

# **APPENDIX A**

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Table 3-5 of the MSCP Subregional Plan

Table 3-5

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
<b>PLANTS</b>					
<i>Acanthomintha illicifolia</i> San Diego thorn-nitml PE/CE	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 Plans/Directives	YES
<b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b>					
<p>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%, with 85% 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.</p> <p><b>Notes:</b> This species occurs on clay and gabbro soils which will be conserved at &gt;28% and &gt;43%, respectively.</p> <p><b>Conditions:</b> Area-specific management directives and the SPA for the Olay Lakes Resort area must include specific measures to protect against detrimental edge effects from the surrounding development.<sup>2</sup></p>					
<i>Agave shawii</i> Shaw's agave FSC*/	100% of major populations	No major populations	Preserve design/landscape level	Monitoring Plan - Habitat Based	YES
<b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b>					
<p>This species will be covered by the MSCP because all known extant populations are within protected public land (Torrey Pines State Reserve 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 for the species.<sup>3</sup></p>					

Table 3-5 (Continued)

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
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**Notes:** Additional important populations are found on military lands (Pt. Loma) which are not part of the MSCP. Populations at Pt. Loma are not part of the MSCP but will be conserved at a minimum of 91% in the Pt. Loma Ecological Reserve Area.

**Conditions:** Area-specific management directives must include specific measures to protect against detrimental edge effects.<sup>4</sup>

<i>Ambrosia pumila</i> San Diego ambrosia FSC*/	90% of the only major population	10% of the only major population	Site-specific preserve design and special measures/management	Monitoring Plan - Site Specific (major population) and Management Plans/ Directives	YES
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**DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED**

This species will be covered because 90% of the only major population in the MSCP will be conserved, and the adjoining population at the radio tower site will be 100% 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 for the species.<sup>3</sup>

**Notes:** Occurrences thought to be *Ambrosia pumila* in 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 San Diego National Wildlife Refuge (Rancho San Diego) will also be conserved and managed by the USFWS.

**Conditions:** If more than 10% of the population 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.<sup>4</sup>

Table 3-5 (Continued)

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
<i>Aphanisma blitoides</i> Aphanisma FSC*/	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± acres), 12% of southern coastal bluff scrub (17± acres)	Preserve design/landscape level with site-specific consideration(s)/management	Monitoring Plan - Habitat Based and Incidental	YES
<b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b>					
This species will be covered by the MSCP because 90% 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 in the MSCP Plan area.					
<i>Arctostaphylos glandulosa</i> var. <i>crassifolia</i> Del Mar manzanita FE/	91% of major populations and 67% of southern maritime chaparral habitat	9% of major populations	Preserve design/landscape level with site-specific consideration(s)/management	Monitoring Plan - Site Specific	YES
<b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b>					
This species will be covered by the MSCP because 91% of the major populations will be conserved and 67% of the habitat for the species will be conserved. This species is a Group A species in the County's proposed BMO <sup>3</sup>					

Table 3-5 (Continued)

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
<p><b>Notes:</b> Within the County, this species occurs in the western portion of the Metro-Lakeside-Jamul segment, primarily in open space areas. Although not dedicated to the preserve, these areas will not likely be developed.</p>					
<p><b>Conditions:</b> 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.<sup>4</sup> Management measures to accomplish this may include prescribed fire.</p>					
<i>Arctostaphylos otayensis</i> Otay manzanita FSC*/	95% of major populations	5% of major populations	Preserve design/landscape level	Monitoring Plan - Habitat Based and Photo Plot	YES
<p><b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b></p>					
<p>This species will be covered by the MSCP because 95% of the major populations are located on BLM land and in the open space (100% protection) designation for Otay Ranch, Jamul Mountain, and San Miguel Mountain. This species is a Group A species in the County's proposed BMO.<sup>3</sup></p>					
<p><b>Notes:</b> This species is often associated with metavolcanic soils of which 34,000 acres are included within the MHPA.</p>					
<p><b>Conditions:</b> Area-specific management directives must include specific management measures to promote germination of seeds, maintenance of diverse age class structure, and reduction in the risk of catastrophic fire.<sup>4</sup> Management measures to accomplish this may include prescribed fire.</p>					
<i>Astragalus deanei</i> Dean's milk vetch FSC*/	Unknown conservation level and therefore not covered by the plan.				NO

Table 3-5 (Continued)

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
<i>Astragalus tener</i> var. <i>illi</i> Coastal dunes milk vetch PE/CE	92% of southern foredunes (123± acres)	8% of southern foredunes (11± acres)	Preserve design/landscape level	Monitoring Plan - Habitat Based and Incidental	YES
<b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b>					
This species will be covered by the MSCP because 92% of the vegetative community that is potential habitat for this species will be conserved.					
Notes: This species historically occurred on the Silver Strand but is thought to be extirpated from the MSCP study area.					
Conditions: Area-specific management directives must provide for reintroduction opportunities, identify potential reintroduction sites, and include measures to prevent non-native species introductions. <sup>4</sup> Any newly found populations shall be evaluated for inclusion in the preserve strategy through acquisition, like exchange, etc.					
<i>Baccharis vanessae</i> Encinitas baccharis FT/CE	92% of major populations	8% of major populations	Preserve design/landscape level with site-specific consideration(s)/ management	Monitoring Plan - Site Specific (1 population) and Management Plans/ Directives	YES
<b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b>					
This species will be covered by the MSCP because 92% 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 specific conservation measures for the species. <sup>3</sup>					
Conditions: Based on BMPs, area-specific management directives must include specific management measures to address the autecology and natural history of the species, measures to reduce the risk of catastrophic fire, and appropriate male/female plant ratios. <sup>4</sup> Management measures to accomplish this may include prescribed fire.					

Table 3-5 (Continued)

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
<i>Berberis nevini</i> Nevin's barberry PE/CE	100% of populations (occurrences are all persisting cultivars)	No natural populations present	Site-specific preserve design and special measures/management	Monitoring Plan - Habitat Based	YES
<p><b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b></p> <p>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 for the species.<sup>3</sup></p> <p>Notes: As 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 San Diego County is dependent on conservation efforts outside the MSCP area.</p>					
<i>Brodiaea filifolia</i> Thread-leaved brodiaea PT/CB	88% of vernal pool habitat, 38% of grassland	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	Monitoring Plan - Habitat Based	YES
<p><b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b></p> <p>This species will be covered by the MSCP because 88% of the vernal pool habitat and 38% 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 for the species if a population is identified in the future.<sup>3</sup></p> <p>Notes: This species is not known to occur within the MSCP area.</p>					

Table 3-5 (Continued)

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
<i>Brodiaea orcuttii</i> Orcutt's brodiaea FSC*/	All major populations in MSCP area, 88% of vernal pool habitat, 38% of grassland	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	Monitoring Plan - Site Specific (4 populations) and Management Plans/Directives	YES
<p><b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b></p> <p>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 a Group A species in the County's proposed BMO.<sup>3</sup></p> <p><b>Notes:</b> Three major populations occur on Miramar military lands 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.</p> <p><b>Conditions:</b> The San Vicente population is identified as a critical population in the County's Subarea Plan and must be 100% conserved. Area-specific management directives must include specific measures to protect against detrimental edge effects.<sup>4</sup></p>					
<i>Calamagrostis densa</i> Dense reed grass none	91% of major populations	9% of major populations	Preserve design/landscape level	Monitoring Plan - Habitat Based	YES



Table 3-5 (Continued)

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
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**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 koelerioides*) which is widespread.

