



Final

Multiple Species Conservation Program

MSCP Plan

August 1998



SUSAN GOLDING
MAYOR

San Diego's beauty and character is in large part due to the incredible natural resources that make it such a unique and wonderful place. Many may take our beaches, bays, mesas, canyons and river valleys for granted, but they will not be here for our children to enjoy, or their children after that, if we do not act now to protect and preserve them. That is why The Multiple Species Conservation Program (MSCP) was created.

The MSCP is an historic accord established to strike a critical balance between development and the protection of valuable habitat. Together, the City of San Diego, the U.S. Department of the Interior, the California Resources Agency, and members of the environmental and building and development communities have worked to develop a sound plan to put aside habitat of endangered species while making it easier and less expensive for most property owners to develop their land. When it is complete, San Diego will be home to the largest urban preserve in the country.

Secretary of the Interior Bruce Babbitt has called this plan a "model for the country...that truly demonstrates that the preservation of ecosystems and the unique plants and wildlife they support is compatible with growth and development."

The plan calls for land to be set aside in a major biological preserve. Once this preserve is dedicated, property owners can develop their land without having to undergo a lengthy, costly state and federal environmental permit process. It is estimated that the plan will cut one to seven years off this process. Under the current system of environmental review and protection, environmental impacts of development projects are mitigated for on a species-by-species, project-by-project basis, rather than in a comprehensive manner. Most government leaders, developers and environmentalists agree that this present system does not accomplish its intended goal as well as it could. So, all levels of government, members of the environmental community, building industry representatives and property owners have cooperated to achieve this plan, including: the Sierra Club; the Building Industry Association; the Endangered Habitats League; and the Alliance for Habitat Conservation, an association of developers and property owners, as well as the County of San Diego and other cities in the County.

For too long many of these different interests have viewed business development and environmental protection as enemies. Under this plan, all of these groups are working together as allies to do what is best for our environment, our economy and our quality of life.

A handwritten signature in black ink that reads "Susan Golding".

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FINAL MSCP PLAN

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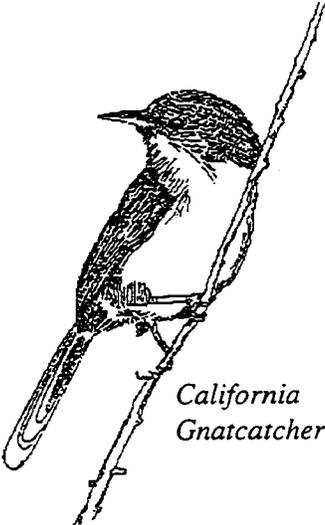
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1.0 Introduction



*California
Gnatcatcher*

1.0 INTRODUCTION

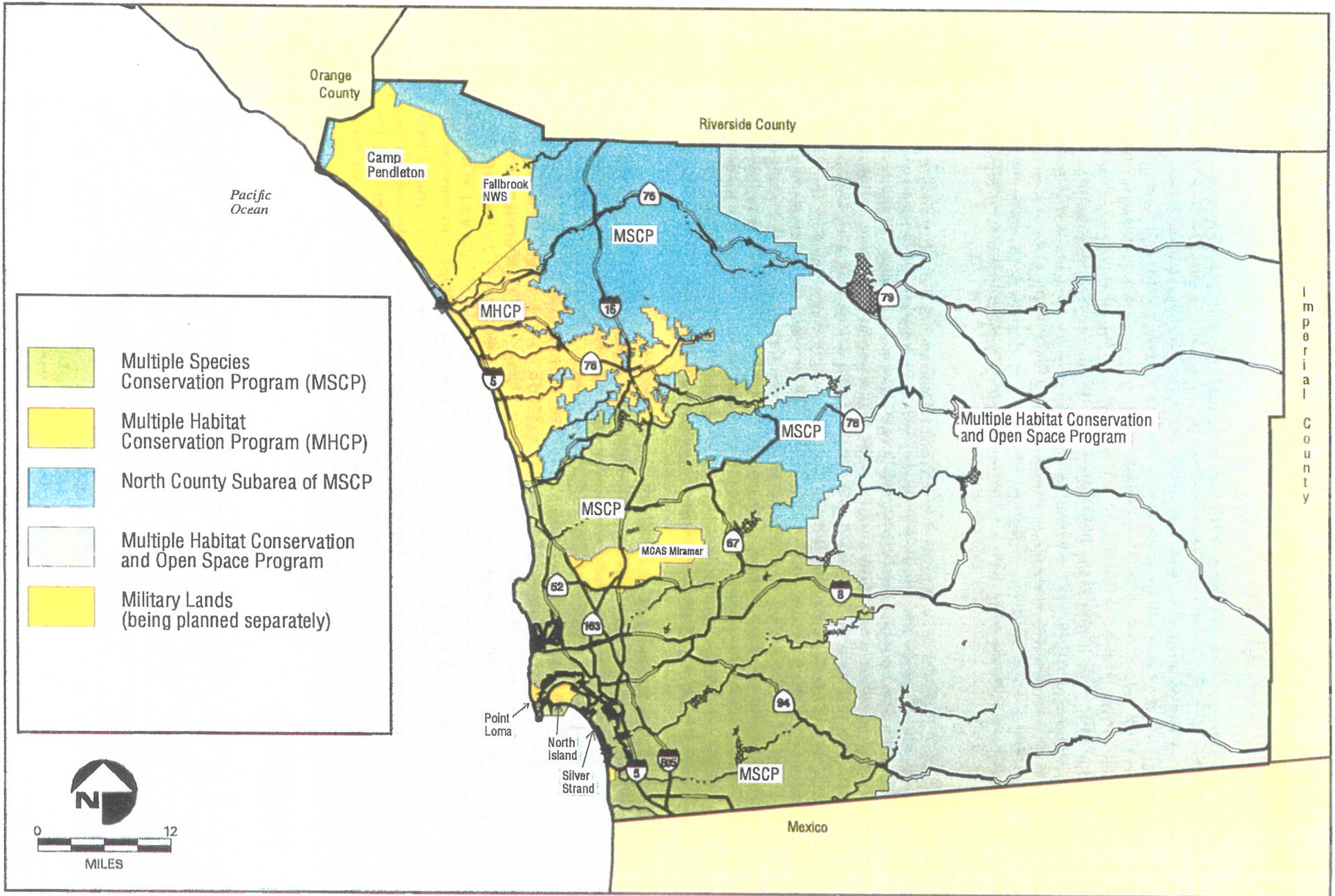
The Multiple Species Conservation Program (MSCP) is a comprehensive habitat conservation planning program that addresses multiple species habitat needs and the preservation of native vegetation communities for a 900-square-mile area in southwestern San Diego County. It is one of three subregional habitat planning efforts in San Diego County (Figure 1-1), which contribute to preservation of regional biodiversity through coordination with other habitat conservation planning efforts throughout southern California. The MSCP will allow local jurisdictions (Figure 1-2) to maintain land use control and development flexibility by planning a regional preserve system that can meet future public and private project mitigation needs. The MSCP Plan does not impose major new restrictions on land use. Rather, the plan is designed to streamline and coordinate existing procedures for review and permitting of project impacts to biological resources.

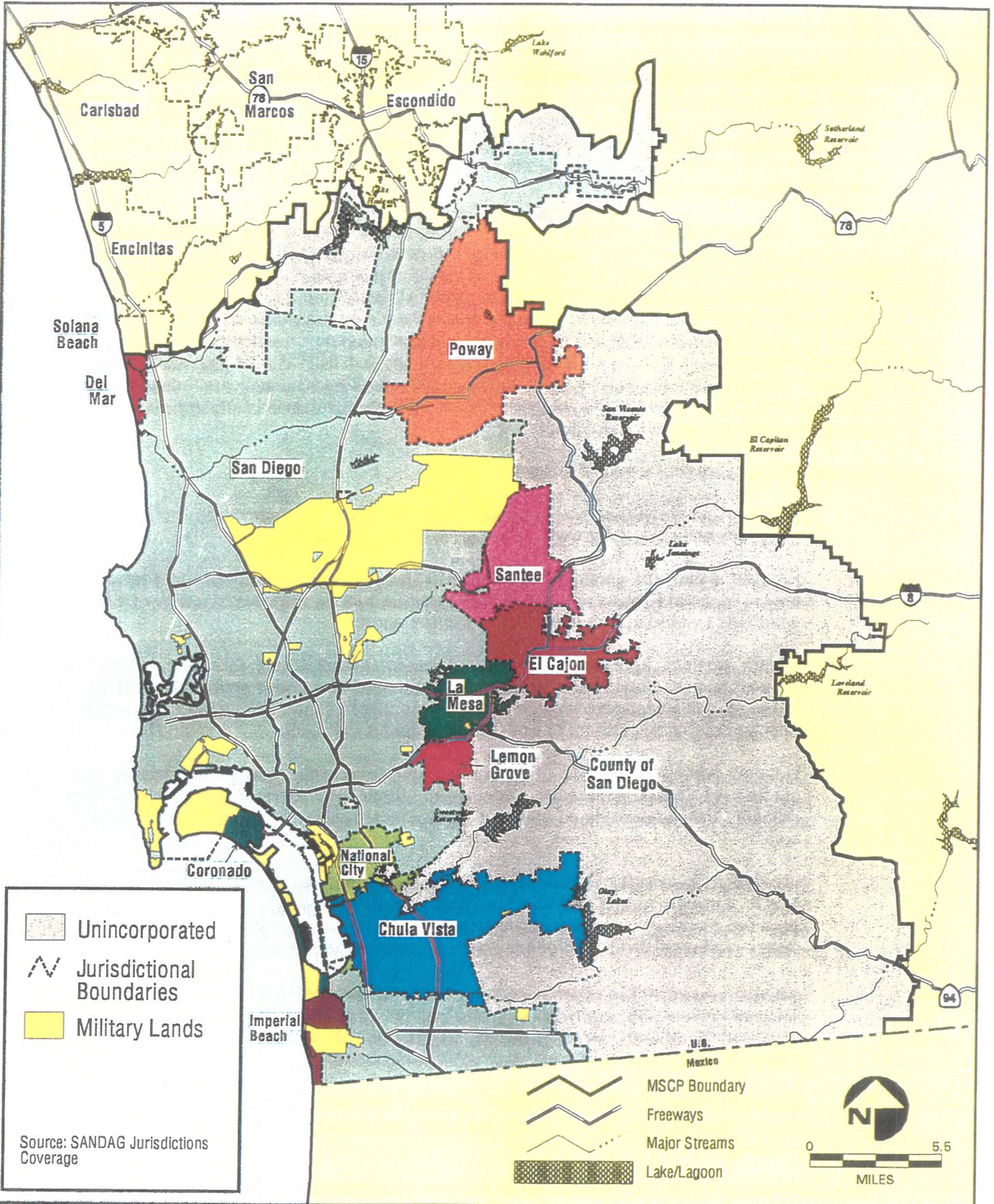
The proposed MSCP preserve will protect biodiversity, enhance the quality of life in the San Diego region, and enhance the region's attractiveness as a location for business. The MSCP has been developed cooperatively by local jurisdictions and special districts with the goal of conserving native vegetation communities and associated species, rather than focusing preservation efforts on one species at a time. Historic loss of native vegetation has resulted in many species of wildlife becoming increasingly rare, and in some cases threatened with extirpation or extinction. Without a multiple species conservation plan, species may continue to be added to the federal and state threatened and endangered species lists and thereby constrain future development, which would affect employment and the economic health of the region. The MSCP provides direct economic benefits by reducing constraints on future development outside the preserve and decreasing the costs of compliance with federal and state laws protecting biological resources.

Local jurisdictions and special districts will implement their respective portions of the MSCP Plan through subarea plans, which describe specific implementing mechanisms for the MSCP. The MSCP subarea plans contribute collectively to the conservation of vegetation communities and species in the MSCP study area. The combination of the subregional MSCP Plan and subarea plans will serve as a multiple species Habitat Conservation Plan (HCP) pursuant to Section 10(a)(1)(B) of the federal Endangered Species Act and a Natural Community Conservation Plan (NCCP) pursuant to the California NCCP Act of 1991 and the state Endangered Species Act. The participating jurisdictions and special districts are submitting these plans to the U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFG) in support of applications for permits and management authorizations, respectively, to impact listed species and other species of concern. The conservation and management responsibilities, guarantees of implementation, and corresponding authorizations for all parties will be contained in an implementing agreement between the entity responsible for each subarea plan and the wildlife agencies (USFWS and CDFG).

1.1 OBJECTIVES

The MSCP will help achieve many objectives regarding the growth and economy of the San Diego region. The MSCP preserve system will replace the currently fragmented, project-by-project biological mitigation areas, which by themselves do not contribute adequately to the continued existence of sensitive species or to maintenance of natural biodiversity. Through a comprehensive conservation program, the MSCP will resolve significant environmental issues, especially the haphazard and widespread loss of habitat, which have constrained and increased the cost of private and public development. By





Jurisdictions Within MSCP Study Area

FIGURE

1-2

identifying priority areas for conservation and other areas for future development, the MSCP will facilitate and improve certainty of development outside the preserve area. Finally, by preserving an extensive network of habitat and open space, the MSCP will contribute to the region's quality of life. When combined with other elements, such as air quality and an efficient transportation network, habitat and open space can help retain and attract new businesses to the region.

In these ways, the MSCP is consistent with the Regional Growth Management Strategy, initiated by the voters in 1988 (Proposition C) to deal with growth issues on an areawide basis and protect the quality of life. The MSCP also helps achieve many of the recommendations made by the Governor's Growth Management Council and reiterated by *Beyond Sprawl: New Patterns of Growth to Fit the New California*, a report prepared jointly by the Bank of America, California Resources Agency, Greenbelt Alliance, and Low Income Housing Fund in 1995. In particular, the MSCP will "provide greater certainty in determining where new development should and should not occur" and "establish a legal and procedural framework that will create the desired certainty and send the right economic signals to investors."

The specific objectives of the MSCP are to:

1. Establish and maintain a workable balance between preservation of natural resources and regional growth and economic prosperity;
2. Provide a plan for general public benefit through open space conservation and access to natural preserves for passive recreation and an improved quality of life, which also would attract new business to the region;
3. Obtain permits, agreements, and management authorizations for the taking of covered species outside the MSCP preserve boundaries under Section 10(a)(1)(B) of the federal Endangered Species Act, Section 2081 of the California Endangered Species Act, and Section 2835 of the California NCCP Act;
4. Develop and implement a program for the conservation and management of habitats of federal and state endangered, threatened, or rare species, thereby reducing the human-related causes of species extirpation within the MSCP study area;
5. Provide a framework for developing subarea plans to directly implement the MSCP through identification of a Multi-Habitat Planning Area, within which preserve planning is focused or a preserve is defined, and through implementing criteria and regulations and/or voluntary agreements with property owners;
6. Establish a partnership among federal, state, and local agencies of government to facilitate review and approval of public and private sector land development and construction projects by expediting acquisition of permits and management authorizations from federal and state wildlife agencies; and
7. Describe a finance and acquisition strategy that spreads implementation costs equitably among the federal, state, and local beneficiaries and which is affordable to the region.

To achieve these objectives, specific policies have been developed through discussion in public forums that included the major stakeholders in the process. These policies have been integrated into this plan (Sections 3 through 7).

1.2 PURPOSE AND NEED

Urbanization of San Diego's natural lands is severely threatening the biodiversity and long-term biological viability of this unique region. The MSCP study area contains much of the current or proposed urbanization in the county; consequently, its remaining native habitats are the most threatened by development. Many native vegetation communities in the study area are considered sensitive by federal, state, or local agencies because they have been severely reduced in distribution as a result of urbanization. Some of these communities, such as coastal bluff scrub, maritime succulent scrub, southern maritime chaparral, Torrey pine forest, and Tecate cypress forest, are found primarily in San Diego County, and all or a large portion of their U.S. distribution falls within the MSCP study area.

