% of potential foraging habitat (11,600 <u>+</u> acres) – 38% of grassland, 6% of agricultural	78% of potential foraging habitat (41,100 <u>+</u> acres)	Preserve design/landscape level	Monitoring Plan – Habitat Based	YES
	6% of agricultural fields				
	neids				

		Potentially		Monitoring Method(s)	Meets State
Scientific Name	Conserved <sup>3</sup>	Impacted/Developed		(Monitoring Plan	and Federal
Common Name	(Based on the	(Based on the	General Basis for	and/or Management	Authorization
Status	MSCP Plan)	MSCP Plan)	Analysis of Coverage	Plans/Directives)	Standards

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because over 11,000 acres of potential foraging habitat will be conserved. The plan will not adversely affect the <u>species</u>' long-term survival.

**Notes:** This species is an uncommon winter visitor (primarily in the Tijuana River Valley) which forages in grasslands and agricultural fields. The MSCP conservation requirement for the Tijuana River Valley area is primarily 94 percent with a small area identified as 75 percent.

**Conditions:** Management Plans for the Tijuana River Valley should specifically address the habitat requirements for this species.

Numenius americanus24% of potentialLong-billed curlewforaging habitat*/SSC(13,500 <u>+</u> acres) –93% of southerncoastal saltmarsh,99% of salt pan, 38%of grassland, 6% ofagricultural fields	77% of potential foraging habitat (42,800 <u>+</u> acres) – wetlands are subject to no net loss of function and value and 404(b)1 guidelines	Preserve design/landscape level	Monitoring Plan – Habitat Based	YES
--	---	------------------------------------	------------------------------------	-----

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species is a fairly common migrant and winter visitor.

**Notes:** This species will be covered by the MSCP because more than 13,500 acres of potential foraging habitat will be conserved. The plan will not adversely affect the <u>species</u>' long-term survival. Additional conservation of grassland habitats should be a priority and one of the primary factors in the design of preserves in the major amendment areas. Additional habitat occurs on military lands (Silver Strand, San Diego Bay) which are not part of the MSCP. Participating jurisdictions' guidelines and ordinances, and state and federal wetland regulations will provide additional habitat protection resulting in no net loss of wetlands.

Scientific Name Common Name Status	Conserved <sup>3</sup> (Based on the MSCP Plan)	Potentially Impacted/Developed (Based on the MSCP Plan)	General Basis for Analysis of Coverage	Monitoring Method(s) (Monitoring Plan and/or Management Plans/Directives)	Meets State and Federal Authorization Standards
Sterna elegans Elegant tern */SSC	93% of potential habitat (650 <u>+</u> acres) 99% of saltpan, 90- 95% of beach outside of intensively used recreational beaches	10% of potential habitat $(46\pm acres)$ – wetlands are subject to no net loss of function and value and 404(b)1 guidelines	Preserve design/landscape level with site-specific consideration(s)/management	Area Specific Management Directives	YES

DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 93 percent of its potential habitat will be conserved.

**Notes:** All breeding activity of elegant terns in the County occurs in saltpan habitat. No new development of beaches is authorized which will result in 90-95 percent protection of beach habitat that is outside of intensively used beach areas. Additional important foraging habitat (bay waters) is under the jurisdiction of the Port Authority and military, and are not part of the MSCP. Participating jurisdictions' guidelines and ordinances, and state and federal wetland regulations will provide additional habitat protection resulting in no net loss of wetlands.

**Conditions:** Area specific management directives must include protection of nesting sites from human disturbance during reproductive season, and specific measures to protect against detrimental edge effects to this species. Incidental take (during the breeding season) associated with maintenance/removal of levees/dikes is not authorized except as specifically approved on a case-by-case basis by the wildlife agencies.

		Potentially		Monitoring Method(s)	Meets State
Scientific Name	Conserved <sup>3</sup>	Impacted/Developed		(Monitoring Plan	and Federal
Common Name	(Based on the	(Based on the	General Basis for	and/or Management	Authorization
Status	MSCP Plan)	<b>MSCP Plan</b> )	Analysis of Coverage	Plans/Directives)	Standards

DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 93 percent of its potential habitat will be conserved.