**Conditions:** Trail maintenance/placement to avoid human impacts must be addressed in area-specific management directives.<sup>4</sup> Enhancement opportunities using prescribed fire should be evaluated in 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.<sup>4</sup>

<i>Calochortus dunnii</i> Dunn's mariposa lily FSC*/CR	100% of major populations	No major populations	Preserve design/landscape level with site-specific consideration(s)/management	Monitoring Plan - Habitat Based and Photo Plot and Management Plans/Directives	YES
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**DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED**

This species will be covered by the MSCP because 100% 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>3</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 CEQA and NEPA processes and require approval by CDFG and USFWS.) This species occurs on gabbro and metavolcanic soils, and >43% of the gabbro soils in the MSCP Plan area are within the MHPA.

**Conditions:** At the time permit amendments are proposed, strategies to provide protection for this species within the amendment area must be included.

Table 3-5 (Continued)

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
<i>Caulanthus stenocarpus</i> Slender-pod Jewelflower FSC*/CR	75% of major populations	25% of major populations	Site-specific preserve design and special measures/management	Monitoring Plan - Habitat Based and Incidental and Management Plans/ Directives	YES
<p><b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b></p> <p>This species will be covered by the MSCP because 3 of 4 (75%) of the major populations and 89% of occurrences will be conserved. The Wildcat Canyon, Poway/Sanroex, and Fortuna Mountain populations are identified as critical and will be 100% protected (San Diego County Subarea Plan requirement).</p> <p><b>Note:</b> This taxon has been combined with the more widespread and common <i>Caulanthus heterophyllus</i> var. <i>heterophyllus</i>.</p> <p><b>Conditions:</b> 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.<sup>4</sup> Management measures to accomplish this may include prescribed fire.</p>					
<i>Ceanothus cyaneus</i> Lakeside ceanothus FSC*/	75% of major populations	25% of major populations	Site-specific preserve design and special measures/management	Monitoring Plan - Habitat Based and Photo Plot	YES
<p><b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b></p> <p>This species will be covered by the MSCP because 3 of 4 (75%) 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>3</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>3</sup></p> <p><b>Conditions:</b> 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.</p>					

Table 3-5 (Continued)

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
<i>Ceanothus verrucosus</i> Wart-stemmed ceanothus FSC*/	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 Plans/ Directives	YES
<p><b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b></p> <p>This species will be covered by the MSCP because 67% 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.<sup>3</sup></p> <p><b>Notes:</b> Additional important populations (30% of known populations) are found on military lands (Pt. Loma, Miramar) which are not part of the MSCP.</p> <p><b>Conditions:</b> 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, including specific management measures to address the autecology and natural history of the species and to reduce the risk of catastrophic fire.<sup>4</sup> 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.</p>					
<i>Chorizanthe orcuttiana</i> Orcutt's spinneflower FE/CE	Unknown 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

Table 3-5 (Continued)

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
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**DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED**

This species will be covered by the MSCP because 100% 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 help achieve the specified goals. Any newly found populations shall be evaluated for inclusion in the preserve strategy through acquisition, like exchange, etc.

<i>Cordylanthus orcuttlanus</i> Orcutt's bird's-beak FSC*/	75% of major populations	25% of major populations	Preserve design/landscape level with site-specific consideration(s)/ management	Monitoring Plan - Site Specific (4 populations) and Management Plans/ Directives	YES
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**DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED**

This species will be covered by the MSCP because 3 of 4 (75%) 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% conservation).<sup>5</sup> 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 CEQA and NEPA processes and require approval by CDFG and USFWS.)

Table 3-5 (Continued)

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
<i>Corethrogyne flaginifolia</i> var <i>linifolia</i> Del Mar Mesa sand aster FSC†/	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
<b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b>					
This species will be covered by the MSCP because 48% of major populations and 67% of its potential habitat (southern maritime chaparral) will be conserved. This is a Group A species in the County's proposed BMO. <sup>3</sup>					
Notes: This taxon has been merged with two other <i>Corethrogyne flaginifolia</i> 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, including specific management measures to address the autecology and natural history of the species and to reduce the risk of catastrophic fire. <sup>4</sup> Management measures to accomplish this may include prescribed fire.					
<i>Cupressus forbesii</i> Tecate cypress FSC*/	98% Tecate cypress forest	2% Tecate cypress forest	Preserve design/landscape level	Monitoring Plan - Habitat Based and Photo Plot	YES
<b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b>					
This species will be covered by the MSCP because 98% 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, including specific management measures to address the autecology and natural history of the species and to reduce the risk of catastrophic fire. <sup>4</sup> Management measures to accomplish this may include prescribed fire.					

Table 3-5 (Continued)

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
<i>Dudleya blachmaniae</i> ssp. <i>brevifolia</i> Short-leaved dudleya FSC/CE	100% of major populations	No major populations	Site-specific preserve design and special measures/management	Monitoring Plan - Site Specific (3 populations) and Management Plans/ Directives	YES
<b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b>					
This species will be covered by the MSCP because 100% 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 for the species. <sup>3</sup>					
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. <sup>4</sup>					
<i>Dudleya variegata</i> Variegated dudleya FSC*/	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

**Table 3-5 (Continued)**

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
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**DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED**

This species will be covered by the MSCP because 56% of major populations and 75% 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 for the species.<sup>3</sup>

**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.<sup>4</sup> Some populations now occur within a major amendment area (Otay Mountain), and 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 will have public review through CEQA and NEPA processes and require approval by CDFG and USFWS.)

<i>Dudleya viscida</i> Sticky dudleya FSC*/	100% of major population	No major populations	Preserve design/landscape level	Monitoring Plan - Habitat Based	YES
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**DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED**

This species will be covered by the MSCP because 100% 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.<sup>4</sup>

<i>Ericameria palmeri</i> ssp. <i>palmeri</i> Palmer's ericameria FSC*/	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
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Table 3-5 (Continued)

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
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**DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED**

This species will be covered by the MSCP because 66% 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 for the species.<sup>3</sup>

**Notes:** Impacts 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).

<i>Eryngium aristulatum</i> 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
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**DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED**

This species will be covered by the MSCP because 82% of major populations and 88% 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 that become part of the National Wildlife Refuge will be managed for the recovery of this species.