San Diego County contains over 200 plant and animal species that are federally and/or state listed as endangered, threatened, or rare; proposed or candidates for listing; or otherwise considered sensitive. Over half of these species occur in the MSCP study area, although this area comprises only about 20% of the total acreage in the county. Recent federal listings and proposed listings of species in the study area underscore the importance and urgency of habitat preservation in order to avoid species extinctions and the need for further listings.

At the same time, the federal listing of the California gnatcatcher as threatened has restricted the region's ability to accommodate future growth and development in coastal habitats. The special rule under Section 4(d) of the federal Endangered Species Act allows some development to continue, restricted to 5% of all coastal sage scrub habitat in the range of the gnatcatcher, while habitat conservation plans are underway. The MSCP targets the highest quality coastal sage scrub for preservation, while allowing development of less important sage scrub areas. Once approved, the MSCP Plan and constituent subarea plans will replace the Section 4(d) restrictions on impacts to coastal sage scrub.

1.2.1 Biological Goal

The ecosystem in southwestern San Diego County consists of a diverse assemblage of vegetation communities/habitats that support a wide array of plant and animal species. The MSCP was developed to conserve both the diversity and function of this ecosystem through the preservation and adaptive management of large blocks of interconnected habitat and smaller areas that support rare vegetation communities (e.g., vernal pools). The MSCP also was designed to conserve specific species at levels that meet the take authorization issuance standards of the federal and state Endangered Species Acts and the NCCP Act. Maintaining ecosystem functions and persistence of extant populations of covered species is the biological goal of the MSCP.

Meeting this goal will require a variety of actions on the part of participating federal, state, and local agencies. The component parts critical to achieving this goal will be evaluated regularly using a variety of techniques, while the overall MSCP performance with respect to the biological goal will be evaluated based on the data collected and analyzed as part of the MSCP Biological Monitoring Plan.

It is anticipated that fluctuation of species populations, including recolonization, will continue to occur. The size (171,000+ acres), configuration, diversity, connectivity, and adaptive management of the preserve will allow the anticipated fluctuations to occur while still meeting the biological goal of the MSCP.

1.3 FEDERAL AND STATE REQUIREMENTS

1.3.1 Federal Requirements

Each subarea plan prepared in compliance with this subregional plan fulfills the mandatory requirements of a Habitat Conservation Plan pursuant to Section 10(a)(1)(B) of the federal Endangered Species Act, as amended. Section 10(a) allows the issuance of permits for the incidental take of threatened or endangered species and allows the inclusion of unlisted species in the permit so long as conservation actions for these species treat them as if they were listed. To fulfill the requirements of a Habitat Conservation Plan, each subarea plan must include the following information:

- Impacts likely to result from the proposed taking of one or more federally listed wildlife species;
- Measures the applicant will undertake to monitor, minimize, and mitigate such impacts; the funding that will be made available to undertake such measures; and the procedures to deal with unforeseen circumstances;
- Alternative actions the applicant considered that would not result in take, and the reasons why such alternatives are not being utilized; and
- Additional measures the USFWS may require as necessary or appropriate for purposes of the plan.

1.3.2 State Requirements

The State of California may authorize for management purposes the take of a species listed by the state as rare, threatened, or endangered under Section 2081 of the California Fish and Game Code. The state also can authorize take of unlisted species under Section 2835 of the California Fish and Game Code. Requirements of state management authorizations are similar to those required for a federal Habitat Conservation Plan.

The CDFG and California Resources Agency prepared NCCP guidelines for the southern California coastal sage scrub region, which were recognized and incorporated by the USFWS for listing the California gnatcatcher as threatened (under the special rule in Section 4(d) of the federal Endangered Species Act). This MSCP Plan and constituent subarea plans have been prepared pursuant to the NCCP guidelines and meet requirements of the NCCP Act.

1.4 OVERVIEW OF PLANNING PROCESS

The MSCP began in July 1991 as a way to address the mitigation needs of the City of San Diego Metropolitan Wastewater Department (formerly the Clean Water Program) for planned improvements to the Metropolitan Sewerage System. From this initial project, the MSCP has evolved into a comprehensive plan to address the impacts of regional growth on native species and their habitats within the study area.

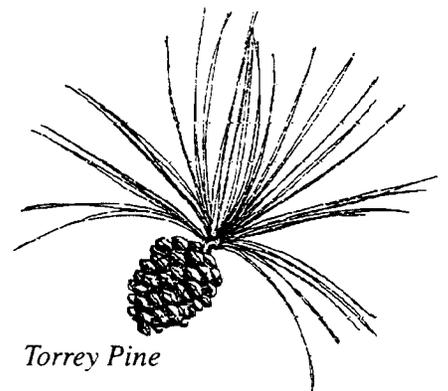
Cities and the County of San Diego, public facility providers, federal and state wildlife agencies, and representatives of the environmental and development communities and other interested parties form the MSCP Working Group. The Working Group has served as the focal point for discussion of proposed plan policies and as the vehicle for building consensus around the recommendations contained in this plan.

The MSCP Policy Committee of elected officials from jurisdictions throughout the county was formed to provide input on the preferred preserve design and fiscal policies, as well as to provide policy level review and coordination of MSCP Plan development and adoption. A representative from the Department of the Navy was included as an ex-officio member. Policy directives from the MSCP Policy Committee, City of San Diego Council, and County of San Diego Board of Supervisors, and responses from the wildlife agencies, are incorporated into this plan as well as individual subarea plans.

Biological, land use, and ownership data were collected for the study area and input into a geographic information system at a scale of 1:24,000. Biological resources were prioritized or ranked to maximize conservation efforts and use of acquisition funds, and a gap analysis was performed to identify existing protection of high priority resources, based on public ownership and planned land use information. Using this information, four sample focused planning area configurations were developed for the purposes of analyzing and comparing land acquisition costs and the level of biological conservation. These alternatives, along with the No Action/No Project alternative, are discussed in the Environmental Impact Report (EIR)/Environmental Impact Statement (EIS) for the MSCP Plan. The results of these analyses were considered by the participating jurisdictions and special districts, in consultation with the wildlife agencies, property owners, and environmental groups, and many noticed public hearings and workshops were held to develop the proposed preserve configuration in this plan.

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2.0 Description of MSCP Study Area



Torrey Pine

2.0 DESCRIPTION OF MSCP STUDY AREA

The MSCP study area occupies approximately 900 square miles (582,243 acres) in southwestern San Diego County and includes the City of San Diego, portions of the unincorporated County of San Diego, ten additional city jurisdictions, and several independent special districts. The area is known for its natural beauty and mild climate, which combine to make the region a popular destination for recreation, tourism, and new development. The region has sustained one of the highest rates of growth in the country over the past two decades.

The southern boundary of the MSCP study area is the international border with Mexico. National Forest lands form much of the eastern boundary, the Pacific Ocean lies to the west, and the northern boundary is the San Dieguito River valley. Marine Corps Air Station Miramar, the Point Loma Naval Complex, and other military lands are within the MSCP study area but are being planned separately. Conservation planning also is being conducted to the north of the study area by a coalition of seven cities in conjunction with the San Diego Association of Governments (SANDAG) (the Multiple Habitat Conservation Program). The County of San Diego is preparing an MSCP subarea plan for the unincorporated area of north San Diego County and is sponsoring the Multiple Habitat Conservation and Open Space Program in the eastern portion of San Diego County. When implemented, the MSCP and these other subregional plans will create an interconnected habitat preserve system throughout the 4,200-square-mile county. These programs have been coordinated in all key scientific, public policy, and finance/acquisition strategy aspects and have been designed to complement planning efforts in Orange and Riverside counties.

The area's topography, soils, and climate combine to influence vegetative associations, which in turn support characteristic plant and animal species. The topography is diverse and includes broad, flat valleys; deep canyons; perennially flowing rivers and intermittent streams; moderately and steeply sloped terrain; rolling foothills and nearly level mesas; coastal bluffs; and a series of coastal bays, inlets, and lagoons. Elevations range from mean sea level along the coast to approximately 3,700 feet above mean sea level in inland portions of the study area.

2.1 VEGETATION COMMUNITIES AND SPECIES

A goal of this MSCP Plan is to conserve and protect the rich diversity of vegetation communities and associated plants and animals in southwestern San Diego County. By prioritizing conservation of the most sensitive of these resources, as described below, the MSCP also will protect habitat for over 1,000 native and nonnative plant species; more than 380 species of fish, amphibians, reptiles, birds, and mammals; and thousands of invertebrate species (see also Section 3).

2.1.1 Vegetation Communities

Approximately 41% of the MSCP study area is developed or urbanized, and about 5% is in agriculture. The rest (54% or 315,940 acres) is covered by several distinct vegetation communities or habitat types which were mapped into a geographic information system using aerial photography, satellite imagery, helicopter overflights, and focused field surveys (Figure 2-1). With the exception of eucalyptus woodland, nonnative grassland, and some forms of chaparral, these native vegetation communities are considered sensitive or rare. Some receive federal and state regulatory protection, such as wetland habitats, coastal sage scrub, and other scrub habitats.

Examples of the rarity of native vegetation communities in the MSCP study area include the following:

- Approximately 70% of coastal sage scrub and greater than 90% of other sensitive coastal vegetation communities in San Diego County have been lost to development;
- All or a large portion of the U.S. distribution of many of these sensitive coastal communities lies within the MSCP study area; and
- Approximately 84% of the U.S. distribution of Tecate cypress occurs on Otay Mountain in the MSCP study area.

2.1.2 Species Evaluated for the MSCP

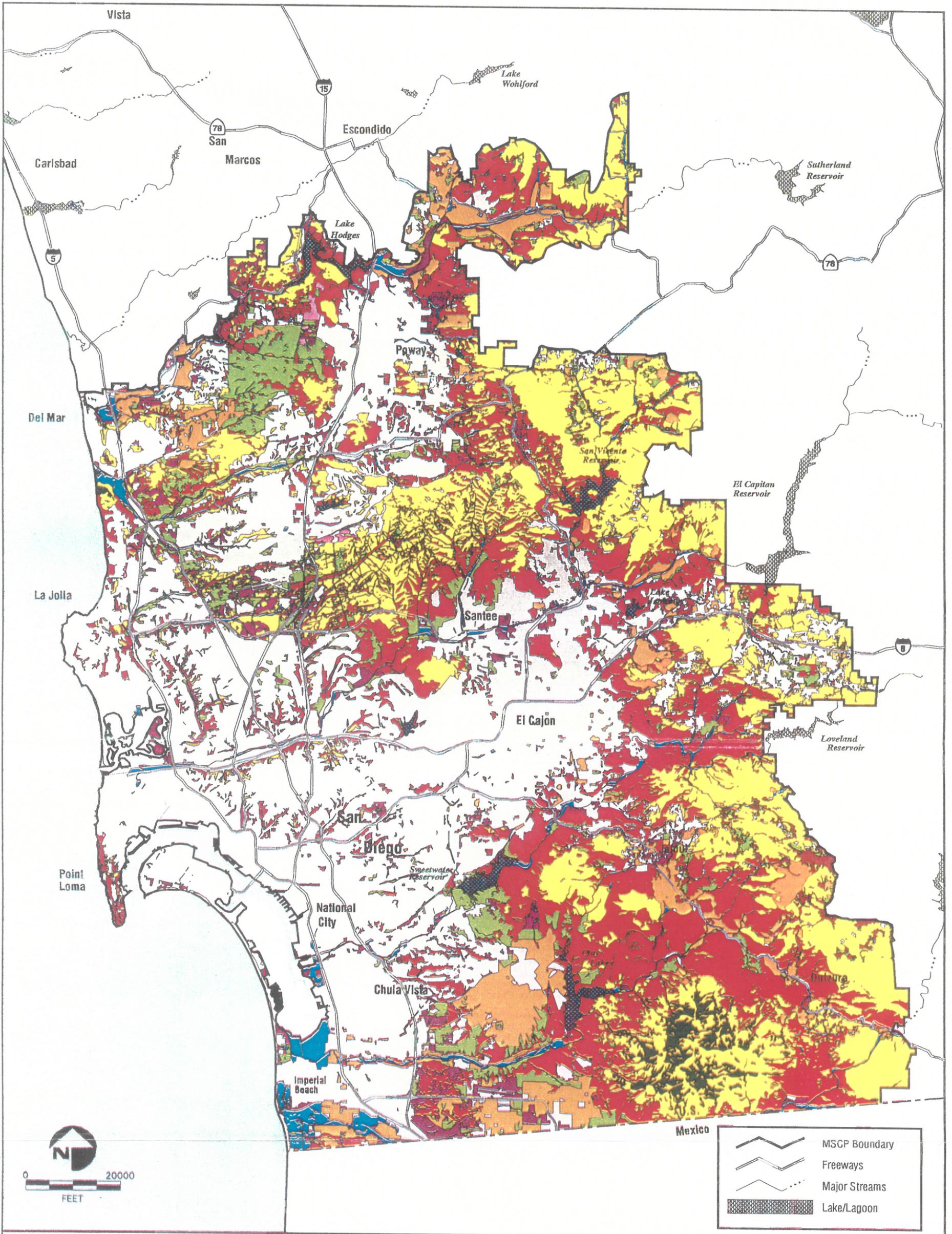
The MSCP preserve has been designed to protect interconnected blocks of different vegetation communities or habitat types and maximize protection of the region's most sensitive species. Less than half of the habitat lands (areas occupied by native and nonnative vegetation communities) in the MSCP study area have been surveyed for the presence of various species, and many of these species have secretive habits, abbreviated blooming seasons, or are otherwise difficult to survey. Therefore, protecting large, interconnected habitat areas is the best way of ensuring long-term preservation of some species.

San Diego County has a greater number of threatened and endangered species than anywhere in the continental United States. Over 200 plant and animal species occur in the county that are federally and/or state listed as endangered, threatened, or rare; proposed or candidates for listing; or otherwise considered sensitive. Over half of these species occur in the MSCP study area, although the study area comprises only 20% of the county. The USFWS recommended that the habitat requirements of 93 of these species (48 plants and 45 animals) be used for designing the MSCP preserve (Table 2-1) because they are indicators of the range of habitats and biodiversity in the study area. Preserve design efforts were focused on 40 species that are federally or state listed, federal candidates for listing, proposed for federal listing, and the 3 NCCP target species. While not all of the evaluated species (referred to as "target species" in the MSCP Public Review Draft) are proposed to be adequately protected by the MSCP Plan, the plan attempts to maximize the presence of these species and their habitats in the preserve.

The MSCP Plan, with the accompanying subarea plans, serves as a Natural Community Conservation Plan (NCCP). The NCCP pilot program area is the coastal sage scrub habitat region of southern California, and the California gnatcatcher, coastal cactus wren, and orange-throated whiptail are the NCCP target species for coastal sage scrub. These animals, which also were evaluated in this plan, serve as "umbrella" species because they are widely distributed and, thus, habitat conservation for these species will provide habitat for many other coastal sage scrub species.