**Notes:** No new development of beaches is authorized which will result in 90-95 percent conservation of beach habitat that is outside of intensively used beach areas. Additional important breeding habitat occurs on military lands (North Beach, Silver Strand, Naval Training Center) and are not part of the MSCP. Additional important foraging habitat (bay waters) is under the jurisdiction of the Port Authority and the military, and are not part of the MSCP. Participating jurisdictions' guidelines and ordinances, and state and federal wetland regulations will provide additional habitat protection resulting in no net loss of wetlands.

**Conditions:** Area specific management directives must include protection of nesting sites from human disturbance during reproductive season, predator control, and specific measures to protect against detrimental edge effects to this species. Incidental take (during the breeding season) associated with maintenance/removal of dikes/levees, beach maintenance/enhancement is not authorized except as specifically approved on a case-by-caser basis by the wildlife agencies.

hypugaea(Spring Canyon, northeast of BrownRanch, S and SouthBurrowing owlnortheast of Brownand South	cations (Otay Site-specific preserve design Pasqual Valley and special County at measures/management 00 <u>+</u> of known	Monitoring Plan – (10 grassland locations) and Area Specific Management Directives	YES
--	--	---	-----

		Potentially		Monitoring Method(s)	Meets State
Scientific Name	Conserved <sup>3</sup>	Impacted/Developed		(Monitoring Plan	and Federal
Common Name	(Based on the	(Based on the	General Basis for	and/or Management	Authorization
Status	MSCP Plan)	MSCP Plan)	Analysis of Coverage	<b>Plans/Directives</b> )	Standards

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because  $5,770\pm$  acres of potential and  $4,000\pm$  acres of known suitable habitat (grassland vegetation community) will be conserved, including portions of Spring Canyon, San Pasqual Valley, Lake Hodges, Otay Mesa northeast of Brown Field, Otay Ranch, Otay River Valley, and Future Urbanizing Area 4.

**Notes**: Habitat enhancement opportunities for the species occur in the Spring Canyon, San Pasqual Valley, Lake Hodges, Otay Mesa northeast of Brown Field, Otay Ranch, Otay River Valley and Future Urbanizing Area 4. The wildlife agencies will enhance and manage lands within their ownership to allow for relocation of burrowing owls, particularly in conjunction with burrowing owl removal programs in areas where their presence conflicts with nesting of California least terns. The wildlife agencies will attempt to achieve additional conservation of occupied burrowing owl habitat or habitat suitable for restoration using state and federal acquisition resources. Persistence of the species in San Diego County is also dependent on adequate conservation of known concentrations in the San Maria Valley in the vicinity of Ramona.

**Conditions**: During the environmental analysis of proposed projects, burrowing owl surveys (using appropriate protocols) must be conducted in suitable habitat to determine if this species is present and the location of active burrows. If burrowing owls are detected, the following mitigation measures must be implemented: within the MSHPA, impacts must be avoided; outside of the MHPA, impacts to the species must be avoided to the maximum extent practicable; any impacted individuals must be relocated out of the impact area using passive or active methodologies approved by the wildlife agencies; mitigation for impacts to occupied habitat (at the Subarea Plan specified ratio) must be through the conservation of occupied burrowing owl habitat or conservation of lands appropriate for restoration, management and enhancement of burrowing owl nesting and foraging requirements.

Management plans/directives must include: enhancement of known, historical and potential burrowing owl habitat; and management for ground squirrels (the primary excavator of burrowing owl burrows). Enhancement measures may include creation of artificial burrows and vegetation management to enhance foraging habitat. Management plans must also include: monitoring of burrowing owl nest sites to determine use and nesting success; predator control; establishing a 300 footwide impact avoidance area (within the preserve) around occupied burrows.