**Conditions:** Area-specific management directives must include specific measures to protect against detrimental edge effects.<sup>4</sup>



Table 3-5 (Continued)

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
<i>Erysimum ammophilum</i> Coast wallflower FSC*/	92% of southern foredunes, 67% of southern maritime chaparral	8% of southern foredunes, 33% of southern maritime chaparral	Preserve design/landscape level	Monitoring Plan - Habitat Based and Incidental	YES
<b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b>					
This species will be covered by the MSCP because 92% of southern foredunes and 67% of southern maritime chaparral vegetation communities (that are potential habitat for this species) will be conserved.					
<b>Notes:</b> Populations from San Diego County are now being treated as <i>Erysimum capitatum</i> ssp. <i>capitatum</i> , a common species of wallflower.					
<i>Ferocactus viridescens</i> San Diego barrel cactus FSC*/	81% of major populations	19% of major populations	Preserve design/landscape level	Monitoring Plan - Habitat Based and Photo Plot	YES
<b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b>					
This species will be covered by the MSCP because 81% of major populations will be conserved. This is a Group B species in the County's proposed BMO. <sup>3</sup>					
<b>Notes:</b> This is an abundant species that will be protected at varying levels in several subareas: Carmel Mountain, 64%; East Elliott, 75%; Marron Valley, 90%; Mission Trails Regional Park, 94%; Otay Mesa, 70%; Otay River Valley, 100%; Sweetwater Reservoir, 100%; Sycamore Canyon-Fanita Ranch, 50%.					
<b>Conditions:</b> Area-specific management directives must include measures to protect this species from edge effects and unauthorized collection; <sup>4</sup> directives should also include appropriate fire management/control practices to protect against a too frequent fire cycle.					

Table 3-5 (Continued)

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
<i>Fremontodendron mexicanum</i> Mexican flannelbush PE/CR	Insufficient distribution data and unknown conservation level; therefore, the species is not covered by the Plan				NO
<i>Githopsis diffusa</i> spp. <i>filicaulis</i> Mission Canyon bluecup FSC*/	Unknown conservation level and therefore not covered 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
<b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b>					
<p>This species will be covered by the MSCP because 66% 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 for the species.<sup>3</sup></p>					
<p><b>Conditions:</b> MSCP coverage of this species requires avoidance of populations in the Otay River Valley through sensitive design and development of the active recreation 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 included (proposed take authorization amendments will be subject to public review through CEQA 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, 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.<sup>4</sup></p>					

Table 3-5 (Continued)

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
<i>Hemizonia floribunda</i> Tecate tarplant FSC*/	Unknown conservation levels and therefore not covered by the Plan.				NO
<i>Lepechinia cardiophylla</i> Heart-leaved pitcher sage FSC*/	85% of major populations	15% of major populations	Preserve design/landscape level	Monitoring Plan - Habitat Based and Photo Plot	YES
<b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b>					
<p>This species will be covered by the MSCP because 85% of major populations will be conserved. The Iron Mountain population falls within a 100% conservation area. The other three major populations fall within the County's area of undetermined development status and will receive 80-100% conservation based on the County's proposed BMO (Group A species).<sup>3</sup></p> <p><b>Conditions:</b> 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).<sup>4</sup></p>					
<i>Lepechinia ganderi</i> Gander's pitcher sage FSC*/	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 Plans/ Directives	YES

**Table 3-5 (Continued)**

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
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**DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED**

This species will be covered by the MSCP because 100% 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 for the species.<sup>3</sup>

**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).<sup>4</sup> One of the five major populations occurs within a major amendment area (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 CEQA and NEPA processes and require approval by CDFG and USFWS).

<i>Lotus nuttallianus</i> Nuttall's lotus FSC*/	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
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**DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED**

This species will be covered by the MSCP because 80-100% of the major populations will be conserved and 92% 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.<sup>4</sup>

Table 3-5 (Continued)

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
<i>Monardella hypoleuca</i> ssp. <i>lanata</i> Felt-leaved monardella none	89% of major populations	11% of major populations	Preserve design/landscape level with site-specific consideration(s)/ management	Monitoring Plan - Habitat Based and Photo Plot and Management Plans/ Directives	YES
<p><b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b></p> <p>This species will be covered by the MSCP because 89% of major populations will be conserved. The Sequan Peak and Iron Mountain populations are identified as critical populations which will be 100% 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 for this species.<sup>3</sup> This is a Group A species in the County's proposed BMO.<sup>5</sup></p> <p><b>Notes:</b> Persistence of this species in San Diego County depends, in part, on conservation efforts outside the MSCP area.</p> <p><b>Conditions:</b> Area-specific management directives must also include measures to protect against detrimental edge effects and uncontrolled access.<sup>4</sup></p>					
<i>Monardella illoides</i> ssp. <i>viminea</i> Willow 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
<p><b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b></p> <p>This species will be covered by the MSCP because 100% 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 protection 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>3</sup></p> <p><b>Conditions:</b> Area-specific management directives must include specific measures to protect against detrimental edge effects.</p>					

Table 3-5 (Continued)

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
<i>Mulla clevelandii</i> San Diego goldenstar FSC*/	73% of major populations and 38% of grasslands	27% of major populations	Preserve design/landscape level with site-specific consideration(s)/ management	Monitoring Plan - Site Specific (4 populations)	YES
<p><b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b></p> <p>This species will be covered by the MSCP because 8 of 11 major populations, 125 of 144 occurrences, and 38% of the grassland vegetation community will be conserved. The City of San Diego will avoid populations within its 25% 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>3</sup></p> <p>Conditions: Area-specific management directives must include monitoring of the transplanted population(s) and specific measures to protect against detrimental edge effects to this species.<sup>4</sup></p>					
<i>Myosurus minimus ssp. apus</i> Little mousetail FSC*/	The MSCP preserve does not include adequate habitat to conserve this species.				NO
<i>Navarrella fossalis</i> Prostrate navarrella 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

Table 3-5 (Continued)

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
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**DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED**

This species will be covered by the MSCP because 63% of the one major population and 88% 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>3</sup>

**Notes:** State and Federal transportation agencies will need to avoid or adequately mitigate the impacts to this species from the extension of State Route 125. 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 will 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 (1) for pollinators and (2) as part of the hydrological system for the vernal pools.