San Diego Horned Lizard



	Coastal Sage Scrub (117,505 acres)		Grassland (28,373 acres)		Beach/Foredunes (1,390 acres)		Developed (214,511 acres)
	Chaparral (113,117 acres)		Riparian/Wetlands (23,230 acres)		Eucalyptus Woodland (1,633 acres)		Agriculture (28,547 acres)
	Coastal Sage Scrub Chaparral (3,877 acres)		Oak Woodland (5,600 acres)		Disturbed (23,244 acres)		Shallow Bay (9,581 acres)
			Coniferous Forest (5,881 acres)				

Source: Aerial photo interpretation from June 1990 photos

Table 2-1

SPECIES EVALUATED FOR MSCP

Common Name	Scientific Name	Status* (Federal/State)	Group**	Habitat***
San Diego thorn-mint	<i>Acanthomintha ilicifolia</i>	PE/CE	1	G, CSS, CHP
Shaw's agave	<i>Agave shawii</i>	FSC*/	2	CSS, bluff scrub
San Diego ambrosia	<i>Ambrosia pumila</i>	FSC*/	2	G
Aphanisma	<i>Aphanisma blitoides</i>	FSC*/	2	Maritime scrub
Del Mar manzanita	<i>Arctostaphylos glandulosa var. crassifolia</i>	FE/	1	CSS, SMC
Otay manzanita	<i>Arctostaphylos otayensis</i>	FSC*/	2	CHP
Dean's milk vetch	<i>Astragalus deanei</i>	FSC*/	2	CSS
Coastal dunes milk vetch	<i>Astragalus tener var. titi</i>	PE/CE	1	Coastal strand/foredunes
Encinitas baccharis	<i>Baccharis vanessae</i>	FT/CE	1	CHP
Thread-leaved brodiaea	<i>Brodiaea filifolia</i>	PT/CE	1	VP, G, seeps, wet meadows
Orcutt's brodiaea	<i>Brodiaea orcuttii</i>	FSC*/	2	G, VP, seeps, wet meadows
Dunn's mariposa lily	<i>Calochortus dunnii</i>	FSC*/CR	1	G, CHP (openings)
Slender-pod jewelflower	<i>Caulanthus stenocarpus</i>	FSC*/CR	1	burned CHP
Lakeside ceanothus	<i>Ceanothus cyaneus</i>	FSC*/	2	CHP
Wart-stemmed ceanothus	<i>Ceanothus verrucosus</i>	FSC*/	2	CHP, SMC
Orcutt's spineflower	<i>Chorizanthe orcuttiana</i>	FE/CE	1	SMC
Salt marsh bird's-beak	<i>Cordylanthus maritimus ssp. maritimus</i>	FE/CE	1	SM
Orcutt's bird's-beak	<i>Cordylanthus orcuttianus</i>	FSC*/	2	Maritime scrub
Del Mar Mesa sand aster	<i>Corethrogyne filaginifolia var. linifolia</i>	FSC† /	2	CHP (openings), CSS, SMC
Tecate cypress	<i>Cupressus forbesii</i>	FSC*/	2	CHP, cypress wldd., drainages
Short-leaved dudleya	<i>Dudleya blochmaniae ssp. brevifolia</i>	FSC† /CE	1	CHP openings, SMC
Variiegated dudleya	<i>Dudleya variegata</i>	FSC*/	2	CSS
Sticky dudleya	<i>Dudleya viscida</i>	FSC*/	2	CSS, CHP
Palmer's ericameria	<i>Ericameria palmeri ssp. palmeri</i>	FSC*/	2	Riparian (edges), CSS
San Diego button-celery	<i>Eryngium aristulatum var. parishii</i>	FE/CE	1	VP, G
Coast wallflower	<i>Erysimum ammophilum</i>	FSC*/	2	Bluff scrub
San Diego barrel cactus	<i>Ferocactus viridescens</i>	FSC*/	2	CSS, CHP, maritime scrub
Mexican flannelbush	<i>Fremontodendron mexicanum</i>	PE/CR	1	CHP, cypress wldd., drainages
Mission Canyon bluecup	<i>Githopsis diffusa ssp. filicaulis</i>	FSC*/	2	CSS
Otay tarplant	<i>Hemizonia conjugens</i>	PE/CE	1	G, CSS

Table 2-1 (Continued)

SPECIES EVALUATED FOR MSCP

Common Name	Scientific Name	Status* (Federal/State)	Group**	Habitat***
Tecate tarplant	<i>Hemizonia floribunda</i>	FSC*/	2	CHP
Heart-leaved pitcher sage	<i>Lepechinia cardiophylla</i>	FSC*/	2	CHP
Gander's pitcher sage	<i>Lepechinia ganderi</i>	FSC*/	2	CHP
Nuttall's lotus	<i>Lotus nuttallianus</i>	FSC*/	2	Foredunes, CSS
Willow monardella	<i>Monardella linoides ssp. viminea</i>	PE/CE	1	RS, washes/floodchannel
San Diego goldenstar	<i>Muilla clevelandii</i>	FSC*/	2	G, CHP (openings)
Little mouseltail	<i>Myosurus minimus ssp. apus</i>	FSC*/	2	VP
Prostrate navarretia	<i>Navarretia fossalis</i>	PT	1	VP
Dehesa bear-grass	<i>Nolina interrata</i>	PT/CE	1	CHP, CSS
Snake cholla	<i>Opuntia parryi var. serpentina</i>	FSC*/	2	CSS, maritime scrub
California Orcutt grass	<i>Orcuttia californica</i>	FE/CE	1	VP
Torrey pine	<i>Pinus torreyana ssp. torreyana</i>	FSC*/	2	SMC
San Diego mesa mint	<i>Pogogyne abramsii</i>	FE/CE	1	VP
Otay Mesa mint	<i>Pogogyne nudiuscula</i>	FE/CE	1	VP
Small-leaved rose	<i>Rosa minutifolia</i>	/CE	1	CSS
Gander's butterweed	<i>Senecio ganderi</i>	FSC*/CR	1	CHP
Narrow-leaved nightshade	<i>Solanum tenuilobatum</i>	FSC*/	2	CHP
Parry's tetracoccus	<i>Tetracoccus dioicus</i>	FSC*/	2	CHP
Harbison's dun skipper	<i>Euphyes vestris harbisoni</i>	FSC*/	2	RW, RS, OW
Salt marsh skipper	<i>Panoquina errans</i>	FSC*/	2	SM
Hermes copper butterfly	<i>Lycaena hermes</i>	FSC*/	2	CSS, CHP
Thorne's hairstreak butterfly	<i>Mitoura thornei</i>	FSC*/	2	Cypress wldd.
Quino checkerspot butterfly	<i>Euphydryas editha quino</i>	FE/	1	CSS, VP, NG
Riverside fairy shrimp	<i>Streptocephalus woottoni</i>	FE/	1	VP
Arroyo southwestern toad	<i>Bufo microscaphus californicus</i>	FE/SSC	1	CSS, CHP, near water (breeding)
California red-legged frog	<i>Rana aurora draytonii</i>	FT/SSC	1	Aquatic/riparian
Southwestern pond turtle	<i>Clemmys marmorata pallida</i>	FSC*/SSC	2	Aquatic/riparian
San Diego horned lizard	<i>Phrynosoma coronatum blainvillei</i>	FSC*/SSC	2	CSS, CHP

Table 2-1 (Continued)

SPECIES EVALUATED FOR MSCP

Common Name	Scientific Name	Status* (Federal/State)	Group**	Habitat***
Orange-throated whiptail	<i>Cnemidophorus hyperythrus beldingi</i>	FSC*/SSC	1	CSS, CHP, G
California brown pelican	<i>Pelecanus occidentalis</i>	FE/CE	1	Open water
Reddish egret	<i>Egretta rufescens</i>	FSC*/	2	SM
White-faced ibis	<i>Plegadis chihi</i>	FSC*/SSC	2	FWM, estuaries
Canada goose	<i>Branta canadensis</i>	none	4	Ag fields, G, FWM, SM
Bald eagle	<i>Haliaeetus leucocephalus</i>	FT/CE	1	Open water
Northern harrier	<i>Circus cyaneus</i>	/SSC	4	G, SM, ag fields
Cooper's hawk	<i>Accipiter cooperii</i>	/SSC	4	OW (breeding), RW
Swainson's hawk	<i>Buteo swainsoni</i>	/CT	1	Ag fields, G
Ferruginous hawk	<i>Buteo regalis</i>	FSC*/SSC	2	G, ag fields
Golden eagle	<i>Aquila chrysaetos</i>	BEPA/SSC	3	CSS,CHP,G,cliffs (breeding), ag fields
American peregrine falcon	<i>Falco peregrinus</i>	FE/CE	1	G, ag fields, cliffs, beach
Light-footed clapper rail	<i>Rallus longirostris levipes</i>	FE/CE	1	SM
Western snowy plover	<i>Charadrius alexandrinus nivosus</i>	FT/SSC	1	Ocean/bay shoreline, river mouths
Mountain plover	<i>Charadrius montanus</i>	C/SSC	1	Ag fields, G
Long-billed curlew	<i>Numenius americanus</i>	FSC*/SSC	2	SM
Elegant tern	<i>Sterna elegans</i>	FSC*/SSC	2	SM, salt flat, open water (ocean)
California least tern	<i>Sterna antillarum browni</i>	FE/CE	1	Coastal strand, mud flats, beach
Burrowing owl	<i>Speotyto cunicularia</i>	FSC*/SSC	2	G, coastal strand, ag fields
Southwestern willow flycatcher	<i>Empidonax traillii extimus</i>	FE/CE	1	RW
Coastal cactus wren	<i>Campylorhynchus brunneicapillus couesi</i>	FSC*/SSC	1	CSS, cactus patches
California gnatcatcher	<i>Poliopitila californica californica</i>	FT/SSC	1	CSS
Western bluebird	<i>Sialia mexicana</i>	none	4	OW (edges, sparse phase), G
Least Bell's vireo	<i>Vireo bellii pusillus</i>	FE/CE	1	RW, RF
California rufous-crowned sparrow	<i>Aimophila ruficeps canescens</i>	FSC*/SSC	2	CSS, rock outcroppings
Belding's Savannah sparrow	<i>Passerculus sandwichensis beldingi</i>	FSC*/CE	1	SM
Large-billed Savannah sparrow	<i>Passerculus sandwichensis rostratus</i>	FSC*/SSC	2	SM, G, FWM
Grasshopper sparrow	<i>Ammodramus savannarum</i>	none	4	G
Tricolored blackbird	<i>Agelaius tricolor</i>	FSC*/SSC	2	FWM

Table 2-1 (Continued)

SPECIES EVALUATED FOR MSCP

Common Name	Scientific Name	Status* (Federal/State)	Group**	Habitat***
Townsend's western big-eared bat	<i>Corynorhinus townsendii pallescens</i>	FSC*/SSC	2	Caves, mines, buildings, OW, RW, CHP
California mastiff-bat	<i>Eumops perotis californicus</i>	FSC*/SSC	2	Cliffs, crevices, CHP, G, CSS
Pacific pocket mouse	<i>Perognathus longimembris pacificus</i>	FE/SSC	1	Sparse CSS, G, ruderal
American badger	<i>Taxidea taxus</i>	/SSC	4	G
Mountain lion	<i>Felis concolor</i>	/protected	3	CSS, CHP, RW, OW
Southern mule deer	<i>Odocoileus hemionus fuliginata</i>	/game spp.	3	CSS, CHP, RW, OW

*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.

BEPA = Bald Eagle Protection Act.

CE = State Endangered.

CR = State Rare.

CT = State Threatened.

SSC = State Species of Special Concern.

FSC* = Federal Species of Concern; formerly Category 2 or Category 3 candidate or proposed for federal listing; no current federal status.

FSC† = Federal Species of Concern; proposed rule to list as endangered or threatened has been withdrawn; no current federal status.

protected = moratorium on hunting.

none = no federal or state status.

***Habitat

CSS - coastal sage scrub

CHP - chaparral

SMC - southern maritime chaparral

G - grassland

NG - native grassland

VP - vernal pool

OW - oak woodland

Cypress wdld. - Tecate cypress woodland

RW - riparian woodland

RS - riparian scrub

RF - riparian forest

SM - saltmarsh

FWM - freshwater marsh

**Group

1 = All federal and state listed species, federal candidate species, species proposed for federal listing, and NCCP target species.

2 = Species formerly included as Category 2 or Category 3 candidate or proposed for federal listing but no longer considered due to lack of sufficient information to justify issuance of a proposed rule.

3 = Species important to preserve design.

4 = Habitat indicator species.

2.2 BIOLOGICAL CORE AND LINKAGE AREAS

A key step in developing the MSCP Plan was prioritizing the most critical biological resource areas for preservation so that:

- Conservation is maximized;
- Acquisition funds are efficiently utilized; and
- Less important habitat areas can be developed.

Sixteen core biological resource areas and associated habitat linkages, totaling approximately 202,757 acres of habitat, were identified in the MSCP study area (Figure 2-2, Table 2-2). The core and linkage map was developed as an analytical tool to assist in testing preserve design criteria and levels of species conservation. It is not a regulatory map. Core areas are defined as areas generally supporting a high concentration of sensitive biological resources which, if lost or fragmented, could not be replaced or mitigated elsewhere. While the entire acreage within a core area may not be important for preservation, the core and linkage configuration assists in visualizing a framework for a regional preserve network. Jurisdictions and other agencies prepared subarea plans with specific preserve boundaries by maximizing inclusion of unfragmented core resource areas and linkages in their preserve designs, given other parameters and objectives.

To define the core and linkage areas, an extensive geographic information system database of vegetation communities, species locations, elevation, slope, soils, drainages, and other physical parameters was used to develop a habitat evaluation map for the study area (Figure 2-3). The habitat evaluation map ranks habitat areas as Very High, High, Moderate, or Low based on their potential to support priority gnatcatcher habitat, high biological diversity/species richness, target species, vernal pool habitat, and wildlife corridors. Although this map was used to identify important biological areas and linkages, the habitat evaluation map is not intended to replace site-specific field survey data and evaluations. Rather, the map provides a regional perspective for site-specific biological assessments.



California Brown Pelican

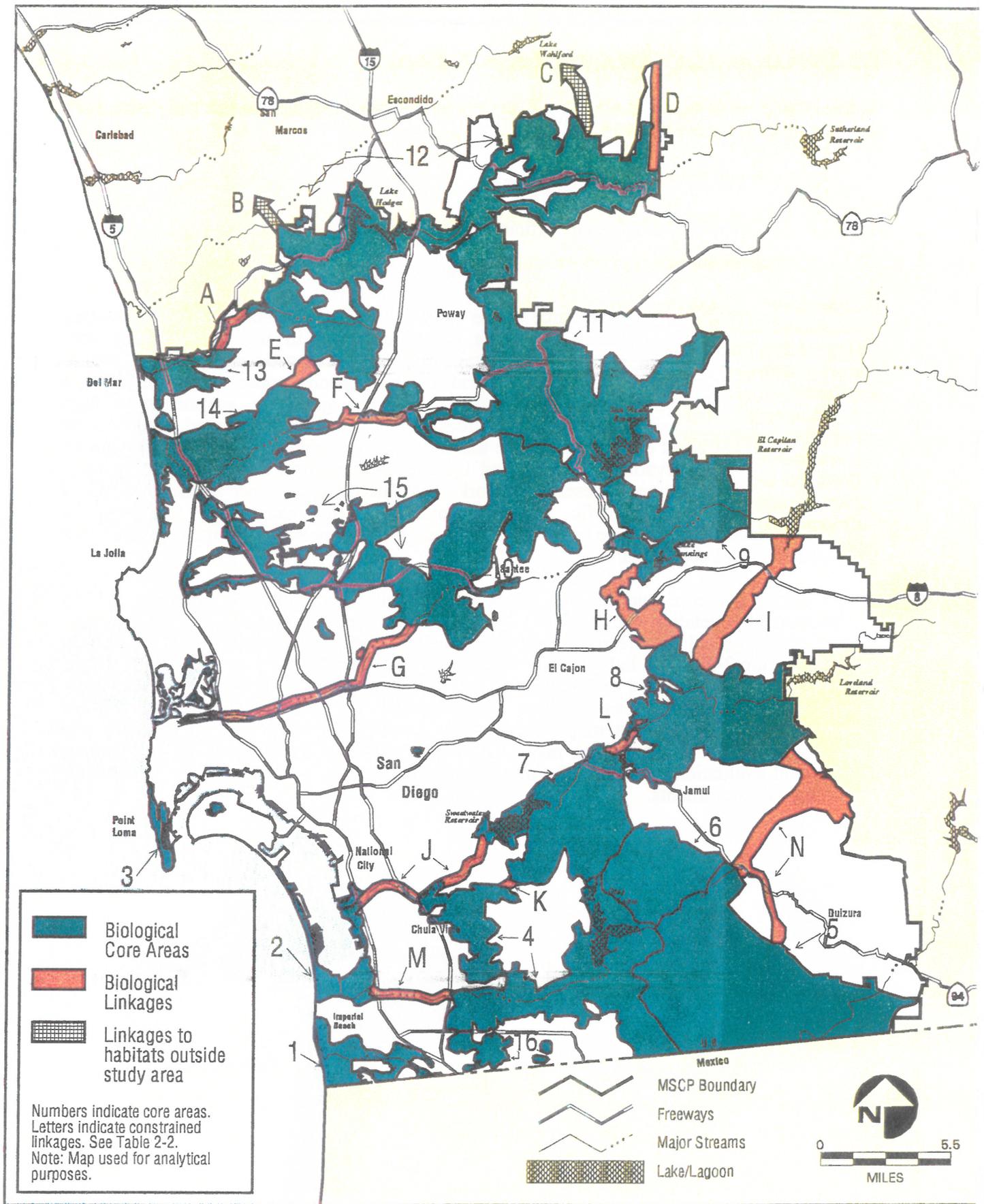


FIGURE
2-2

Table 2-2

GENERALIZED CORE BIOLOGICAL RESOURCE AREAS AND LINKAGES

Core Resource Areas -- high concentration of sensitive biological resources which, if lost, could not be replaced or mitigated elsewhere