Eight known burrowing owl location occur within major amendment areas of the South County Segment of the County Subarea Plan and the conservation of occupied burrowing owl habitat must be one of the primary factors preserve design during the permit amendment process.

Scientific Name Common Name Status	Conserved <sup>3</sup> (Based on the MSCP Plan)	Potentially Impacted/Developed (Based on the MSCP Plan)	General Basis for Analysis of Coverage	Monitoring Method(s) (Monitoring Plan and/or Management Plans/Directives)	Meets State and Federal Authorization Standards
Empidonax traillii extimus	76% of potential habitat (4,900 <u>+</u> acres)	24% of potential habitat $(1,400 \pm acres) - wetlands$	Preserve design/landscape level with site-specific	Monitoring Plan – Habitat Based and Area	YES
Southwestern willow flycatcher FE/CE	– 90% of riparian woodland, 80% of riparian scrub – 88%	are subject to no net loss of function and value and 404(b)1 guidelines	consideration(s)/management	<ul> <li>Specific Management</li> <li>Directives</li> </ul>	

DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 4,900+ acres (76 percent) of potential habitat will be conserved.

**Conditions:** Jurisdictions must require surveys (using appropriate protocols) during the CEQA review process in suitable habitat proposed to be impacted and incorporate mitigation measures consistent with the 404(b)1 guidelines into the project. Participating jurisdictions' guidelines and ordinances, and state and federal wetland regulations will provide additional habitat protection resulting in no net loss of wetlands. For new developments adjacent to preserve areas that create conditions attractive to brown-headed cowbirds, jurisdictions must require monitoring and control of cowbirds. Area specific management directives must include measures to provide appropriate successional habitat, upland buffers for all known populations, cowbird control, and specific measures to protect against detrimental edge effects to this species. Any clearing of occupied habitat must occur between September 1 and May 1 (i.e., outside of the nesting period).

		Potentially		Monitoring Method(s)	Meets State
Scientific Name	Conserved <sup>3</sup>	Impacted/Developed		(Monitoring Plan	and Federal
Common Name	(Based on the	(Based on the	General Basis for	and/or Management	Authorization
Status	MSCP Plan)	<b>MSCP Plan</b> )	Analysis of Coverage	Plans/Directives)	Standards

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species is covered because four of five major populations are conserved, including populations at Lake Hodges/San Pasqual Valley, Lake Jennings, South Sweetwater Reservoir/San Miguel Ranch and Salt Creek/Otay Mesa and 60 percent ( $850\pm$  acres) will be conserved allowing for expansion of the populations with management.

**Notes:** This species also uses other habitat types (coastal sage scrub and chaparral) containing cactus patches. Small clusters of birds at Black Mountain and Spring Valley will also be conserved. Conservation of the Salt Creek population is critical to the persistence of the species in San Diego County and it would only be conserved under the city of Chula Vista's "Modified GDP B" alternative. The existing distribution of cactus wrens in the MSCP plan area has been greatly reduced and restoration of suitable cactus wren habitat and its management are important components of the MSCP plan. Significant opportunities for restoration within the MHPA occur on Otay Ranch, Spring Canyon (and adjacent areas), Dennery Canyon, San Miguel Ranch, Lake Hodges/San Pasqual Valley, Otay River Valley and Santee/Lake Jennings. The participating jurisdictions should seek OHV funds for restoration since much of these areas have been heavily impacted by OHVs. The City of San Diego has already acquired habitat in Spring Canyon as mitigation. The City of San Diego and the wildlife agencies have agreed to make restoration maritime succulent scrub in Spring Canyon a high priority. The USFWS will also make restoration of maritime succulent scrub a high priority on any lands it acquires in Spring Canyon.

**Conditions:** The restoration of maritime succulent scrub habitat as specified in the Otay Ranch RMP and GDP must occur at the specified 1:1 ratio. Area specific management directives must include restoration of maritime succulent scrub habitat, including propagation of cactus patches, active/adaptive management of cactus wren habitat, monitoring of populations within preserves and specific measures to reduce or eliminate detrimental edge effects. No clearing of occupied habitat may occur from the period February 15 through August 15.