<i>Nolina interrata</i> Dehesa bear-grass PT/CE	90-100% of major populations	<10% of major populations	Preserve design/landscape level	Monitoring Plan - Habitat Based and Photo-Plot and Management Plans/ Directives	YES
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**DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED**

This species will be covered by the MSCP because: 100% of the McInty Mountain population will be conserved; half of the Sequan Peak population is under protected ownership, and 80-100% of the other half will be conserved; and 80-100% of the Dehesa Peak population will be conserved under the County's proposed BMO (Group A species).<sup>3</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 for this species.<sup>3</sup>

**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<sup>4</sup> and management measures to maintain surrounding habitats for pollinators.

Table 3-5 (Continued)

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
<i>Opuntia parryi</i> var. <i>serpentina</i> Snake cholla FSC*/	75% of major populations and 67% of southern maritime chaparral	25% of major populations and 33% of southern maritime chaparral	Preserve design/landscape level with site-specific consideration(s)/ management	Area-specific Management Directives	YES
<p><b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b></p> <p>This species will be covered by the MSCP because 75% of major populations and 67% 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 for this species.<sup>3</sup></p> <p><b>Notes:</b> Additional important populations are found on military lands (Pt. Loma) which are not part of the MSCP.</p> <p><b>Conditions:</b> Area-specific management directives must include (1) specific measures to protect against detrimental edge effects to this species<sup>4</sup> and (2) translocation, where appropriate. The Otay Ranch project GDP and RMP require protection of 80% of existing occurrences and transplantation of any impacted occurrences to restored areas of comparable size.</p>					
<i>Orcuttia californica</i> California Orcutt grass FE/CE	86% of only major population, 88% of vernal pool habitat	14% of only major population may be impacted, but vernal pool habitat is subject to no net loss of function or value and 404(b)1 guidelines	Preserve design/landscape level with site-specific consideration(s)/ management	Area-specific Management Directives (wetlands)	YES



Table 3-5 (Continued)

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
<b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b>					
<p>This species will be covered by the MSCP because 86% 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 for this species.<sup>3</sup></p> <p>Notes: A population outside of the MHPA (J-13N pool complex) is conserved within 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.</p> <p>Conditions: Area-specific management directives must include specific measures to protect against detrimental edge effects to this species<sup>4</sup> and measures to maintain surrounding habitats for pollinators.</p>					
<i>Pinus torreyana</i> Torrey pine FSC*/	100% of native population	No major populations	Preserve design/landscape level	Monitoring Plan - Habitat Based	YES
<b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b>					
<p>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.</p>					
<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

Table 3-5 (Continued)

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
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**DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED**

This species will be covered by the MSCP because 88% 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 has now been included. This population will be conserved and managed by the City of San Diego. Vernal pools included in the National Wildlife Refuge will be managed for recovery of this species.

**Conditions:** Area-specific management directives 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	9% 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
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Table 3-5 (Continued)

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
<b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b>					
<p>This species will be covered by the MSCP because 91% of the one major population will be conserved, and federal wetland regulations will provide additional protection for vernal pool habitats.</p>					
<p>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 its narrow endemics list. Vernal pools included in the National Wildlife Refuge will be managed for recovery of this species. The RMP for the Olay Ranch project includes protection for vernal pools with sensitive species.</p>					
<p>Conditions: Area-specific management directives must include measures to: (1) protect against detrimental edge effects; (2) maintain surrounding habitat for pollinators; and (3) maintain pool watershed areas.</p>					
<p><i>Rosa minutifolia</i> Small-leaved rose /CE</p>	<p>Only known MSCP occurrence transplanted into preserve, propagation and restoration in appropriate habitat</p>	<p>Only known MSCP occurrence transplanted into preserve</p>	<p>Site-specific preserve design and special measures/management</p>	<p>Area-specific Management Directives (1 population)</p>	<p>YES</p>

Table 3-5 (Continued)

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
<b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b>					
There is only one known occurrence of this species in the MSCP on Otay Mesa near Derrery 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 a part of the California Terraces project:					
<ol style="list-style-type: none"> <li>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 3-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 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, acceptable to the Department, and under supervision of a qualified botanist. The rose propagation shall take place over a 2-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 habitat management lands as prescribed by a qualified botanist.</li> <li>There shall be no removal of the rose population for a 2-year period commencing from the date of planting propagated rose plants at the approved locations.</li> <li>The progress of the rose mitigation effort shall be assessed through measurements and observations for a period of at least 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 3-year period shall include: (i) measurable annual growth on a minimum of 50% of the rose plants; and (ii) flowering of 50% 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.</li> </ol>					
<i>Satureja chandleri</i> San Miguel savory None	80-100% of future identified occurrences	0-20%	Preserve design/landscape level with site-specific consideration(s)/management	Monitoring Plan - Habitat Based and Photo Plot	YES

Table 3-5 (Continued)

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
<b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b>					
<p>This species will be covered by the MSCP because it will be conserved at the 80+% level. The County will add this species to Group A or B of the County's proposed BMO.<sup>3</sup></p> <p><b>Conditions:</b> 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+% level.</p>					
<i>Senecio ganderi</i> Gander's butterweed FSC*/CR	90-100% of major populations	<10% of major populations	Preserve design/landscape level with site-specific consideration(s)/ management	Monitoring Plan - Habitat Based and Photo Plot	YES
<b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b>					
<p>This species will be covered by the MSCP because 90-100% of known major populations will be conserved. Half of the Sequan Peak population is under protected ownership; 80-100% of the other half will be conserved, and 90-100% of the McGinty Mountain population will be conserved. The El Cajon Mountain (between El Capitan and San Vicente Reservoir) population is identified as critical which requires 100% protection based on the San Diego County Subarea Plan. Occurrences in the County's areas of undetermined development status will receive 80-100% protection under the County's proposed BMO (Group A species).<sup>3</sup></p> <p><b>Notes:</b> This species is often associated with gabbro soils which will be conserved at the 43+% level. Acquisition of the remaining portions of the population on Sequan Peak is important, and efforts are underway by CDFG.</p> <p><b>Conditions:</b> Area-specific management directives must include: (1) specific measures to protect against detrimental edge effects to this species,<sup>4</sup> and (2) measures to address the autecology and natural history of the species.</p>					
<i>Solanum tenuilobatum</i> Narrow-leaved nightshade FSC*/I	90% of major populations	10% of major populations	Preserve design/landscape level with site-specific consideration(s)/ management	Monitoring Plan - Habitat Based and Photo Plot and Management Plans/ Directives	YES

**Table 3-5 (Continued)**

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
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**DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED**

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

**Notes:** This species is now taxonomically included in *Solanum xanthi*.

<i>Tetracoccus dioicus</i> Parry's tetracoccus FSC*/	80-100% of major populations	0-20% of major populations	Preserve design/landscape level	Monitoring Plan - Habitat Based and Photo Plot	YES
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**DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED**