1. Tijuana Estuary/River Valley
2. South San Diego Bay/Silver Strand
3. Point Loma
4. Otay Lakes/Otay Mesa/Otay River Valley
5. Otay Mountain/Marron Valley
6. Jamul Mountains
7. Sweetwater Reservoir/San Miguel Mountain/Sweetwater River
8. McGinty Mountain/Sequan Peak-Dehesa
9. Lake Jennings/Wildcat Canyon-El Cajon Mountain
10. Mission Trails/Kearny Mesa/East Elliott/Santee
11. Central Poway/San Vicente Reservoir/North Poway
12. Hodges Reservoir/San Pasqual Valley
13. San Dieguito Lagoon
14. Los Peñasquitos Lagoon/Del Mar Mesa/Peñasquitos Canyon
15. Vernal Pools, Kearny Mesa
16. Vernal Pools, Otay Mesa

Habitat Linkages -- linkages between core resource areas (constrained linkages are followed by a letter, which corresponds to their location on Figure 2-2)

Linkages between core resource areas within study area

1. San Dieguito River Valley between Del Mar and Santa Fe Valley (A)
2. Del Mar Mesa - Black Mountain (E)
3. Los Peñasquitos Creek west of Poway (F)
4. Central Poway - San Dieguito River Valley
5. Central Poway - Mission Trails/Santee
6. San Diego River west of Mission Trails (G)
7. Interstate 8 at Lakeside (H)
8. Sweetwater River west of the Sweetwater Reservoir (J)
9. San Miguel Mountain - Rancho Del Rey (K)
10. Sweetwater River between San Miguel Mountain and McGinty Mountain (L)
11. Otay River west of Interstate 805 (M)
12. Otay Lakes - Sweetwater/San Miguel Mountain
13. Otay Mountain/Jamul Mountains to Sequan Peak (N)

Linkages to areas outside study area

1. Hodges Reservoir north to La Costa/Carlsbad (B)
2. San Pasqual Valley east and south
3. San Pasqual Valley to San Luis Rey River (C)
4. Boden Canyon (San Pasqual Valley north to Rancho Guejito) (D)
5. San Vicente Reservoir northeast through San Vicente River Valley and Long's Gulch
6. Lake Jennings northeast through San Diego River Valley and Wildcat Canyon
7. Dehesa to El Capitan Reservoir (I)
8. Sweetwater River Valley east
9. Dulzura Creek east
10. Lyons Valley east (southeast of Sequan Peak)
11. Marron Valley east through Cottonwood Creek

NOTE: All of the areas identified above are primarily in the "Very High" category on the habitat evaluation map, although individual parcels may not support important biological resources. While this list does not actually define preserve boundaries or imply that the entirety of a named area or a "Very High" area should be preserved, this list assisted planners in visualizing a framework for a regional preserve network. These areas have **not** been ranked or prioritized.

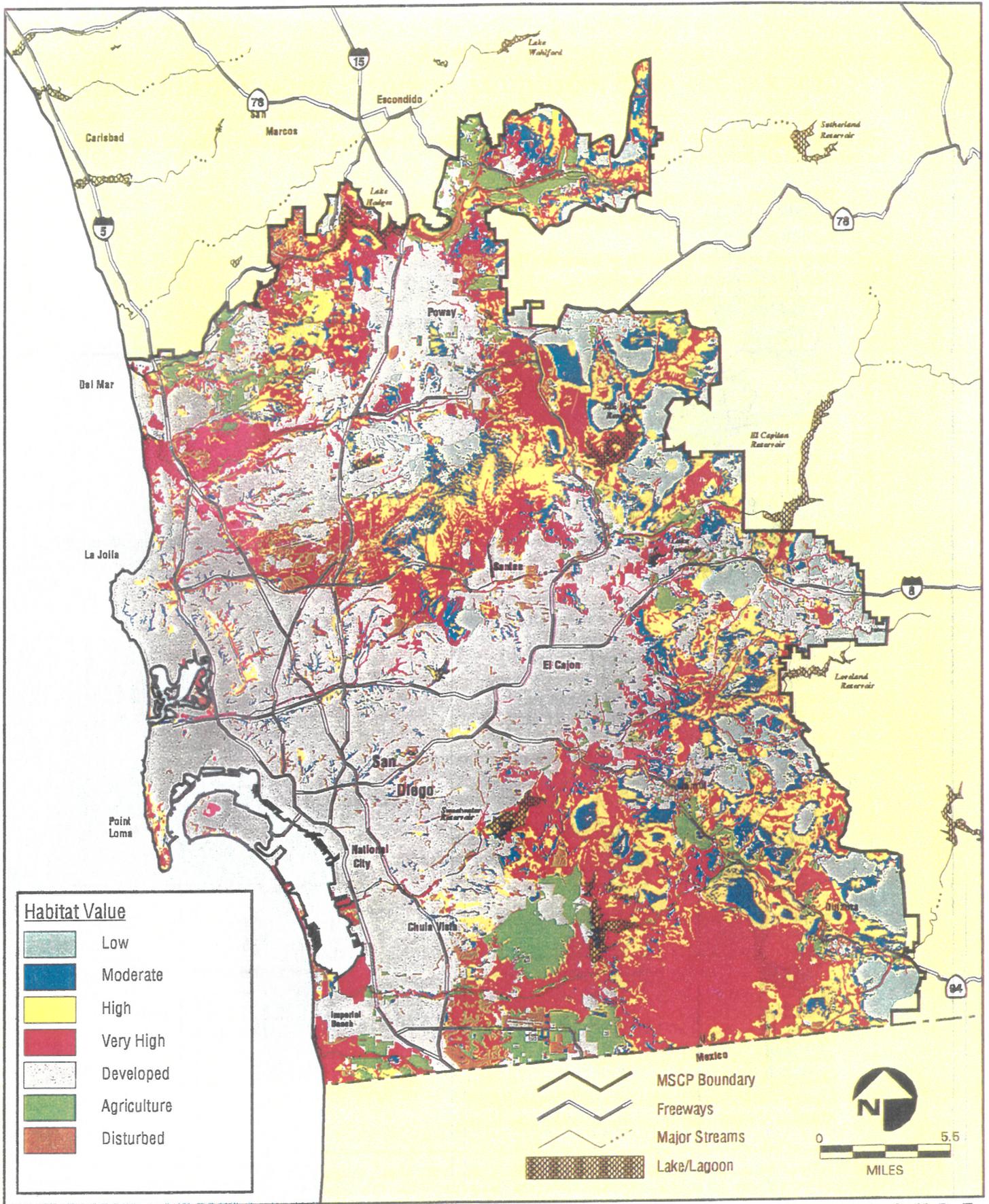


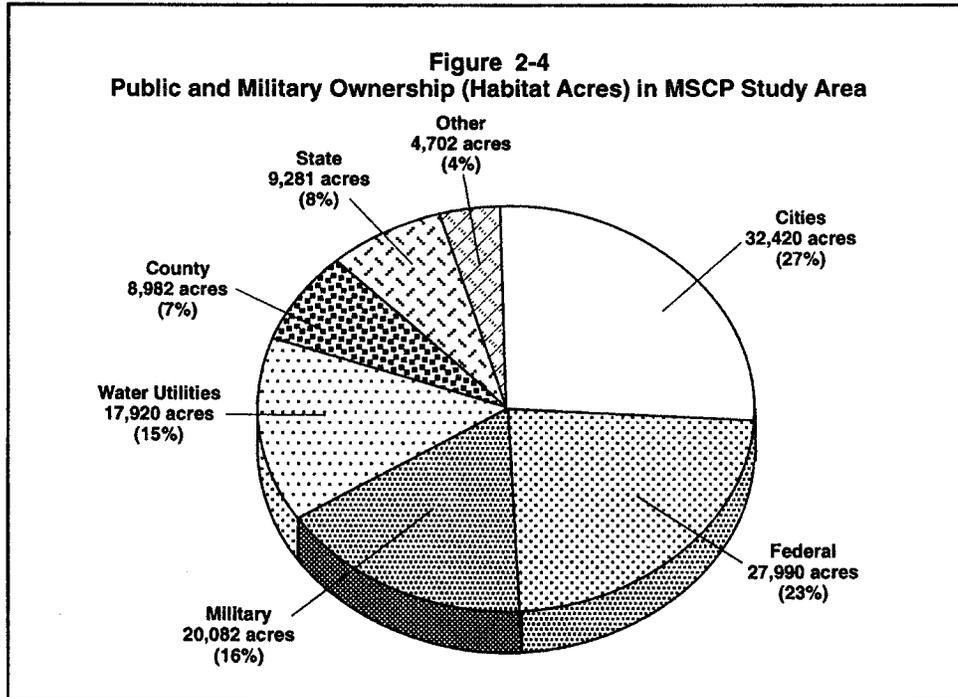
FIGURE
2-3



Habitat Evaluation Map

2.3 OWNERSHIP

The study area contains 315,940 acres of habitat with almost two-thirds (about 194,563 acres) being privately owned. Over one-third of the habitat within the MSCP study area is in military (20,082 acres) or other public ownership (101,295 acres). The federal government administers 39% of the public habitat lands, and the state administers 8% (Figures 2-4 and 2-5). Because so much habitat is privately owned, the ability to equitably preserve habitat and to develop an affordable preserve system is a critical issue.



2.4 LAND USE AND GAP ANALYSIS

2.4.1 Existing and Planned Land Uses

Existing land uses in the study area consist mostly of vacant (undeveloped) land (44%) or urban development (30%), with only a small percentage in low density residential uses (3%), defined as one dwelling unit per one or more acres. According to adopted general and community plans, the remaining habitat areas are planned to be developed with low density residential uses (39%) or used as parks, preserves, or open space (29%). Existing uses and planned uses of the remaining habitat lands in the MSCP study area, as defined by the general and community plans, are summarized below.

Existing Uses (% of study area)		Planned Uses (% of habitat)	
Vacant ¹	44%	Low density residential	39%
Urban	30%	Parks, preserves, open space	29%
Agriculture	7%	Urban	12%
Military	6%	Water, impact-sensitive	8%
Parks, preserves	5%	Military	6%
Active parks, extractive, golf courses, water	5%	Agriculture	5%
Low density residential	3%	Other	1%

¹ Vacant lands include native and nonnative vegetation communities and disturbed lands.

2.4.2 Gap Analysis

A useful tool in designing the MSCP preserve and identifying conservation targets has been the identification of gaps in existing protection of key biological resources. This technique, termed gap analysis, is a frequently used and accepted method of conservation planning. The geographic information system was used to map the location of existing and planned open space lands, public lands, and lands constrained to development by steep slopes and floodplains. This database was compared to maps of vegetation communities, habitat value, core biological resource areas, ownership, and land use, in various combinations, to analyze existing and potential conservation patterns.

A key policy of the MSCP has been to maximize inclusion of existing open space and other publicly owned habitat lands in the preserve. However, the MSCP gap analysis showed that only 17% of the biological core and linkage areas was already preserved for biological open space as of 1994, and these protected areas were widely distributed without preserved linkages between them. Therefore, using these protected areas as building blocks, the MSCP preserve network was designed through inclusion of additional selected public lands, planned open space, and constrained lands, along with unprotected habitats in the biological core and linkage areas.

2.5 HISTORICAL AND FORECAST GROWTH

As shown by the planned land use chart (Section 2.4.1), the establishment of a regional habitat preserve system will affect the planned location of future growth. However, other quality of life objectives for the region, such as improving transportation access and air quality, are connected with the objective of open space conservation and are mutually supportive.

In 1990, the population of San Diego County was 2.5 million, with 1.1 million civilians employed. The county experienced rapid growth in population (3% per year) and employment (4.4% per year) between 1980 and 1990, caused by large U.S. and foreign in-migration. Between 1990 and 1995, this growth moderated to an average population growth of 1.9% per year, due to a national recession and reduced defense spending.

The county's population has been projected to grow to 3.8 million by 2015, with civilian employment of 1.5 million (Growth Management Forecast by SANDAG, Series 8, as of May 1995). This represents average growths of 1.7% and 1.1% per year, respectively, in population and employment over this period. A majority (52%) of the projected growth in population would be due to natural increase (births minus deaths), with the remainder due to net in-migration.

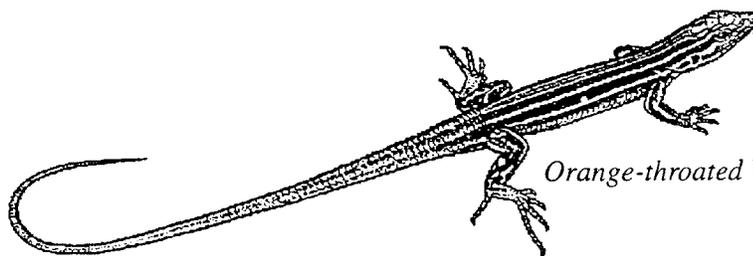
In allocating the forecast growth to the cities and communities of the region, the local jurisdictions and SANDAG found that, even without the MSCP, the existing general and community plans would accommodate residential growth up to around 3.3 million people, which is forecast to be reached in 2005. After 2005, there would not be sufficient vacant land designated by the general and community plans for residential use at urban densities (more than one dwelling unit per acre).

To address this issue, the local jurisdictions have been working with SANDAG to formulate a Regional Growth Management Strategy to accommodate residential growth beyond 2005 and meet quality of life objectives of greater transportation access, reduced congestion, and improved air quality. A primary goal of the strategy is to reduce vehicle trips and travel miles below those that would occur under the existing general and community plans. At the same time, the strategy also would reduce the forecast

consumption of vacant land by more than 80,000 acres. The strategy would accomplish these goals by focusing growth around major transit services, providing mixed-use districts as community centers, locating residences within major employment centers, and providing safe and convenient pedestrian and bicycle access.

The Regional Growth Management Strategy (Land Use Distribution Element), if adopted and implemented by the local jurisdictions, would substantially reduce pressure to convert habitat lands to urban uses. Accommodating growth in this way would help to achieve quality of life objectives in transportation access, air quality, and habitat and open space protection, while also providing space for residential growth after the year 2005. It is important to note that a lack of sufficient residentially designated lands would occur with or without a habitat preserve system, but preservation of habitat lands and a new growth management strategy can be mutually supportive of quality of life objectives in the region, including the need for economic growth.

3.0 Conservation Plan



Orange-throated Whiptail

3.0 CONSERVATION PLAN

The process of designing the MSCP preserve incorporated the following biological, ownership, land use, and economic goals:

- Preserve as much of the core biological resource areas and linkages as possible;
- Maximize the inclusion of public lands within the preserve;
- Maximize the inclusion of lands already conserved as open space; and
- Make the preserve affordable and share the costs equitably among all beneficiaries.