		Potentially		Monitoring Method(s)	Meets State
Scientific Name	Conserved <sup>3</sup>	Impacted/Developed		(Monitoring Plan	and Federal
Common Name	(Based on the	(Based on the	General Basis for	and/or Management	Authorization
Status	MSCP Plan)	MSCP Plan)	Analysis of Coverage	Plans/Directives)	Standards

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because: over 73,300 acres of existing and potential gnatcatcher habitat will be conserved and linked together; over 81 percent of the core areas where the species occurs (Otay, San Miguel, Mission Trails, Santee, Kearny Mesa, Poway, San Pasqual and Lake Hodges) will be conserved; and 65 percent (1,819 of 2,814) of the known locations will be conserved.

**Notes:** Sixty-eight percent (57,874 acres) of habitat supporting core gnatcatcher populations and 70 percent (30,273 acres) of very high value and 62 percent high value (4,609 acres) gnatcatcher coastal sage scrub habitat would be conserved. Critical habitat linkages between core areas conserved in a function manner with a minimum of 75 percent of the habitat within identified linkages conserved. Populations of this species also occur on military lands which are not part of the MSCP.

**Conditions:** Area specific management directives must include measures to reduce edge effects and minimize disturbance during the nesting period, fire protection measures to reduce the potential for habitat degradation due to unplanned fire, and management measures to maintain or improve habitat quality including vegetation structure. No cleaning of occupied habitat within the cities' MHPAs and within the County's Biological Resource Core Areas may occur between March 1 and August 15.

	59% of potential habitat (15,500+	41% of potential habitat $(12,100\pm acres) - wetlands$	Preserve design/landscape level	Monitoring Plan – Habitat Based	YES
none	acres) – 57% of oak	are subject to no net loss of function and value and 404(b)1 guidelines			

DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because over 15,000 acres of habitat will be conserved.

Notes: Persistence of this species in San Diego County depends largely on conservation of existing large populations on public lands east of the plan area.

Scientific Name Common Name Status	Conserved <sup>3</sup> (Based on the MSCP Plan)	Potentially Impacted/Developed (Based on the MSCP Plan)	General Basis for Analysis of Coverage	Monitoring Method(s) (Monitoring Plan and/or Management Plans/Directives)	Meets State and Federal Authorization Standards
<i>Vireo bellii pusillus</i> Least Bell's vireo FE/CE	81% of potential habitat (1,700 <u>+</u> acres) – 93% of riparian woodland, 58% of oak riparian forest – 82-100% of major populations	19% of potential habitat $(400\pm acres) -$ wetlands are subject to no net loss of function and value and 404(b)1 guidelines	Preserve design/landscape level with site-specific consideration(s)/management	Monitoring Plan – Habitat Based and Management Plans/Directives	YES

DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 1,700+ acres (81 percent) of potential habitat will be conserved.

**Conditions:** Jurisdictions will require surveys (using appropriate protocols) during the CEQA review process in suitable habitat proposed to be impacted and incorporate mitigation measures consistent with the 404(b)1 guidelines into the project. Participating jurisdictions' guidelines and ordinances, and state and federal wetland regulations will provide additional habitat protection resulting in no net loss of wetlands. Jurisdictions must require new developments adjacent to preserve areas that create conditions attractive to brown-headed cowbirds to monitor and control cowbirds. Area specific management directives must include measures to provide appropriate successional habitat, upland buffers for all known populations, cowbird control, and specific measures to protect against detrimental edge effects to this species. Any clearing of occupied habitat must occur between September 15 and March 15 (i.e., outside of the nesting period).