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

**Notes:** Fourteen of 33 (43%) small populations are already under protected ownership. The Dehesa population is identified as critical and will be 100% protected in the San Diego County Subarea Plan. Occurrences in the County's areas of undetermined development status will receive 80-100% protection under the County's proposed BMO (Group A species).<sup>3</sup> 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+% 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.<sup>4</sup>

Table 3-5 (Continued)

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
<b>ANIMALS</b>					
<b>Invertebrates</b>					
<i>Euphydryas editha quino</i> Quino checkerspot butterfly FE/	Unknown conservation level and lack of assurances that Plan will protect preferred habitat (mesa tops/grassland) and connection to known source populations; therefore, not covered by the Plan.				NO
<i>Euphyes vestris harbisoni</i> Harbison's dun skipper FSC*/	Unknown conservation level and therefore not covered by the Plan based on insufficient distribution and life history data.				NO
<i>Lycaena hermes</i> Hermes copper butterfly FSC*/	Unknown conservation level and therefore not covered by the Plan based on insufficient distribution and life history data.				NO
<i>Mitoura thornei</i> Thorne's hairstreak butterfly FSC*/	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
<b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b>					
This species will be covered by the MSCP because 98% of the major populations of its larval host plant, Tecate cypress, will be conserved. Most of the Tecate cypress forest occurs on BLM lands.					
<b>Conditions:</b> Area-specific management directives must manage for the host species (Tecate cypress). <sup>4</sup> Management measures to accomplish this may include prescribed fire.					

Table 3-5 (Continued)

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
<i>Panoquina errans</i> Salt marsh skipper FSC*/	93% of salt marsh habitat (1,700± acres)	7% of salt marsh habitat (120± acres) 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	Monitoring Plan - Habitat Based	YES
<b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b>					
This species will be covered by the MSCP because 93% of its potential habitat will be conserved.					
<b>Conditions:</b> Area-specific management directives must include measures to: (1) control exotic weeds and invertebrate predators, where appropriate, and (2) control access to saltmarsh habitat. <sup>4</sup>					
<i>Branchinecta sandiegoensis</i> San Diego 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 (wetlands)	YES



Table 3-5 (Continued)

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
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**DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED**

This species will be covered by the MSCP because 88% 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.<sup>4</sup>

<i>Streptocephalus woottoni</i> 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 (wetlands)	YES
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**DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED**

This species will be covered by the MSCP because 88% 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.<sup>4</sup>

Table 3-5 (Continued)

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
<b>Reptiles and Amphibians</b>					
<i>Bufo microscaphus californicus</i> 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
<b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b>					
<p>This species will be covered by the MSCP because the MHPA preserves all known locations, and 90-95% 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. Participating jurisdictions' guidelines and ordinances and state and federal wetland regulations will provide additional habitat protection resulting in no net loss of wetlands.</p>					
<p>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.</p>					
<p>Conditions: Area-specific management directives must address the maintenance of arroyo toad through control of nonnative 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 preserve lands. Area-specific management directives must include measures to control human impacts to the species within the preserve (e.g., public education, patrol, etc.)<sup>4</sup> Take authorization holders must minimize impacts to upland habitats that are: within the MHPA and are within 1 km of riparian habitat that supports or is likely to support arroyo toad.</p>					

Table 3-5 (Continued)

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
<i>Rana aurora draytoni</i> California red-legged frog FT/SSC	72% of riparian habitats and freshwater marsh (9,500± acres)	28% of riparian habitats and freshwater 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
<p><b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b></p> <p>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% 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.</p> <p>Conditions: Area-specific management directives must provide for management of any new discovered populations within the preserve.<sup>4</sup></p>					
<i>Clemmys marmorata pallida</i> Southwestern pond turtle FSC*/SSC	72% of riparian habitats and freshwater marsh (9,501± acres)	28% of riparian habitats and freshwater marsh (3,800± 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

Table 3-5 (Continued)

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
<b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b>					
This species will be covered by the MSCP because 72% 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 areas with 1500 feet 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 will be controlled/removed, and habitat restoration/enhancement measures will be implemented.					
<i>Cnemidophorus hyperythrus beldingi</i> Orange-throated whiptail FSC*/SSC	59% of potential habitat (129,600± acres) - 64% of coastal sage scrub, 60% of maritime succulent scrub, 54% of chaparral, 67% of southern maritime chaparral, 44% of coastal sage/chaparral - 62% of known point occurrences	41% of potential habitat (89,800± acres) - 38% of known point occurrences	Preserve design/landscape level	Monitoring Plan - Site Specific (pit traps at 12 locations)	YES

Table 3-5 (Continued)

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
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DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 39% of its potential habitat and 62% 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.<sup>4</sup>

<i>Phrynosoma coronatum blainvillei</i> San Diego horned lizard FSC*/SSC	60% of potential habitat (132,000± acres) - 64% of coastal sage scrub, 54% of chaparral, 44% of coastal sage/chaparral, 80% of riparian scrub - 63% of known point occurrences	40% of potential habitat (89,700± acres) - 37% of known point occurrences	Preserve design/landscape level	Monitoring Plan - Site Specific (pit traps at 12 locations)	YES
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DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 60% of its potential habitat and 63% 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.<sup>4</sup>

Table 3-5 (Continued)

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
<b>Birds</b>					
<i>Pelecanus occidentalis californicus</i> California brown pelican FE/CB	91% of roosting and foraging habitat (2,900± 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± 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
<b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b>					
<p>This species will be covered by the MSCP because 91% of roosting and foraging habitat within the MSCP Plan area will be conserved. No new development of beaches is authorized which will result in 90-95% protection of beach habitat that is outside of intensively used beach areas.</p>					
<p><b>Notes:</b> 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 it forages primarily in coastal ocean waters and San Diego Bay.</p>					

Table 3-5 (Continued)

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
<i>Figgetta rufescens</i> Reddish egret FSC*/	92% of potential habitat (2,700± acres)- 93% of southern coastal saltmarsh, 99% of saltpan, 88% of natural flood channel	8% of potential habitat (230± 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
<p><b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b></p> <p>This species will be covered by the MSCP because 90% of its potential habitat will be conserved.</p> <p><b>Notes:</b> 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 in 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.</p>					
<i>Plegadis chihi</i> White-faced ibis FSC*/SSC	80% of potential habitat (1,200± acres) - 68% of freshwater marsh, 88% of natural flood channel; additionally 1,800± acres of agricultural land will be conserved	20% of potential habitat (300± 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

**Table 3-5 (Continued)**

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
<b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b>					
<p>This species will be covered by the MSCP because 78% 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.</p>					
<p><b>Conditions:</b> Area-specific management directives must include specific measures to protect against detrimental edge effects to this species.<sup>4</sup></p>					
<i>Branta canadensis</i> Canada goose none	8,200± acres of potential habitat	1,100± 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± acres of its potential habitat will be conserved, including open water areas for loafing. Participating jurisdictions' guidelines and ordinances and state and federal wetland regulations will provide additional habitat protection resulting in no net loss of wetlands.