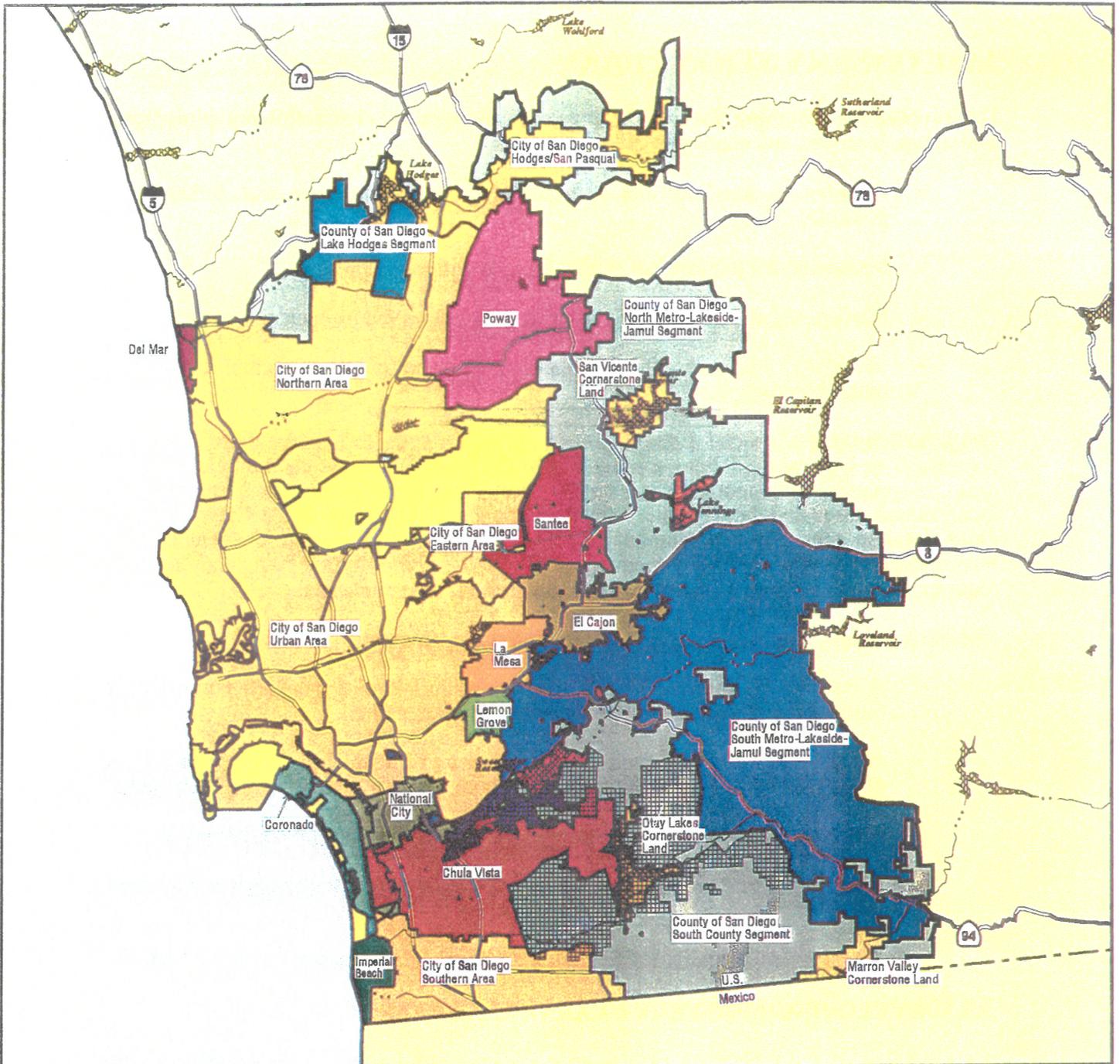
The jurisdictions and special districts prepared subarea plans to achieve these goals and conform with general guidelines contained in this plan. Subarea plans may change over time as preserve boundaries are refined and as annexations occur between the incorporated cities and the County. Subarea plans may include policies different from or more detailed than those contained in this subregional plan. In the event of any inconsistencies between the general guidelines in the MSCP Plan and specific requirements in a subarea plan, the subarea plan shall take precedence.

The Conservation Plan section includes the following elements:

- A description of the quantity and configuration of vegetation communities (habitat types) targeted for conservation by this plan;
- A list and analysis of species considered to be adequately conserved for the purposes of receiving federal and state take authorizations (covered species);
- The process for addressing potential future listings of uncovered species;
- A summary of how subarea plans will be used to protect biological resources; and
- A biological checklist for preparing subarea plans consistent with the MSCP.

3.1 DEVELOPING PRESERVE PLANNING AREAS

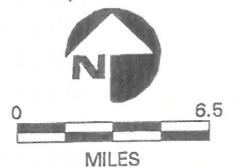
An objective of the MSCP is to conserve a connected system of biologically viable habitat lands in a manner that maximizes the protection of sensitive species and precludes the need for future listings of species as threatened or endangered. This plan for an interconnected, contiguous preserve has required the coordination of multiple jurisdictions. Responsibilities for conservation planning in the MSCP study area are organized by subareas (Figure 3-1), because some local governments own land in more than one jurisdiction. The input from the jurisdictions and other special district and agency participants is summarized in the Multi-Habitat Planning Area (MHPA) maps (Figures 3-2, 3-3, and 3-4), estimated conservation targets (Section 3.2), and subarea plans.



- | | | |
|--|----------------|--|
| County of San Diego - Lake Hodges Segment | Chula Vista | Lemon Grove |
| County of San Diego - South County Segment | Santee | Water Districts - (Sweetwater Authority, Helix WD, Padre Dam MWD, Otay WD) |
| County of San Diego - North Metro-Lakeside-Jamul Segment | Del Mar | Military - (Miramar, Point Loma, North Island, Silver Strand, South San Diego Bay) |
| County of San Diego - South Metro-Lakeside-Jamul Segment | El Cajon | Chula Vista/County Subarea Overlap |
| City of San Diego | Poway | |
| Coronado | La Mesa | |
| | Imperial Beach | |
| | National City | |

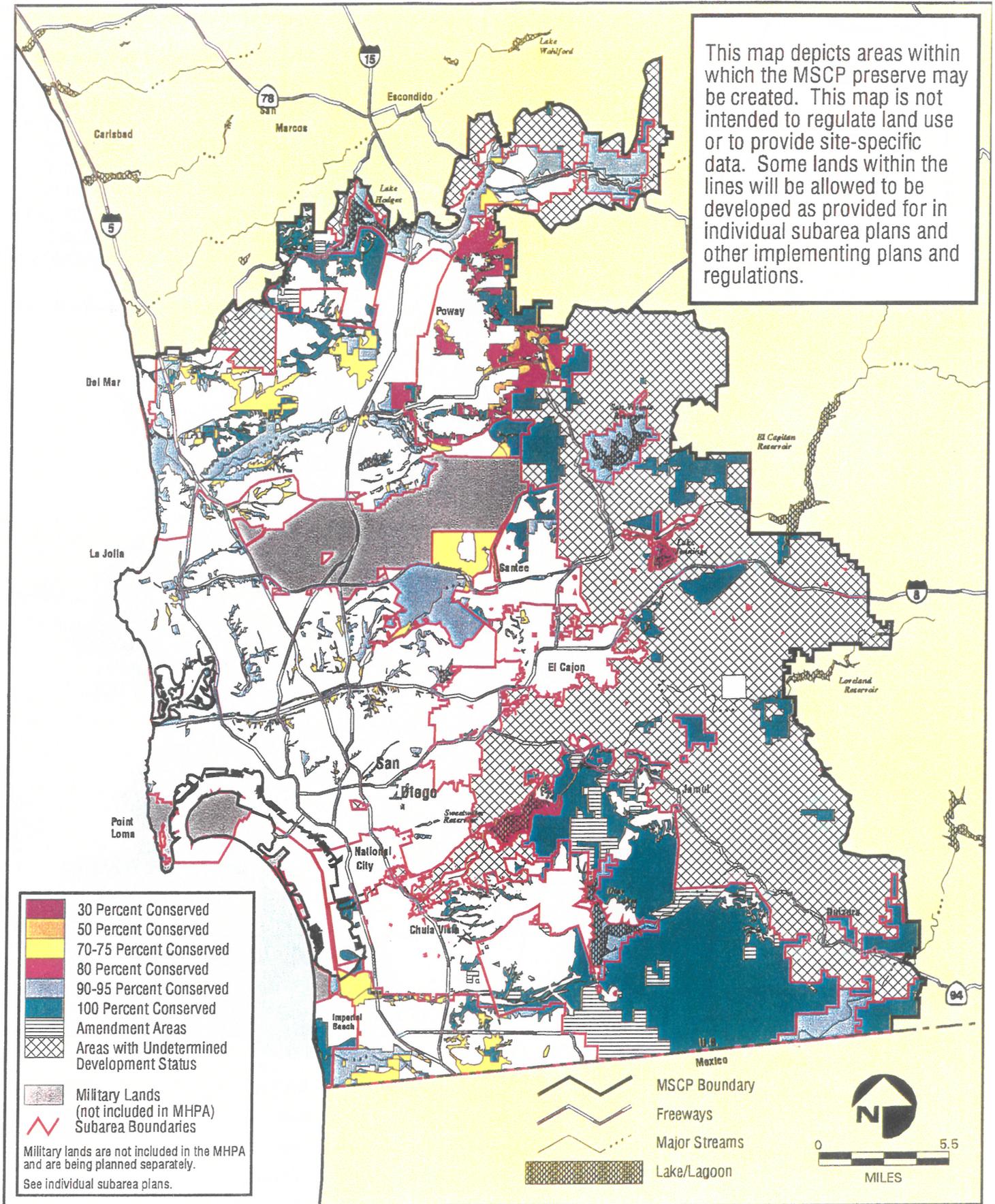
Base Map Features

- MSCP Boundary
- Freeways
- Major Streams
- Lake/Lagoon



MSCP Subareas

FIGURE
3-1

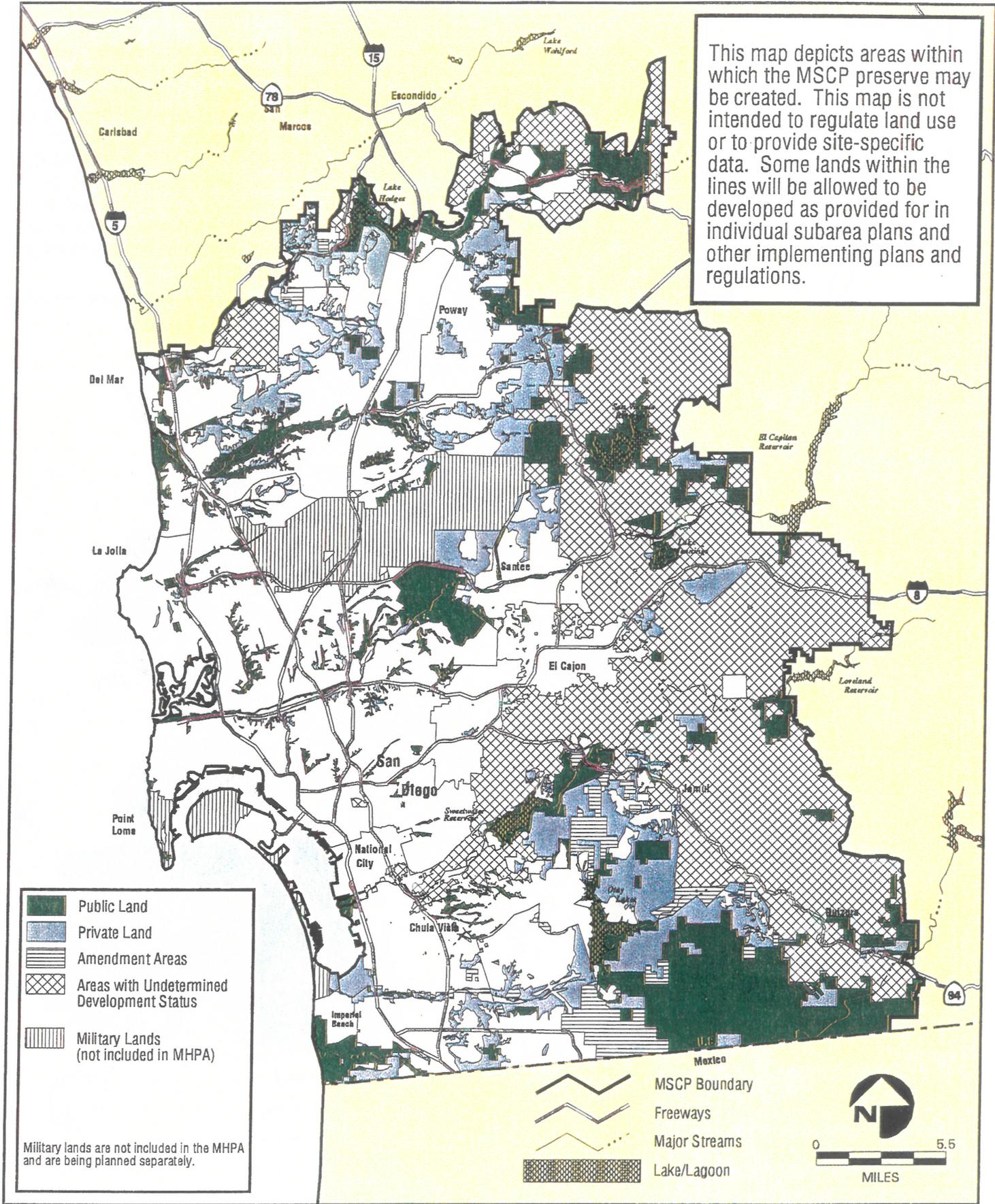


Average Habitat Conservation in MHPA

FIGURE

3-2

This map depicts areas within which the MSCP preserve may be created. This map is not intended to regulate land use or to provide site-specific data. Some lands within the lines will be allowed to be developed as provided for in individual subarea plans and other implementing plans and regulations.



	Public Land
	Private Land
	Amendment Areas
	Areas with Undetermined Development Status
	Military Lands (not included in MHPA)

Military lands are not included in the MHPA and are being planned separately.