Scientific Name Common Name Status	Conserved <sup>3</sup> (Based on the MSCP Plan)	Potentially Impacted/Developed (Based on the MSCP Plan)	General Basis for Analysis of Coverage	Monitoring Method(s) (Monitoring Plan and/or Management Plans/Directives)	Meets State and Federal Authorization Standards
Aimophilia ruficeps canescens California rufous- crowned sparrow */SSC	61% of potential habitat (73,600 <u>+</u> acres) – 64% of coastal sage scrub, 60% of maritime succulent scrub, 44% of coastal sage/chaparral – 71% of mapped localities	39% of potential habitat (46,600 <u>+</u> acres) – 29% of mapped localities	Preserve design/landscape level	Monitoring Plan – Habitat Based	YES

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 61 percent (73,600+ acres) of potential habitat (including 71 percent of mapped localities) will be conserved.

Notes: This species is tolerant of edge effects, small habitat patches, low shrub volume, and short-term habitat disturbance.

**Conditions:** Area specific management directives must include maintenance of dynamic processes, such as fire, to perpetuate some open phases of coastal sage scrub with herbaceous components.

Passerculus	93% of potential	7% of potential habitat	Preserve design/landscape	Monitoring Plan –	YES
sandwichensis beldingi	habitat (1,700 <u>+</u> acres	$(120 \pm acres) - wetlands are$	level	Habitat Based and	
Belding's savannah	of southern coastal	subject to no net loss of		Management	
sparrow	saltmarsh) – 71% of	function and value and		Plans/Directives	
*/CE	mapped localities	404(b)1 guidelines			

		Potentially		Monitoring Method(s)	Meets State
Scientific Name	Conserved <sup>3</sup>	Impacted/Developed		(Monitoring Plan	and Federal
Common Name	(Based on the	(Based on the	General Basis for	and/or Management	Authorization
Status	MSCP Plan)	MSCP Plan)	Analysis of Coverage	Plans/Directives)	Standards

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 93 percent  $(1,700 \pm \text{ acres})$  of potential habitat (including 71 percent of mapped localities) will be conserved and the remaining acres  $(120 \pm)$  are subject to no net loss of value and function.

**Notes:** Additional important habitat is found on military lands (Silver Strand, North Island, etc.) which are not part of the MSCP. Participating jurisdictions' guidelines and ordinances, and state and federal wetland regulations will provide additional habitat protection resulting in no net loss of wetlands.

Conditions: Area specific management directives must include specific measures to protect against detrimental edge effects to this species.

Passerculus	93% of potential	7% of potential habitat	Preserve design/landscape	Monitoring Plan –	YES
sandwichensis rostratus	habitat (1,700 <u>+</u> acres	$(120 \pm acres) - wetlands are$	level	Habitat Based and	
Large-billed savannah	of southern coastal	subject to no net loss of		Management	
sparrow	saltmarsh) - 50% of	function and value and		Plans/Directives	
*/SSC	mapped localities	404(b)1 guidelines			

DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 93 percent  $(1,700 \pm \text{ acres})$  of potential habitat (including 50 percent of mapped localities) will be conserved and the remaining acres  $(120 \pm)$  are subject to no net loss of value and function.

**Notes:** Additional important habitat is found on military lands (Silver Strand, North Island, etc.) which are not part of the MSCP. Participating jurisdictions' guidelines and ordinances, and state and federal wetland regulations will provide additional habitat protection resulting in no net loss of wetlands.

Conditions: Area specific management directives must include specific measures to protect against detrimental edge effects to this species.

Scientific Name Common Name Status	Conserved <sup>3</sup> (Based on the MSCP Plan)	Potentially Impacted/Developed (Based on the MSCP Plan)	General Basis for Analysis of Coverage	Monitoring Method(s) (Monitoring Plan and/or Management Plans/Directives)	Meets State and Federal Authorization Standards
<i>Ammodramus savannarum</i> Grasshopper sparrow none	This species will no	-	cause insufficient information is abitat is conserved.	available to determine if	NO
Agelaius tricolor Tricolored blackbird */SSC	77% of breeding habitat (4,800 <u>+</u> acres) – 61% of freshwater marsh, 80% of riparian scrub – 59% of known localities	23% of breeding habitat (1,400 <u>+</u> acres)	Preserve design/landscape level	Management Plans/Directives	YES