Table 3-5 (Continued)

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
<i>Haliaeetus leucocephalus</i> Bald eagle FT/CE	89% of potential foraging habitat (wetlands, 5,719± acres), 68% of freshwater marsh, 92% of open water. In addition, foraging opportunities on 100,000+ acres will be conserved.	11% of potential foraging habitat (wetlands, 692± 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
<b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b>					
This species will be covered by the MSCP because 89% 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.					
<i>Circus cyaneus</i> Northern harrier /SSC	42% of potential nesting habitat (12,000± acres) - 93% of saltmarsh, 68% of freshwater marsh, and 38% of grasslands - 85,000± acres of potential foraging habitat	58% of potential nesting habitat (16,300± 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

**Table 3-5 (Continued)**

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
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**DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED**

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

**Notes:** Harriers tolerate patchiness in their habitat, exhibit nest area fidelity, and forage within 4 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 jurisdictions' 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 4 miles of the known nesting site will be conserved. Upland habitat enhancement opportunities exist at the D Street fill area.

**Proctor Valley -** Proctor Valley includes a historical nesting location (1970s). Over 80% 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: (1) manage agricultural and disturbed lands (which become part of the preserve) within 4 miles of nesting habitat to provide foraging habitat; (2) include an impact avoidance area (900 feet or maximum possible within the preserve) around active nests; and (3) include measures for 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 preserve.

Table 3-5 (Continued)

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
<i>Accipiter cooperii</i> Cooper's hawk /SSC	59% of potential foraging habitat (133,400± acres) (47% of oak woodland, 58% of oak riparian, 64% of coastal sage scrub, 54% of chaparral, 44% of coastal sage scrub/chaparral - 57% of known localities) and 52% (5,705± 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 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% of potential foraging habitat, 52% of potential nesting habitat, and 57% of known occurrences will be conserved.

**Conditions:** In the design of future projects within the Metro-Lakeside-Jamul segment, 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 active nests and minimization of disturbance in oak woodlands and oak riparian forests.<sup>4</sup>

Table 3-5 (Continued)

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
<i>Buteo swainsoni</i> Swainson's hawk /CT	22% of foraging habitat (11,600± acres) - 38% of grassland, 6% of agricultural fields	78% of foraging habitat (42,000± acres)	Preserve design/landscape level	Monitoring Plan - Habitat Based (10 grassland locations)	YES
<b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b>					
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.					
<b>Notes:</b> The plan will not adversely affect the species' 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.					
<i>Buteo regalis</i> Ferruginous hawk FSC*/SSC	22% of foraging habitat (11,600± acres) - 38% of grassland, 6% of agricultural fields	78% of foraging habitat (42,000± acres)	Preserve design/landscape level	Monitoring Plan - Habitat Based (10 grassland locations)	YES
<b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b>					
This species will be covered because 11,600± acres of potential foraging habitat will be conserved. This species is an uncommon winter visitor which forages in grasslands and agricultural fields.					
<b>Notes:</b> The plan will not adversely affect the species' 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.					

**Table 3-5 (Continued)**

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
<p><i>Aquila chrysaetos</i> Golden eagle BEP/SSC</p>	<p>53% of potential foraging/nesting habitat (coastal sage scrub, chaparral, grassland and oak woodland) (139,000± 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.</p>	<p>Viability of 4 of the 11 active nesting territories (partially or fully within the plan area)</p>	<p>Preserve design/landscape level with site-specific consideration(s)/management</p>	<p>Monitoring Plan - Habitat Based and Management Plans/Directives (site-specific nest territories)</p>	<p>YES</p>

Table 3-5 (Continued)

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
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**DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED**

This species will be covered by the MSCP because 53% of potential foraging and nesting habitat will be conserved. Local populations are not critical to, and the plan will not adversely affect, the species' 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 within the MSCP study area:

1. Rancho San Diego- development under the plan will result in <10% loss of habitat in the nesting territory; nesting territory should remain viable.
2. East Otay Mountain- development under the plan will result in <5% loss of habitat in the nesting territory; nesting territory should remain viable.
3. Sequan Peak- between 30% and 40% of the habitat in the nesting territory could be developed; the nesting territory may not remain viable, but the steepness of the areas that could be developed may preclude enough development to keep the territory viable.
4. Loveland Reservoir- development under the plan will result in <20% loss of habitat in the nesting territory; nesting territory should remain viable.
5. Lake Jennings- between 40% and 60% of the habitat in the nesting territory could be developed under the plan; the nesting territory may not remain viable.
6. El Capitan- development under the plan will result in <15% loss of habitat within the nesting territory; the territory should remain viable.
7. San Vicente Reservoir- development under the plan will result in <30% 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 slopes); the nesting territory may not be viable.
- 8 and 9. San Pasqual (two nesting territories)- development under the plan will result in <20% loss of habitat in the nesting territory; both nesting territories should remain viable.
10. Santee- development under the plan could result in 30%-40% loss of habitat in the nesting territory; nesting territory may not remain viable, although a significant amount of foraging habitat (Miramar and Mission Trails) occurs just outside of the territory and within normal foraging distances.
11. Lake Hodges- development under the plan will result in <20% loss of habitat in the nesting territory; 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.<sup>4</sup> Area-specific management directives must also include monitoring of nest sites to determine use/success.

Table 3-5 (Continued)

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
<i>Falco peregrinus anatum</i> American peregrine falcon FE/CE	61% of historic nesting sites - 58% of foraging habitat (89,400± acres) - 93% southern coastal saltmarsh, 99% of saltpan, 68% of freshwater marsh, 92% of open water, 88% of natural flood channel, 64% of coastal sage scrub, 38% of grassland	39% of foraging habitat (57,000± 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
<p><b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b></p> <p>This species will be covered by the MSCP because more than 89,000 acres of potential foraging habitat will be conserved.</p> <p>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.</p>					
<i>Rallus longirostris levipes</i> Light-footed clapper rail FE/CE	93% of potential habitat (1,700± acres of southern coastal saltmarsh)	7% of potential habitat (120± acres) - wetlands are subject to no net loss of function and value and 404(b)1 guidelines	Site-specific preserve design and special measures/management	Management Plans/Directives	YES

Table 3-5 (Continued)

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
<b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b>					
This species will be covered by the MSCP because 93% of its habitat will be conserved.					
<b>Notes:</b> 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.					
<b>Conditions:</b> 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. <sup>4</sup>					
<i>Charadrius alexandrinus nivosus</i> Western snowy plover FT/SSC	93% of potential habitat (650± acres) - 99% of saltpan, 90-95% of beach outside of intensively used recreational beaches	7% of potential habitat (46± 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
<b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b>					
This species will be covered by the MSCP because 93% 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% conservation of beach habitat that is outside of intensively used beach areas.					
<b>Notes:</b> 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.					
<b>Conditions:</b> 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. <sup>4</sup> 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.					