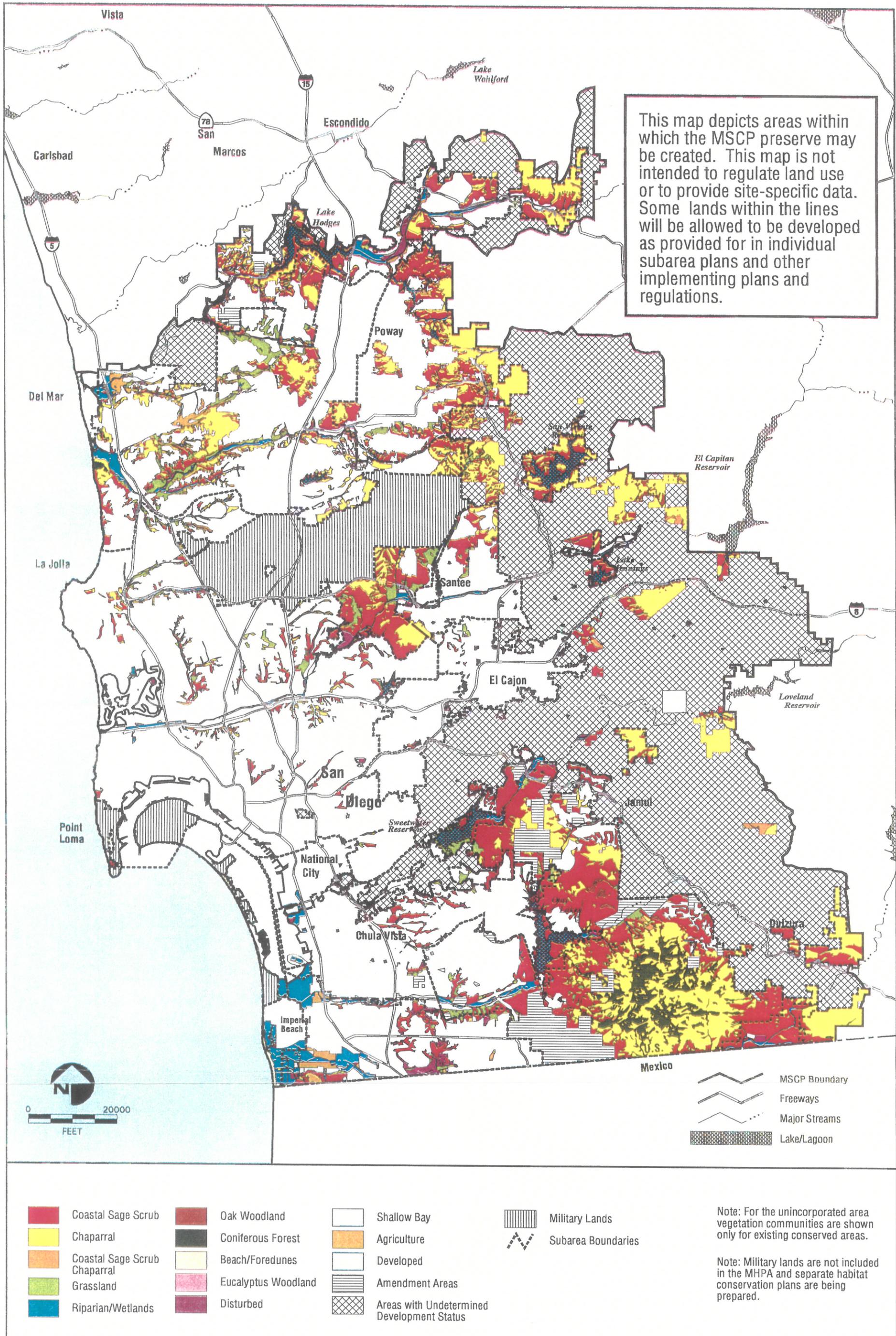
	MSCP Boundary
	Freeways
	Major Streams
	Lake/Lagoon

0 5.5 MILES



Public and Private Ownership in MHPA

FIGURE
3-3



3.1.1 Multi-Habitat Planning Area

The MHPA is the area within which the permanent MSCP preserve will be assembled and managed for its biological resources. The MHPA is defined in many areas by mapped boundaries, as shown in Figures 3-2, 3-3, and 3-4, and also is defined by quantitative targets for conservation of vegetation communities (Section 3.2) and goals and criteria for preserve design. On Figure 3-2, the MHPA includes the colored areas indicating various levels of conservation as well as the “Areas with Undetermined Development Status” and “Amendment Areas.” Public acquisition of private lands from willing sellers will be focused within the MHPA. The MHPA was cooperatively designed by the participating jurisdictions and special districts in the study area, in partnership with the wildlife agencies (USFWS and CDFG), property owners, and representatives of the development industry and environmental groups. The MHPA includes the majority of public habitat lands in the study area (80%, excluding military lands; Figure 3-3). Major military holdings, regional public facility providers, and some special districts are being planned separately.

3.1.2 Planning Process

The participating jurisdictions and special districts prepared subarea plans and defined boundaries of their portions of the MHPA based on common biological, economic, ownership, and land use criteria but using individual methods of implementation. Consequently, the MHPA has different levels of conservation associated with different areas. The MHPA includes property set aside as mitigation for major development projects as a result of negotiations between property owners, wildlife agency staff, jurisdiction staff, and environmental groups. Most major habitat patches designated as open space in general or community plans also are included. Some areas within the MHPA are already permanently conserved and managed for their biological resources. Other areas are planning areas within which the ultimate preserve will be sited, and thus will be smaller than the area included in the MHPA. Within some of the unincorporated areas, neither preserves nor planning areas are designated; instead, selected lands have been pre-approved by the wildlife agencies as the preferred areas for compensatory mitigation of unavoidable impacts.

The County of San Diego prepared its subarea plan in three segments. Preserve boundary lines are shown for the Lake Hodges and South County segments. The Metro-Lakeside-Jamul segment includes some publicly conserved parcels and private mitigation banks that are currently being managed as biological open space. Development and conservation on the remainder of the private lands in this segment will proceed based on preserve design criteria, implemented through a Biological Mitigation Ordinance, which is intended to achieve specific vegetation community and species conservation targets.

Subarea plans also have been prepared by the cities of San Diego, Chula Vista, Santee, Del Mar, Coronado, Poway, El Cajon, and La Mesa, and Otay Water District, Helix Water District, Padre Dam Municipal Water District, and Sweetwater Authority. The cities of Imperial Beach and National City have not completed subarea plans at this time but have agreed to the inclusion of portions of their jurisdictions in the MHPA. The City of Lemon Grove does not have habitat important to the MHPA and has not prepared a subarea plan.

Additional conservation plans are being prepared by the Department of the Navy and regional public facility providers but are not identified in the MHPA. Summary descriptions of the subarea plans are included in Section 5.6. Refer to the individual subarea plans for specifics on implementation.

Actions that must be taken by local governments and special districts, federal and state governments, private landowners, wildlife agencies, and other parties to implement the MSCP and receive the benefits of participation are described in Section 5. The take authorization holders, as defined in Section 3.3, also must ensure that land uses within preserve areas are compatible with the biological objectives of the MSCP as described in Section 6 and each subarea plan.

3.2 HABITATS CONSERVED

The jurisdictions and special districts worked together with the wildlife agencies in developing preserve designs that would maximize inclusion of sensitive vegetation communities and the 93 species selected for MSCP evaluation (Sections 2.1 and 2.2). Once this iterative process of defining MHPA boundaries and conservation criteria was completed, the vegetation communities and species protected by the subarea plans could be quantified. Tables 3-1 and 3-2 describe the estimated targets for conservation, by vegetation community and biological core area, respectively, for each subarea. These estimated targets for habitat conservation are based on preserve designs and/or goals and criteria approved by the wildlife agencies. The covered species list (Section 3.3) is based on these conservation targets. Subarea plans and implementing agreements will demonstrate how these conservation targets will be achieved through development regulations, mitigation requirements, and acquisition. Estimated projections of future habitat conservation levels are shown in Figure 3-2.

This MSCP Plan targets 171,917 acres of vacant land within the MHPA for conservation, including over half of all natural habitat lands in the MSCP study area (167,667 acres) and 4,250 acres of other vacant lands that contribute to preserve design. The Public Review Draft MSCP Plan (March 1995) targeted 164,326 acres of natural habitat for conservation. The difference in acres of conservation targeted in this plan and that presented in the Public Review Draft may be attributed to several factors:

1. The acreage of public lands targeted for conservation in the MHPA increased by approximately 10,000 acres, as a result of new public acquisition and updating of ownership files in the geographic information system. The acreage of private lands targeted for conservation in the MHPA decreased by about 2,400 acres.
2. The City of San Diego Subarea Plan targets 4,250 acres of disturbed and agricultural lands for conservation that were not included in the draft plan. (The City's Subarea Plan does not preclude agricultural uses in the preserve.)
3. The MSCP study area boundary was expanded by approximately 1,050 acres of habitat to accommodate conservation in areas of the County of San Diego Subarea Plan that were not included in the draft plan.

The MHPA conserves important portions of all vegetation communities represented in the subregion, including 62% of all coastal sage scrub in the MSCP study area (Figure 3-4, Table 3-3). This conservation is focused in the most biologically important areas, with nearly three-fourths (73%) of the core biological resource areas and linkages conserved in the MHPA (Table 3-2, Figure 3-5). Each subarea plan contributing to this total describes a process for allowing development outside the preserve to be mitigated by conservation inside the preserve, and a method for the interim protection of habitats in the MHPA until a preserve plan is finalized and lands are acquired or conserved through the development process. In the Metro-Lakeside-Jamul segment of the County Subarea Plan, development will be allowed consistent with achieving County goals and criteria for

Table 3-1

**VEGETATION COMMUNITY ACRES WITHIN
MULTI-HABITAT PLANNING AREA BY SUBAREA**

Vegetation Communities	Total MSCP Study Area (acres)	Total MHPA (acres)	MHPA Conserved ¹ (acres)	% of MSCP Veg. Comm. Conserved
CHULA VISTA				
Coastal Sage Scrub	1,899	1,109	1,092	58
Maritime Succulent Scrub	17	17	16	94
Grassland	1,335	295	272	20
Southern Coastal Saltmarsh	295	225	225	76
Freshwater Marsh	15	6	6	40
Riparian Forest	11	10	10	91
Riparian Scrub	177	149	149	84
Eucalyptus Woodland	15	0	0	0
Open Water	87	24	24	28
Natural Flood Channel	37	19	19	51
Shallow Bay	1,190	135	135	11
Deep Bay	102	0	0	0
Disturbed Wetlands	21	6	6	29
Other Habitat ²	139	119	119	86
<i>Subtotal Habitat</i>	5,339	2,114	2,073	39
Disturbed	1,049	284	0	0
Agriculture	2,067	65	0	0
<i>Subtotal Vacant Land</i>	8,455	2,463	2,073	25
Developed	14,408	0	0	0
TOTAL³	22,864	2,463	2,073	9
CORONADO				
Beach	307	187	140	46
Southern Foredunes	32	32	25	78
Southern Coastal Saltmarsh	12	0	0	0
Open Water	187	185	185	99
Shallow Bay	3,713	0	0	0
Deep Bay	161	0	0	0
Other Habitat ²	9	1	<1	5
<i>Subtotal Habitat</i>	4,421	405	350	8
Disturbed	24	0	0	0
<i>Subtotal Vacant Land</i>	4,445	405	350	8
Developed	1,540	0	0	0
TOTAL	5,985	405	350	6
DEL MAR				
Beach	72	49	49	68
Southern Foredunes	1	1	1	100
Southern Coastal Bluff Scrub	2	2	2	100

Table 3-1 (Continued)

**VEGETATION COMMUNITY ACRES WITHIN
MULTI-HABITAT PLANNING AREA BY SUBAREA**

Vegetation Communities	Total MSCP Study Area (acres)	Total MHPA (acres)	MHPA Conserved ¹ (acres)	% of MSCP Veg. Comm. Conserved
DEL MAR (Continued)				
Coastal Sage Scrub	9	8	8	89
Southern Maritime Chaparral	17	4	4	24
Southern Coastal Saltmarsh	62	58	58	94
Freshwater Marsh	6	6	6	100
Torrey Pine Forest	9	0	0	0
Open Water	52	41	41	79
Disturbed Wetlands	4	4	4	100
Other Habitat ²	56	2	2	4
<i>Subtotal Habitat</i>	291	175	175	60
Disturbed	41	11	0	0
<i>Subtotal Vacant Land</i>	332	187	175	53
Developed	819	0	0	0
TOTAL	1,151	187	175	15
EL CAJON				
Coastal Sage Scrub	269	105	105	39
Chaparral	35	26	26	74
Grassland	118	82	61	52
Riparian Scrub	3	0	0	0
<i>Subtotal Habitat</i>	424	212	192	45
Disturbed	213	29	0	0
Agriculture	19	0	0	0
<i>Subtotal Vacant Land</i>	655	241	192	29
Developed	8,580	0	0	0
TOTAL	9,235	241	192	2
IMPERIAL BEACH				
Beach	154	139	139	90
Saltpan	76	76	76	100
Southern Foredunes	89	89	89	100
Coastal Sage Scrub	28	28	28	100
Grassland	20	17	17	85
Southern Coastal Saltmarsh	454	452	452	100
Freshwater Marsh	5	5	5	100
Riparian Scrub	172	172	172	100
Open Water	97	77	77	79
Disturbed Wetlands	34	34	34	100
Deep Bay	2	1	0	0

Table 3-1 (Continued)

**VEGETATION COMMUNITY ACRES WITHIN
MULTI-HABITAT PLANNING AREA BY SUBAREA**

Vegetation Communities	Total MSCP Study Area (acres)	Total MHPA (acres)	MHPA Conserved ¹ (acres)	% of MSCP Veg. Comm. Conserved
IMPERIAL BEACH (Continued)				
Other Habitat ²	1	1	1	100
<i>Subtotal Habitat</i>	1,132	1,091	1,090	96
Disturbed	142	35	0	0
<i>Subtotal Vacant Land</i>	1,274	1,126	1,090	86
Developed	1,631	0	0	0
TOTAL	2,905	1,126	1,090	38
LA MESA				
Coastal Sage Scrub	151	49	49	32
Grassland	2	0	0	0
Riparian Scrub	5	2	2	40
Eucalyptus Woodland	1	0	0	0
Open Water	9	0	0	0
Other Habitat ²	42	0	0	0
<i>Subtotal Habitat</i>	210	51	51	24
Disturbed	25	0	0	0
<i>Subtotal Vacant Land</i>	235	51	51	22
Developed	5,483	0	0	0
TOTAL	5,718	51	51	1
LEMON GROVE				
Eucalyptus Woodland	1	0	0	0
<i>Subtotal Habitat</i>	1	0	0	0
Disturbed	102	0	0	0
Agriculture	7	0	0	0
<i>Subtotal Vacant Land</i>	110	0	0	0
Developed	2,397	0	0	0
TOTAL	2,507	0	0	0
NATIONAL CITY				
Coastal Sage Scrub	12	0	0	0
Grassland	28	0	0	0
Southern Coastal Saltmarsh	52	47	47	90
Freshwater Marsh	1	<1	<1	50
Riparian Scrub	45	26	26	58
Open Water	159	141	141	89
Shallow Bay	444	9	9	2
Deep Bay	648	0	0	0

Table 3-1 (Continued)

**VEGETATION COMMUNITY ACRES WITHIN
MULTI-HABITAT PLANNING AREA BY SUBAREA**

Vegetation Communities	Total MSCP Study Area (acres)	Total MHPA (acres)	MHPA Conserved ¹ (acres)	% of MSCP Veg. Comm. Conserved
NATIONAL CITY (Continued)				
Other Habitat ²	<1	<1	<1	100
<i>Subtotal Habitat</i>	1,388	225	225	16
Disturbed	44	2	0	0
Agriculture	3	0	0	0
<i>Subtotal Vacant Land</i>	1,436	227	225	16
Developed	4,475	0	0	0
TOTAL	5,911	227	225	4
POWAY				
Coastal Sage Scrub	7,199	6,015	4,809	67
Chaparral	5,032	4,654	3,978	79
Coastal Sage/Chaparral	70	70	48	69
Grassland	629	447	353	56
Freshwater Marsh	4	<1	<1	12
Riparian Forest	8	8	8	100
Oak Riparian Forest	419	351	351	84
Riparian Scrub	115	42	42	37
Oak Woodland	167	134	110	66
Eucalyptus Woodland	33	32	25	76
Open Water	69	65	65	94
Natural Flood Channel	23	23	23	100
Other Habitat ²	5	3	2	40
<i>Subtotal Habitat</i>	13,772	11,843	9,814	71
Disturbed	1,393	60	0	0
Agriculture	1,042	71	0	0
<i>Subtotal Vacant Land</i>	16,208	11,974	9,814	61
Developed	8,833	0	0	0
TOTAL	25,040	11,974	9,814	39
SAN DIEGO				
Beach	498	115	115	23
Saltpan	138	136	136	99
Southern Foredunes	12	10	9	75
Southern Coastal Bluff Scrub	154	144	135	88
Coastal Sage Scrub	26,916	21,185	18,951	70
Maritime Succulent Scrub	1,133	721	681	60
Chaparral	15,604	11,652	10,424	67
Southern Maritime Chaparral	1,586	1,231	1,102	69

Table 3-1 (Continued)