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 77 percent of potential habitat (including 59 percent of mapped localities) will be conserved. Breeding colonies move from season to season, and with a goal of no net loss of wetlands, most of the suitable breeding sites will continue to be available. This species forages in grasslands and agricultural fields near its breeding habitat. Foraging habitat near the known nesting colonies will be conserved at 70-100 percent. Additionally, foraging opportunities will continue to be provided and created in turfed areas such as golf courses and cemeteries. Jurisdictions will require surveys during the CEQA review process in suitable breeding habitat proposed to be impacted. Participating jurisdictions' guidelines and ordinances, and state and federal wetland regulations will provide additional habitat protection resulting in no net loss of wetlands.

**Conditions:** Project approvals must require avoidance of active nesting areas during the breeding season. Area specific management directives must include measures to avoid impacts to breeding colonies, and specific measures to protect against detrimental edge effects to this species.

Scientific Name Common Name Status	Conserved <sup>3</sup> (Based on the MSCP Plan)	Potentially Impacted/Developed (Based on the MSCP Plan)	General Basis for Analysis of Coverage	Monitoring Method(s) (Monitoring Plan and/or Management Plans/Directives)	Meets State and Federal Authorization Standards	
Plecotus townsendii Townsend's western big-eared bat */SSC	Unknown/Insufficient	data on distribution and life his	story.		NO	
Eumops perotis californicus California mastiff bat */SSC	Unknown/Insufficient	data on distribution and life his	story.			
Perognathus longimembris pacificus Pacific pocket mouse FE/SSC		known/Only 3 to 4 known populations in Southern California. Sufficient data on distribution and life history.				
<i>Taxidea taxus</i> American badger /SSC	58% of potential habitat (82,500 <u>+</u> acres) – 38% of grassland, 64% of coastal sage scrub, 44% of coastal sage/chaparral	42% of potential habitat (58,300 <u>+</u> acres)	Preserve design/landscape level	Monitoring Plan – Habitat Based	YES	

		Potentially		Monitoring Method(s)	Meets State
Scientific Name	Conserved <sup>3</sup>	Impacted/Developed		(Monitoring Plan	and Federal
Common Name	(Based on the	(Based on the	General Basis for	and/or Management	Authorization
Status	MSCP Plan)	MSCP Plan)	Analysis of Coverage	<b>Plans/Directives</b> )	Standards

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 82,000+ acres (58 percent) of its potential habitat will be conserved.

**Notes:** This species has a wide range, and the plan will not adversely affect the <u>species</u>' long-term survival. Additional conservation of grassland habitats should be a priority and one of the primary factors in the design of preserves in the major amendment areas.

Conditions: Area specific management directives must include measures to avoid direct human impacts to this species if it is present or likely to be present.

Felis concolor	81% of core areas 5,	19% of core areas (24,000 <u>+</u>	Preserve design/landscape	Monitoring Plan –	YES
Mountain lion/protected	6, 7, 8, 9, 11, and 12	acres)	level	Habitat Based and	
	(105,000 <u>+</u> acres) –			Corridor Sites	
	connected by				
	linkages C, D, N				

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 81 percent of the core areas  $(105,000 \pm acres)$  which support its habitat will be conserved.

**Notes:** Although not considered sensitive, this species has aesthetic and intrinsic values, thereby being an important species to protect. This species has a wide range, and the plan will not adversely affect the <u>species</u>' long-term survival. The criteria used to define core and linkage areas involves maintaining ecosystem function and processes, including large animal movement. Each core area is connected to other core areas or to habitat areas outside of the MSCP either through common boundaries or through linkages. Core areas have multiple connections to help ensure that the balance in the ecosystem will be maintained. An extensive monitoring program will also be implemented by the wildlife agencies to detect unanticipated changes in ecosystem function and allow for adaptive management of the preserve system. Specific design criteria for linkages, road crossings/undercrossings are included in Subarea Plans.