Table 3-5 (Continued)

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
<i>Charadrius montanus</i> Mountain plover C/SSC	22% of potential foraging habitat (11,600± acres) - 38% of grassland, 6% of agricultural fields	78% of potential foraging habitat (41,100± acres)	Preserve design/landscape level	Monitoring Plan - Habitat Based	YES
<p><b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b></p> <p>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 species' long-term survival.</p> <p><b>Notes:</b> This species is an uncommon winter visitor (primarily in the Tijuana River Valley) that forages in grasslands and agricultural fields. The MSCP conservation requirement for the Tijuana River Valley area is primarily 94%, with a small area identified as 75%.</p> <p><b>Conditions:</b> Area-specific management directives for the Tijuana River Valley should specifically address the habitat requirements for this species.<sup>4</sup></p>					
<i>Numenius americanus</i> Long-billed curlew FSC*/SSC	24% of potential foraging habitat (13,500± acres) - 93% of southern coastal saltmarsh, 99% of saltpan, 38% of grassland, 6% of agricultural fields	76% of potential foraging habitat (42,800± 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

Table 3-5 (Continued)

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
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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 species' 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.

<i>Sterna elegans</i> Elegant tern FSC*/SSC	93% of potential habitat (650± acres) - 99% of saltpan, 90-95% of beach outside of intensively used recreational beaches	7% of potential habitat (46± 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
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DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because 93% 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% 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 is 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.<sup>4</sup> 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.

Table 3-5 (Continued)

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
<i>Sterna antillarum browni</i> California least tern FE/CE	93% of potential habitat (650± acres) -99% of saltpan, 90- 95% of beach outside of intensively used recreational beaches	7% of potential habitat (46± acres) - wetlands are subject to no net loss of function and value and 404(b)1 guidelines	Preserve design/landscape level	Area-specific Management Directives	YES
<p><b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b></p> <p>This species will be covered by the MSCP because 93% of its potential habitat will be conserved.</p> <p><b>Notes:</b> No new development of beaches is authorized, which will result in 90-95% 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 is not part of the MSCP. Additional important foraging habitat (bay waters) is under the jurisdiction of the Port Authority and the military and is 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.</p> <p><b>Conditions:</b> 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-case basis by the wildlife agencies.</p>					

Table 3-5 (Continued)

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
<i>Speotyto cunicularia hypugaea</i> Burrowing owl FSC*/SSC	4 known locations (Spring Canyon, northeast of Brown Field, Lake Hodges), 8 known locations within major amendment area (South County segment), 4,000± acres of known habitat	8 known locations (Otay Ranch, San Pasqual Valley, and South County at border), 5,000± acres of known habitat	Site-specific preserve design and special measures/management	Monitoring Plan (10 grassland locations) and Area-specific Management Directives	YES

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

This species will be covered by the MSCP because 5,770± acres of potential and 4,000± 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 Santa 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 MHPA, 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.

Table 3-5 (Continued)

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
<p>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; and establishing a 300 foot-wide impact avoidance area (within the preserve) around occupied burrows.<sup>4</sup></p>					
<p>Eight known burrowing owl locations 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 in preserve design during the permit amendment process.</p>					
<p><i>Empidonax traillii estinus</i> Southwestern willow flycatcher FE/CE</p>	<p>76% of potential habitat (4,900± acres) - 93% of riparian woodland, 80% of riparian scrub - 88% of known localities</p>	<p>24% of potential habitat (1,400± acres) - wetlands are subject to no net loss of function and value and 404(b)1 guidelines</p>	<p>Preserve design/landscape level with site-specific consideration(s)/management</p>	<p>Monitoring Plan -Habitat Based and Area-specific Management Directives</p>	<p>YES</p>
<p><b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b></p>					
<p>This species will be covered by the MSCP because 4,900± acres (76%) of potential habitat will be conserved.</p>					
<p><b>Conditions:</b> 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)</p>					

Table 3-5 (Continued)

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
<i>Campylorhynchus brunneicapillus couesi</i> Coastal cactus wren FSC*/SSC	60% of maritime succulent scrub habitat in large contiguous blocks (850± acres)	40% of maritime succulent scrub habitat in small isolated blocks (580± acres)	Site-specific preserve design and special measures/management	Monitoring Plan - Site Specific (31 locations) and Management Plans/ Directives	YES
<b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b>					
<p>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% (850 ± acres) of potential habitat will be conserved, allowing for expansion of the populations with management.</p>					
<p><b>Notes:</b> 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, as much of these areas has been heavily impacted by OHVs. The City of San Diego already has acquired habitat in Spring Canyon as mitigation. The City of San Diego and the wildlife agencies have agreed to make restoration of maritime succulent scrub in Spring Canyon a high priority. The USFWS also will make restoration of maritime succulent scrub a high priority on any lands it acquires in Spring Canyon.</p>					
<p><b>Conditions:</b> 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.</p>					

Table 3-5 (Continued)

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
<i>Polioptila californica californica</i> California gnatcatcher FT/SSC	73,300± acres of coastal sage scrub and interdigitated habitats in an interconnected network of preserves	67,300± acres of coastal sage scrub and interdigitated habitats	Preserve design/landscape level	Area-specific Management Directives (31 locations)	YES
<b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b>					
<p>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% of the core areas where the species occurs (Olay, San Miguel, Mission Trails, Santee, Kearny Mesa, Poway, San Pasqual, and Lake Hodges) will be conserved, and 65% (1,819 of 2,814) of the known locations will be conserved.</p> <p><b>Notes:</b> 68% (57,874 acres) of habitat supporting core gnatcatcher populations, 70% (30,273 acres) of Very High value and 62% High value (4,609 acres) gnatcatcher coastal sage scrub habitat will be conserved. Critical habitat linkages between core areas will be conserved in a functional manner, with a minimum of 75% of the habitat within identified linkages conserved. Populations of this species also occur on military lands which are not part of the MSCP.</p> <p><b>Conditions:</b> 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 clearing of occupied habitat within the cities' MHPAs and within the County's Biological Resource Core Areas may occur between March 1 and August 15.</p>					
<i>Sialia mexicana</i> Western bluebird none	59% of potential habitat (15,500± acres) - 58% of oak riparian forest, 47% of oak woodland, 38% of grassland	41% of potential habitat (12,100± 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

Table 3-5 (Continued)

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
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**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 MSCP Plan area.