**VEGETATION COMMUNITY ACRES WITHIN
MULTI-HABITAT PLANNING AREA BY SUBAREA**

Vegetation Communities	Total MSCP Study Area (acres)	Total MHPA (acres)	MHPA Conserved ¹ (acres)	% of MSCP Veg. Comm. Conserved
SAN DIEGO (Continued)				
Coastal Sage/Chaparral	150	118	95	63
Grassland	11,571	5,387	4,942	43
Southern Coastal Saltmarsh	968	936	936	97
Freshwater Marsh	341	232	232	68
Riparian Forest	649	614	614	95
Oak Riparian Forest	497	469	469	94
Riparian Woodland	608	567	567	93
Riparian Scrub	3,248	2,749	2,749	85
Oak Woodland	421	362	329	78
Torrey Pine Forest	158	153	144	91
Tecate Cypress Forest	2	2	2	100
Eucalyptus Woodland	642	189	170	26
Open Water	3,822	3,699	3,699	97
Disturbed Wetlands	660	583	583	88
Natural Flood Channel	315	295	295	94
Shallow Bay	4,190	225	225	5
Deep Bay	3,961	2	0	0
Other Habitat ²	347	194	157	45
<i>Subtotal Habitat</i>	<i>78,590</i>	<i>51,971</i>	<i>47,762</i>	<i>61</i>
Disturbed	9,368	2,763	2,447	26
Agriculture	9,677	2,097	1,803	19
<i>Subtotal Vacant Land</i>	<i>97,635</i>	<i>56,831</i>	<i>52,012</i>	<i>53</i>
Developed	108,489	0	0	0
TOTAL	206,124	56,831	52,012	25
SANTEE				
Coastal Sage Scrub	2,785	1,152	1,121	40
Chaparral	822	549	544	66
Coastal Sage/Chaparral	49	20	20	41
Grassland	660	181	178	27
Freshwater Marsh	5	2	2	40
Riparian Forest	17	3	3	18
Oak Riparian Forest	41	38	38	93
Riparian Scrub	124	80	80	65
Oak Woodland	6	2	2	33
Eucalyptus Woodland	3	0	0	0
Open Water	68	58	58	85
Disturbed Wetlands	26	0	0	0

Table 3-1 (Continued)

**VEGETATION COMMUNITY ACRES WITHIN
MULTI-HABITAT PLANNING AREA BY SUBAREA**

Vegetation Communities	Total MSCP Study Area (acres)	Total MHPA (acres)	MHPA Conserved ¹ (acres)	% of MSCP Veg. Comm. Conserved
SANTEE (Continued)				
Natural Flood Channel	39	21	21	54
<i>Subtotal Habitat</i>	4,645	2,107	2,067	44
Disturbed	512	30	0	0
Agriculture	11	0	0	0
<i>Subtotal Vacant Land</i>	5,169	2,136	2,067	40
Developed	5,117	0	0	0
TOTAL	10,286	2,136	2,067	20
UNINCORPORATED				
Coastal Sage Scrub	71,326	49,951	44,254	62
Maritime Succulent Scrub	285	158	158	55
Chaparral	79,764	43,963	39,884	50
Southern Maritime Chaparral	59	5	5	8
Coastal Sage/Chaparral	3,119	1,539	1,325	42
Grassland	10,864	4,040	3,566	33
Freshwater Marsh	343	238	238	69
Riparian Forest	526	348	348	66
Oak Riparian Forest	4,346	2,194	2,194	50
Riparian Woodland	26	20	20	77
Riparian Scrub	1,118	760	760	68
Oak Woodland	4,999	2,649	2,206	44
Tecate Cypress Forest	5,710	5,639	5,589	98
Eucalyptus Woodland	868	132	120	14
Open Water	282	149	149	53
Disturbed Wetlands	157	90	90	57
Natural Flood Channel	391	344	344	88
Other Habitat ²	66	18	18	27
<i>Subtotal Habitat</i>	184,248	112,237	101,268	55
Disturbed	6,159	1,687	0	0
Agriculture	15,391	1,777	0	0
<i>Subtotal Vacant Land</i>	205,798	115,701	101,268	49
Developed	46,334	0	0	0
TOTAL³	252,132	115,701	101,268	40

Table 3-1 (Continued)

**VEGETATION COMMUNITY ACRES WITHIN
MULTI-HABITAT PLANNING AREA BY SUBAREA**

Vegetation Communities	Total MSCP Study Area (acres)	Total MHPA (acres)	MHPA Conserved ¹ (acres)	% of MSCP Veg. Comm. Conserved
WATER DISTRICTS				
Coastal Sage Scrub	1,101	994	857	78
Chaparral	95	90	89	94
Coastal Sage/Chaparral	3	3	2	67
Grassland	523	477	380	73
Freshwater Marsh	16	8	8	50
Riparian Forest	96	94	94	98
Oak Riparian Forest	6	3	3	50
Riparian Woodland	1	1	1	100
Riparian Scrub	346	307	307	89
Oak Woodland	3	3	2	67
Eucalyptus Woodland	14	11	11	79
Open Water	842	782	782	93
Disturbed Wetlands	25	21	21	84
Natural Flood Channel	46	45	45	98
<i>Subtotal Habitat</i>	3,116	2,836	2,601	83
Disturbed	461	135	0	0
Agriculture	328	5	0	0
<i>Subtotal Vacant Land</i>	3,905	2,976	2,601	67
Developed	542	0	0	0
TOTAL	4,447	2,976	2,601	58
MILITARY⁴				
Beach	172	-	-	-
Saltpan	21	-	-	-
Southern Foredunes	54	-	-	-
Southern Coastal Bluff Scrub	42	-	-	-
Coastal Sage Scrub	3,807	-	-	-
Maritime Succulent Scrub	368	-	-	-
Chaparral	9,982	-	-	-
Southern Maritime Chaparral	120	-	-	-
Coastal Sage/Chaparral	486	-	-	-
Grassland	2,624	-	-	-
Southern Coastal Saltmarsh	27	-	-	-
Freshwater Marsh	79	-	-	-
Riparian Forest	21	-	-	-
Oak Riparian Forest	52	-	-	-
Riparian Woodland	96	-	-	-
Riparian Scrub	23	-	-	-
Oak Woodland	6	-	-	-
Torrey Pine Forest	1	-	-	-

Table 3-1 (Continued)

**VEGETATION COMMUNITY ACRES WITHIN
MULTI-HABITAT PLANNING AREA BY SUBAREA**

Vegetation Communities	Total MSCP Study Area (acres)	Total MHPA (acres)	MHPA Conserved ¹ (acres)	% of MSCP Veg. Comm. Conserved
MILITARY⁴ (Continued)				
Eucalyptus Woodland	55	-	-	-
Open Water	53	-	-	-
Disturbed Wetlands	1	-	-	-
Natural Flood Channel	12	-	-	-
Shallow Bay	45	-	-	-
Deep Bay	18	-	-	-
Other Habitat ²	198	-	-	-
<i>Subtotal Habitat</i>	<i>18,365</i>	-	-	-
Disturbed	3,710	-	-	-
<i>Subtotal Vacant Land</i>	<i>22,075</i>	-	-	-
Developed	5,865	-	-	-
TOTAL	27,940	-	-	-
TOTAL STUDY AREA	582,243	194,318	171,917	30

Note: Numbers may not sum to totals as shown, due to rounding.

¹ MHPA conserved acres have been estimated based on average conservation factors (e.g., 70%, 80%, 90%, etc.) applied to Total MHPA acres, with the following exceptions: (a) all wetland communities are assumed 100% conserved within the MHPA boundary; (b) all Disturbed and Agriculture areas are assumed 0% conserved within the MHPA boundary for all subareas except City of San Diego; and (c) Developed areas are not conserved in MHPA. For the Unincorporated area, MHPA conserved acres include both existing conserved acres and acres targeted for conservation according to the County Subarea Plan goals and criteria.

² Disturbed, Agriculture, and Developed areas with habitat value according to the habitat evaluation map.

³ Over 9000 acres of the Unincorporated area are currently under consideration for annexation to the City of Chula Vista.

⁴ Military lands are included in total study area acreage but are not included in MHPA. Military lands are being planned separately.

Source: 1996 MSCP GIS database. Subareas do not necessarily correspond to jurisdictional boundaries. See Figure 3-1.

Table 3-2

PORTIONS OF CORE AND LINKAGE AREAS TARGETED FOR CONSERVATION IN MULTI-HABITAT PLANNING AREA

Core #	Core Name	Habitat Acres	Study Area	Subareas											
				CV	CD	DM	EC	IB	NC	PO	SD	SN	CO	WD	MI
3-17	1. Tijuana Estuary/ River Valley	Total MHPA (%)	3,051 2,925 (96)	0 0 (0)	0 0 (0)	0 0 (0)	0 0 (0)	1,089 1,088 (100)	0 0 (0)	0 0 (0)	1,962 1,837 (94)	0 0 (0)	0 0 (0)	0 0 (0)	- - (-)
	2. S. San Diego Bay/ Silver Strand	Total MHPA (%)	2,316 1,644 (71)	416 302 (73)	463 350 (76)	0 0 (0)	0 0 (0)	11 0 (0)	183 175 (96)	0 0 (0)	883 817 (93)	0 0 (0)	0 0 (0)	0 0 (0)	359 - (-)
	3. Pt. Loma	Total MHPA (%)	709 92 (13)	0 0 (0)	0 0 (0)	0 0 (0)	0 0 (0)	0 0 (0)	0 0 (0)	0 0 (0)	117 92 (79)	0 0 (0)	0 0 (0)	0 0 (0)	592 - (-)
	4. Otay Lakes/Mesa/ River Valley	Total MHPA (%)	17,158 12,587 (73)	2,025 1,231 (61)	0 0 (0)	0 0 (0)	0 0 (0)	0 0 (0)	0 0 (0)	0 0 (0)	4,002 3,058 (76)	0 0 (0)	11,104 8,298 (75)	26 0 (0)	- - (-)
	5. Otay Mtn/Marron Valley	Total MHPA (%)	28,221 26,396 (94)	0 0 (0)	0 0 (0)	0 0 (0)	0 0 (0)	0 0 (0)	0 0 (0)	0 0 (0)	2,521 2,302 (91)	0 0 (0)	25,700 24,094 (94)	0 0 (0)	- - (-)
	6. Jamul Mtn	Total MHPA (%)	8,285 7,028 (85)	0 0 (0)	0 0 (0)	0 0 (0)	0 0 (0)	0 0 (0)	0 0 (0)	0 0 (0)	178 161 (90)	0 0 (0)	8,107 6,867 (85)	0 0 (0)	- - (-)
	7. Sweetwater/San Miguel Mtn	Total MHPA (%)	12,963 10,116 (78)	689 178 (26)	0 0 (0)	0 0 (0)	0 0 (0)	0 0 (0)	0 0 (0)	0 0 (0)	116 105 (91)	0 0 (0)	10,306 8,167 (79)	1,852 1,665 (90)	- - (-)
	8. McGinty Mtn/ Sequan Peak/ Dehesa	Total MHPA (%)	15,909 10,456 (66)	0 0 (0)	0 0 (0)	0 0 (0)	0 0 (0)	0 0 (0)	0 0 (0)	0 0 (0)	0 0 (0)	0 0 (0)	15,907 10,456 (66)	2 0 (0)	- - (-)
	9. Lake Jennings/ Wildcat Cyn/EI Cajon Mtn	Total MHPA (%)	9,830 8,228 (84)	0 0 (0)	0 0 (0)	0 0 (0)	0 0 (0)	0 0 (0)	0 0 (0)	0 0 (0)	24 21 (88)	0 0 (0)	8,895 7,453 (84)	911 754 (83)	- - (-)
	10. Mission Trails/Kearny Mesa/E. Elliott/ Santee	Total MHPA (%)	17,629 10,499 (60)	0 0 (0)	0 0 (0)	0 0 (0)	0 0 (0)	0 0 (0)	0 0 (0)	0 0 (0)	8,258 6,625 (80)	3,181 1,753 (55)	2,487 2,114 (85)	26 8 (31)	3,677 - (-)
	11. Poway/San Vicente	Total MHPA (%)	27,948 21,079 (75)	0 0 (0)	0 0 (0)	0 0 (0)	0 0 (0)	0 0 (0)	0 0 (0)	0 0 (0)	11,381 8,620 (76)	4,759 4,191 (88)	0 0 (0)	11,808 8,267 (70)	0 0 (0)

Table 3-2 (Continued)

PORTIONS OF CORE AND LINKAGE AREAS TARGETED FOR CONSERVATION IN MULTI-HABITAT PLANNING AREA

Core #	Core Name	Habitat Acres	Study Area	Subareas												
				CV	CD	DM	EC	IB	NC	PO	SD	SN	CO	WD	MI	
12.	Hodges Reservoir/ San Pasqual	Total	25,965	0	0	0	0	0	0	0	5	13,534	0	12,426	0	-
		MHPA	18,739	0	0	0	0	0	0	0	4	10,589	0	8,146	0	-
		(%)	(72)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(80)	(78)	(0)	(66)	(0)	(-)
13.	San Dieguito Lagoon	Total	1,278	0	0	199	0	0	0	0	0	1,078	0	1	0	-
		MHPA	880	0	0	129	0	0	0	0	0	751	0	0	0	-
		(%)	(69)	(0)	(0)	(65)	(0)	(0)	(0)	(0)	(0)	(70)	(0)	(0)	(0)	(-)
14.	Los Peñasquitos Lagoon/Cyn/Del Mar Mesa	Total	9,154	0	0	<1	0	0	0	0	0	9,154	0	0	0	-
		MHPA	6,236	0	0	0	0	0	0	0	0	6,236	0	0	0	-
		(%)	(68)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(68)	(0)	(0)	(0)	(-)
15.	Vernal Pools, Kearny Mesa	Total	8,289	0	0	0	0	0	0	0	0	1,965	0	5	0	6,320
		MHPA	1,085	0	0	0	0	0	0	0	0	1,085	0	0	0	-
		(%)	(13)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(55)	(0)	(0)	(0)	(-)
3-18 16.	Vernal Pools, Otay Mesa	Total	885	0	0	0	0	0	0	0	0	885	0	0	0	-
		MHPA	425	0	0	0	0	0	0	0	0	425	0	0	0	-
		(%)	(48)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(48)	(0)	(0)	(0)	(-)
Subtotal Cores	Total	189,590	3,130	463	199	0	1,100	183	11,386	49,436	3,181	106,746	2,817	10,948		
	MHPA	138,415	1,711	350	129	0	1,088	175	8,624	38,295	1,753	83,862	2,427	(-)		
	(%)	(73)	(55)	(76)	(65)	(0)	(99)	(96)	(76)	(77)	(55)	(79)	(86)	(-)		
Linkages	Total	13,166	185	0	0	28	0	48	1	2,104	0	10,646	23	131		
	MHPA	9,876	98	0	0	13	0	41	1	1,626	0	8,084	13	-		
	(%)	(75)	(53)	(0)	(0)	(46)	(0)	(85)	(100)	(77)	(0)	(76)	(57)	(-)		
TOTAL IN CORES AND LINKAGES	Total	202,757	3,315	463	199	28	1,100	231	11,387	51,540	3,181	117,392	2,840	11,079		
	MHPA	148,290	1,809	350	129	13	1,088	216	8,625	39,921	1,753	91,946	2,440	(-)		
	(%)	(73)	(55)	(76)	(65)	(46)	(99)	(94)	(76)	(77)	(55)	(78)	(86)	(-)		

Note: Numbers may not sum to total as shown, due to rounding. Acreages exclude Disturbed, Agriculture, and Developed. These numbers represent habitat acres targeted for conservation (from Table 3-1) that also occur in the biological core and linkage areas. Percent (in parentheses) represents the portion of the core and linkage areas targeted for conservation in the MHPA.

CV = Chula Vista, CD = Coronado, DM = Del Mar, EC = El Cajon, IB = Imperial Beach, NC = National City, PO = Poway, SD = San Diego, SN = Santee, CO = County, WD = Water Districts, MI = Military. (Military acreages are not included in the MHPA.)

Source: 1996 MSCP GIS database.