Scientific Name Common Name Status	Conserved <sup>3</sup> (Based on the MSCP Plan)	Potentially Impacted/Developed (Based on the MSCP Plan)	General Basis for Analysis of Coverage	Monitoring Method(s) (Monitoring Plan and/or Management Plans/Directives)	Meets State and Federal Authorization Standards
<i>Odocoileus hemionus fuliginata</i> Southern mule deer none	81% of core areas 5, 6, 7, 8, 9, 11, and 12 (105,000 <u>+</u> acres) – connected by linkages C, D, N	19% of core areas (24,000 <u>+</u> acres)	Preserve design/landscape level	Monitoring Plan – Habitat Based and Corridor Sites	YES

#### DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 81 percent of the core areas (105,000+ acres) which support its habitat will be conserved.

**Notes:** Although not considered sensitive, this broadly distributed species has aesthetic and intrinsic values, and is the only large native herbivore in the plan area thereby making it an important species to protect. The criteria used to define core and linkage areas involves maintaining ecosystem function and processes, including large animal movement. Each core area is connected to other core areas or to habitat areas outside of the MSCP either through common boundaries or through linkages. Core areas have multiple connections to help ensure that the balance in the ecosystem will be maintained. An extensive monitoring program will also be implemented by the wildlife agencies to delete unanticipated changes in ecosystem function and allow for adaptive management of the preserve system. Specific design criteria for linkages, road crossings/undercrossings are included in the Subarea Plans.

<sup>1</sup>Measures to conserve population of species on the MSCP plan's narrow endemic list must be incorporated into the Subarea Plans which do not have preserve/development areas specifically delineated based on site specific surveys. The City of San Diego's and the County of San Diego's Subarea Plan areas are primarily where this requirement is applicable and both Subarea Plans specify how MSCP narrow endemic species conservation measures.

Within the City of San Diego's MHPA, populations of MSCP narrow endemic species will be avoided.

The County will conserve MSCP narrow endemic species using a process which: first, requires avoidance to the maximum extent possible (avoidance); second, allows for a maximum 20 percent encroachment into a population if total avoidance is not possible (minimize); and third, requires mitigation at 1:1 to 3:1 ratio (inkind) for impacts if avoidance and minimization of impacts would result in no reasonable use of the property. The County requirements for avoidance, minimization and mitigation are specifically described in the County's proposed BMO.

<sup>2</sup>The County's proposed BMO includes a list of sensitive plant species (Groups A and B) which require special consideration in project design. The County will conserve Group A and B species using a process which: first, requires avoidance to the maximum extent possible (avoidance); second, allows for a maximum 20 percent encroachment into a population if total avoidance is not possible (minimize); and third, requires mitigation at 1:1 to 3:1 ration (in-kind) for impacts if avoidance and minimization of impacts would result in no reasonable use of the property.

<sup>3</sup>This column indicates the conservation level of the species. Not all major populations are in the GIS database, i.e., if specific locality data are lacking. In these cases, the percentage of major populations preserved is determined or estimated from the percentage of associated habitat in the MHPA.

Status Federal/State

FE = Federally endangered	BEPA = Bald Eagle Protection Act	
PE = Proposed for federal listing as endangered	CE = State endangered	
FT = Federally threatened	CR = State rare	
PT = Proposed for federal listing as threatened	CT = State threatened	
C = Candidate for federal listing	SSC = State Species of Special Concern	

\*= Formerly Category 2 or Category 3 candidate for federal listing; no current federal status.

Protected = moratorium on hunting

None = no federal or state status

Shading indicates priority species (federally and state listed species, species proposed for listing, Category 1 candidate species, and NCCP target species).

**Findings Definitions** 

**Note:** Area specific management directives for preserve areas will include specific guidelines for managing and monitoring covered species and their habitats, including following best management practices. Edge effects may include (but are not limited to) trampling, dumping, vehicular traffic, competition with invasive species, parasitism by cowbirds, predation by domestic animals, noise, collecting, recreational activities, and other human intrusion. **Source:** 1996 MSCP GIS database. Military lands excluded from analysis.