<i>Vireo bellii pusillus</i> Least Bell's vireo FE/CE	81% of potential habitat (1,700± acres) - 93% of riparian woodland, 58% of oak riparian forest - 82-100% of major populations	19% of potential habitat (400± 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
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**DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED**

This species will be covered by the MSCP because 1,700± acres (81%) 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.<sup>4</sup> Any clearing of occupied habitat must occur between September 15 and March 15 (i.e., outside of the nesting period).



Table 3-5 (Continued)

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
<i>Almophila ruficeps canescens</i> California rufous-crowned sparrow FSC*/SSC	61% of potential habitat (73,600± 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± acres) - 29% of mapped localities	Preserve design/landscape level	Monitoring Plan - Habitat Based	YES
<p><b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b></p> <p>This species will be covered by the MSCP because 61% (73,600± acres) of potential habitat (including 71% of mapped localities) will be conserved.</p> <p><b>Notes:</b> This species is tolerant of edge effects, small habitat patches, low shrub volume, and short-term habitat disturbance.</p> <p><b>Conditions:</b> 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.<sup>4</sup></p>					
<i>Passerculus sandwichensis beldingi</i> Belding's Savannah sparrow FSC*/CE	93% of potential habitat (1,700± acres of southern coastal saltmarsh) - 71% of mapped localities	7% of potential habitat (120± 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 and Management Plans/Directives	YES

Table 3-5 (Continued)

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
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**DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED**

This species will be covered by the MSCP because 93% (1,700± acres) of potential habitat (including 71% of mapped localities) will be conserved, and the remaining acres (120±) 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.<sup>4</sup>

<i>Passerculus sandwichensis rostratus</i> Large-billed Savannah sparrow FSC*/SSC	93% of potential habitat (1,700± acres of southern coastal saltmarsh) - 50% of mapped localities	7% of potential habitat (120± 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 and Management Plans/Directives	YES
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**DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED**

This species will be covered by the MSCP because 93% (1,700± acres) of potential habitat (including 50% of mapped localities) will be conserved, and the remaining acres (120±) 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.<sup>4</sup>

Table 3-5 (Continued)

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
<i>Animodramus savannarum</i> Grasshopper sparrow none	This species will not be covered by the MSCP because insufficient information is available to determine if adequate habitat is conserved.			NO	
<i>Agelaius tricolor</i> Tricolored blackbird FSC*/SSC	77% of breeding habitat (4,800+ acres) - 68% of freshwater marsh, 80% of riparian scrub - 59% of known localities	23% of breeding habitat (1,400+ acres)	Preserve design/landscape level	Management Plans/ Directives	YES
<p><b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b></p> <p>This species will be covered by the MSCP because 77% of potential habitat (including 59% 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%. 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.</p> <p><b>Conditions:</b> 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.<sup>4</sup></p>					

Table 3-5 (Continued)

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
<b>Mammals</b>					
<i>Corynorhinus townsendii pallescens</i> Townsend's western big-eared bat FSC*/SSC	Unknown/Insufficient data on distribution and life history.				NO
<i>Eumops perotis californicus</i> California mastiff bat FSC*/SSC	Unknown/Insufficient data on distribution and life history.				NO
<i>Perognathus longimembris pacificus</i> Pacific pocket mouse FE/SSC	Unknown/Only 3 to 4 known populations in Southern California. Insufficient data on distribution and life history.				NO
<i>Taxidea taxus</i> American badger /SSC	58% of potential habitat (82,500± acres) - 38% of grassland, 64% of coastal sage scrub, 44% of coastal sage/chaparral	42% of potential habitat (58,300± acres)	Preserve design/landscape level	Monitoring Plan - Habitat Based	YES

Table 3-5 (Continued)

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE AUTHORIZATION STANDARDS
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**DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED**

This species will be covered by the MSCP because 82,500± acres (58%) of its potential habitat will be conserved.

**Notes:** This species has a wide range, and the plan will not adversely affect the species' 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.<sup>4</sup>

<i>Felis concolor</i> Mountain lion /protected	81% of core areas 5, 6, 7, 8, 9, 11, and 12 (105,000± acres) - connected by linkages C, D, N	19% of core areas (24,000± acres)	Preserve design/landscape level	Monitoring Plan - Habitat Based and Corridor Sites	YES
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**DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED**

This species will be covered by the MSCP because 81% of the core areas (105,000± acres) that 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 species' long-term survival. The criteria used to define core and linkage areas involve 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 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 and road crossings/undercrossings are included in subarea plans.

Table 3-5 (Continued)

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) <sup>1</sup>	CONSERVED <sup>2</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 & FEDERAL TAKE 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± acres) - connected by linkages C, D, N	19% of core areas (24,000± acres)	Preserve design/landscape level	Monitoring Plan - Habitat Based and Corridor Sites	YES
<b>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</b>					
This species will be covered by the MSCP because 81% of the core areas (105,000± acres) that support its habitat will be conserved.					
<b>Notes:</b> 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 involve 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 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 and road crossings/ undercrossings are included in subarea plans.					

**Table 3-5 (Continued)**

**SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP**

<sup>1</sup> **Status (Federal/State)**

FE=Federally Endangered

PE=Proposed for federal listing as Endangered

FT=Federally Threatened

PT=Proposed for federal listing as Threatened

C=Candidate for federal listing

FSC\* = Federal species of concern; formerly Category 2 or Category 3 candidate for federal listing.

FSC† = Federal species of concern; proposed federal rule to list as Endangered or Threatened has been withdrawn.

Shading indicates federally and state listed species, species proposed for listing, candidate species, and NCCP target species.

BEPA = Bald Eagle Protection Act

CE = State Endangered

CR = State Rare

CT = State Threatened

SSC = State Species of Special Concern

protected = moratorium on hunting

none = no federal or state status

<sup>2</sup> This column indicates the conservation level for 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.

<sup>3</sup> Measures to conserve population of species on the MSCP Plan's narrow endemic list must be incorporated into the subarea plans that 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 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 that: (1) requires avoidance to the maximum extent possible; (2) allows for a maximum 20% encroachment into a population if total avoidance is not possible; and (3) requires mitigation at a 1:1 to 3:1 ratio (in-kind) for impacts if (1) avoidance and (2) minimization of impacts would result in no reasonable use of the property. The County requirements for (1) avoidance, (2) minimization, and (3) mitigation are specifically described in the County's proposed Biological Mitigation Ordinance (BMO).

<sup>4</sup> 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.

<sup>5</sup> The County's proposed BMO includes a list of sensitive plant species (Groups A and B) that require special consideration in project design. The County will conserve Groups A and B species using a process that: (1) requires avoidance to the maximum extent possible; (2) allows for a maximum 20% encroachment into a population if total avoidance is not possible; and (3) requires mitigation at a 1:1 to 3:1 ratio (in-kind) for impacts if (1) avoidance and (2) minimization of impacts would result in no reasonable use of the property.

Source: 1996 MSCP GIS database. Military lands excluded from analysis.