Table 3-3

**VEGETATION COMMUNITY ACRES TARGETED FOR
CONSERVATION WITHIN MULTI-HABITAT PLANNING AREA**

Vegetation Communities	Total MSCP Study Area ¹ (acres)	Total MHPA (acres)	MHPA Conserved ³ (acres)	% of MSCP Veg. Comm. Conserved ⁴
Beach	1202 (*)	491	443	37% (43)
Saltpan	235 (*)	212	212	90% (99)
Southern Foredunes	188 (*)	132	123	65% (92)
Southern Coastal Bluff Scrub	198 (*)	146	137	69% (88)
Coastal Sage Scrub	115,504 (37)	80,596	71,274	62% (64)
Maritime Succulent Scrub	1,803 (*)	899	855	47% (60)
Chaparral	111,335 (35)	60,933	54,945	49% (54)
Southern Maritime Chaparral	1,782 (*)	1,240	1,111	62% (67)
Coastal Sage/Chaparral	3,877 (1)	1,749	1,490	38% (44)
Grassland	28,373 (9)	10,926	9,770	34% (38)
Southern Coastal Saltmarsh	1,870 (*)	1,719	1,719	92% (93)
Freshwater Marsh	815 (*)	497	497	61% (68)
Riparian Forest	1,328 (*)	1,078	1,078	81% (82)
Oak Riparian Forest	5,361 (2)	3,054	3,054	57% (58)
Riparian Woodland	731 (*)	588	588	80% (93)
Riparian Scrub	5,374 (2)	4,286	4,286	80% (80)
Oak Woodland	5,600 (2)	3,150	2,651	47% (47)
Torrey Pine Forest	169 (*)	153	144	85% (86)
Tecate Cypress Forest	5,712 (2)	5,641	5,591	98% (98)
Eucalyptus Woodland	1,633 (*)	364	326	20% (21)
Open Water	5,726 (2)	5,220	5,220	91% (92)
Disturbed Wetlands	928 (*)	738	738	80% (80)
Natural Flood Channel	862 (*)	746	746	87% (88)
Shallow Bay	9,581 (3)	369	369	4% (4)
Deep Bay	4,891 (2)	3	0	0% (0)
Other Habitat ²	864 (*)	339	300	35% (45)
Subtotal Habitat	315,940(100)	185,266	167,667	53% (56)
Disturbed	23,244 (*)	5,037	2,447	11% (13)
Agriculture	28,547 (*)	4,015	1,803	6% (6)
Subtotal Vacant Land	367,731	194,318	171,917	47% (50)
Developed	214,511	0	0	0% (0)
TOTAL	582,243	194,318	171,917	30% (31)

¹ Percent of total MSCP habitats (315,940 acres) is given in parentheses. Asterisk (*) indicates <1%.

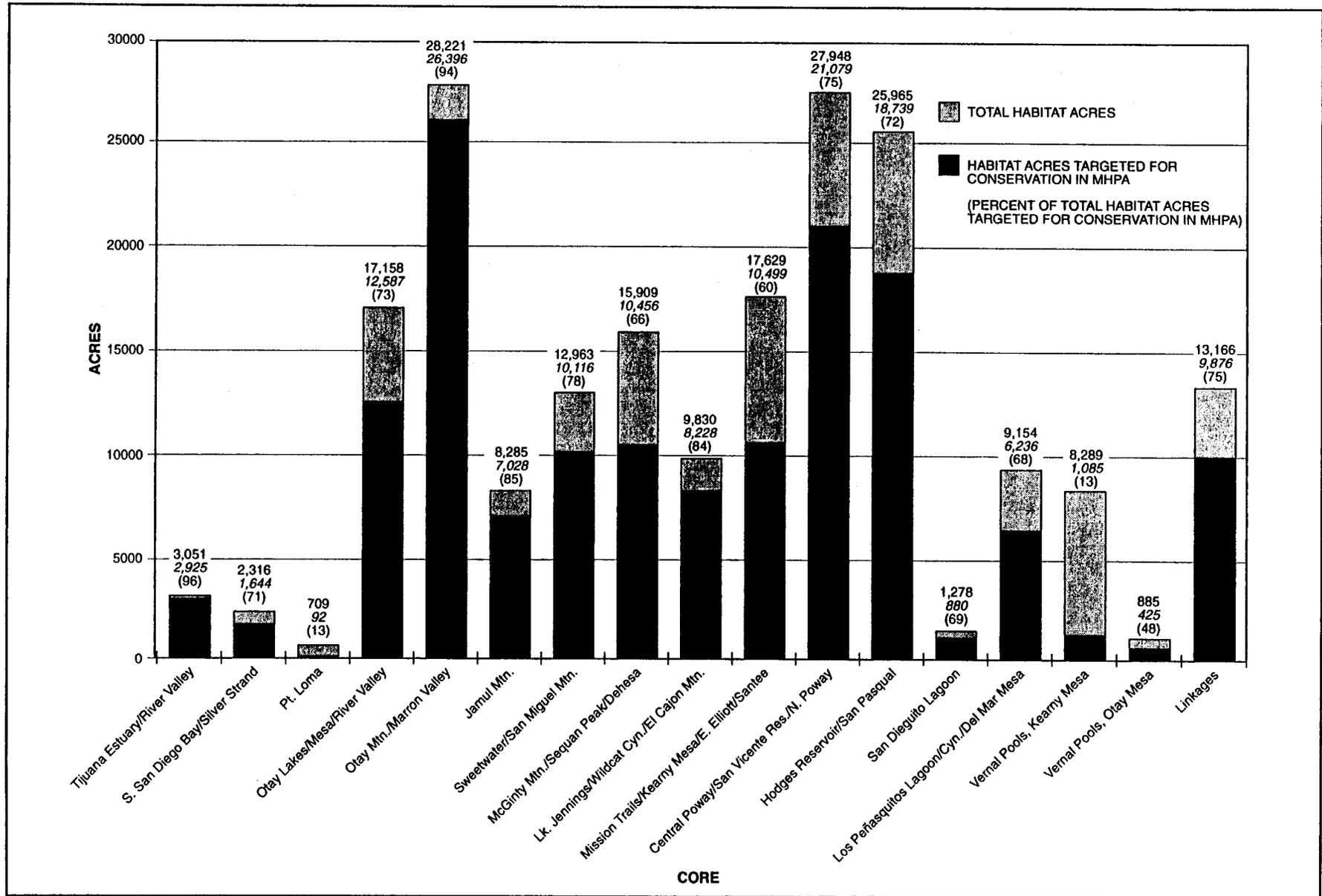
² Disturbed, Agriculture, and Developed areas with habitat value according to the habitat evaluation map.

³ MHPA conserved acres have been estimated based on average conservation factors (e.g., 70%, 80%, 90%, etc.) applied to Total MHPA acres, with the following exceptions: (a) all wetland communities are assumed 100% conserved within the MHPA boundary; (b) all Disturbed and Agriculture are assumed 0% conserved within the MHPA boundary for all subareas except City of San Diego; and (c) Developed areas are not conserved in MHPA. Numbers represent both existing conserved acres and acres targeted for conservation.

⁴ Number in parentheses is percent of MSCP vegetation communities conserved with military land excluded from total MSCP study area.

Note: Numbers may not sum to total as shown, due to rounding. Vernal pools were mapped as an overlay and thus their acreage is included in this total. Military lands are included in total study area acreage but are not included in MHPA.

Source: 1996 MSCP GIS database.



Percent of Biological Core and Linkage Areas Targeted for Conservation in MHPA

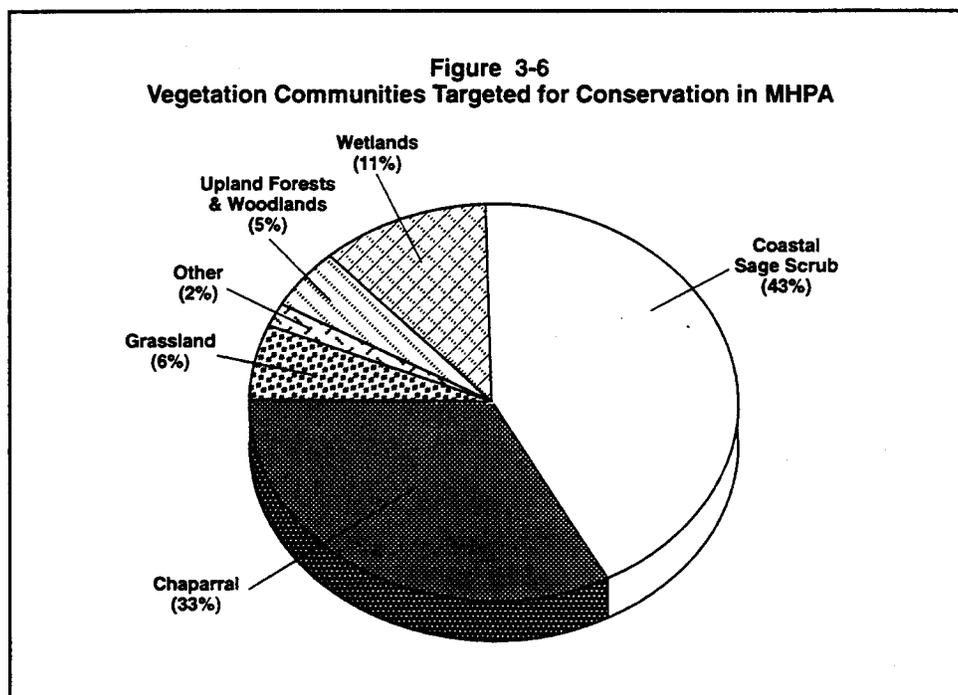
FIGURE

3-5

preserve design, in combination with the pre-approved mitigation area map developed by the wildlife agencies.

Three-fourths of the habitat acres conserved in the MHPA are comprised of coastal sage scrub and chaparral, with wetlands and grasslands comprising another 17% (Figure 3-6). Based on the MSCP habitat evaluation map (Figure 2-3), a little over half of the habitats conserved in the MHPA are ranked Very High in habitat value, and 22% are ranked High. Approximately 67% of all Very High habitat value lands and 53% of all High habitat value lands in the study area are conserved in the MHPA.

Much of the MHPA is comprised of small habitat patches adjacent to existing or proposed development areas. Habitat management techniques have been identified to minimize potential biological effects of development along these habitat/development interfaces (i.e., edge effects; see Section 6, individual subarea plans, and habitat management plans).



3.2.1 Wetlands

Wetland communities (vernal pools, saltpan, saltmarsh, freshwater marsh, riparian forest, oak riparian forest, riparian woodland, riparian scrub, open water, disturbed wetlands, natural flood channel, and shallow bay) within the MSCP study area include areas subject to California Fish and Game Code Section 1600 et seq. and Section 404 of the federal Clean Water Act. Such areas will continue to be regulated by these state and federal statutes. The U.S. Army Corps of Engineers (Corps) will continue to consult with the USFWS pursuant to Section 7 of the federal Endangered Species Act on projects that may affect federally listed species within Corps jurisdictional wetlands. The CDFG will work closely with the Corps, USFWS, and local jurisdictions to ensure that Fish and Game Code Section 1600 et seq. agreements are consistent with (1) the mitigation required for

covered species by Section 404 permits (including federal Endangered Species Act Section 7 consultations) and (2) the MSCP Plan.

Subarea plans and associated implementing mechanisms will address avoidance, minimization, and mitigation measures for wetland habitats subject to development impacts. Development projects that affect wetland vegetation communities will be required to comply with the terms of the local jurisdiction's subarea plan, the federal policy of no net loss of wetland functions and values, and the Environmental Protection Agency's (EPA) 404(b)(1) Guidelines (40 CFR Part 230). Such compliance will constitute the full extent of mitigation measures for the take of covered species required or recommended by the USFWS pursuant to the federal Endangered Species Act and National Environmental Policy Act and the CDFG pursuant to the state Endangered Species Act, NCCP Act, and California Environmental Quality Act.

The wildlife agencies have approached the Corps and EPA about the feasibility of integrating Section 404 permits into the NCCP process. The wildlife agencies and local jurisdictions will continue these discussions with the Corps and EPA with the intent of developing over the next 6 months a process to achieve this objective within 2 years.

3.3 COVERED SPECIES

Based on the MHPA preserve configuration, vegetation community conservation targets for all subareas, and implementation of habitat management plans, 85 species will be adequately conserved and "covered" by this plan (Table 3-4a). Table 3-4b lists those covered species affected by severability of take authorizations (see Section 3.3.1). Once the wildlife agencies have approved a subarea plan and signed the corresponding implementing agreement, that local agency will receive permits and/or management authorizations to directly impact or "take" these 85 species, pursuant to its approved plan and implementing agreement, if such taking is incidental to otherwise lawful activities. The term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect. (The County of San Diego and cities of San Diego, Poway, and Chula Vista must have approved subarea plans and implementing agreements before take of all 85 species is authorized for all participants.) These permits/management authorizations are referred to as "take authorizations." Taking of covered species will be allowed in accordance with approved subarea plans and implementing agreements. The covered species include species listed as endangered or threatened by the federal and state Endangered Species Acts, as well as currently unlisted species, many of which are also NCCP species:

<u>Protection Status</u>	<u>Plants</u>	<u>Animals</u>	<u>Total</u>
Federally listed ¹	7	13	20
State listed ²	12	2	14
Federally proposed	1	0	1
Federal candidates (C1 and former C2)	23	16	39
Other ³	3	8	11
Total	46	39	85

¹ May also be state listed.

² Includes 7 plants proposed for federal listing.

³ State species of special concern, habitat indicator species, and species important to preserve design.

Table 3-4a

MSCP COVERED SPECIES¹**Plants**

San Diego thorn-mint
 Shaw's agave
 San Diego ambrosia
 Aphanisma
 Del Mar manzanita
 Otay manzanita
 Coastal dunes milk vetch
 Encinitas baccharis
 Nevin's barberry
 Thread-leaved brodiaea
 Orcutt's brodiaea
 Dense reed grass
 Dunn's mariposa lily
 Slender-pod jewelflower
 Lakeside ceanothus
 Wart-stemmed ceanothus
 Salt marsh bird's-beak
 Orcutt's bird's-beak
 Del Mar Mesa sand aster
 Tecate cypress
 Short-leaved dudleya
 Variegated dudleya
 Sticky dudleya
 Palmer's ericameria
 San Diego button-celery
 Coast wallflower
 San Diego barrel cactus
 Otay tarplant
 Heart-leaved pitcher sage
 Gander's pitcher sage
 Nuttall's lotus
 Felt-leaved monardella

Willowy monardella
 San Diego goldenstar
 Prostrate navarretia
 Dehesa bear-grass
 Snake cholla
 California Orcutt grass
 Torrey pine
 San Diego mesa mint
 Otay Mesa mint
 Small-leaved rose
 San Miguel savory
 Gander's butterweed
 Narrow-leaved nightshade
 Parry's tetracoccus

Animals

Salt marsh skipper butterfly
 Thorne's hairstreak butterfly
 Riverside fairy shrimp
 San Diego fairy shrimp
 Arroyo southwestern toad
 California red-legged frog
 Southwestern pond turtle
 San Diego horned lizard
 Orange-throated whiptail
 California brown pelican
 Reddish egret
 White-faced ibis
 Canada goose
 Bald eagle

Northern harrier
 Cooper's hawk
 Swainson's hawk
 Ferruginous hawk
 Golden eagle
 American peregrine falcon
 Light-footed clapper rail
 Western snowy plover
 Mountain plover
 Long-billed curlew
 California least tern
 Elegant tern
 Burrowing owl
 Southwestern willow
 flycatcher
 Coastal cactus wren
 California gnatcatcher
 Western bluebird
 Least Bell's vireo
 California rufous-
 crowned sparrow
 Belding's Savannah
 sparrow
 Large-billed Savannah
 sparrow
 Tricolored blackbird
 American badger
 Mountain lion
 Southern mule deer

¹See Table 3-5 (at the end of this section) for specific conditions required for take authorizations.

Table 3-4b

**COVERED SPECIES AFFECTED BY
SEVERABILITY OF TAKE AUTHORIZATIONS**

Jurisdiction	Species	Jurisdictions Needed to Add Species ¹
Santee		
	San Diego ambrosia	City and County of San Diego
	Variigated dudleya	City and County of San Diego
	San Diego button-celery	City and County of San Diego
	San Diego barrel cactus	City and County of San Diego and Chula Vista
	San Diego mesa mint	City of San Diego
	Orange-throated whiptail	City and County of San Diego
	Cooper's hawk	City and County of San Diego
	Coastal cactus wren	City and County of San Diego and Chula Vista
	California gnatcatcher	City and County of San Diego and Chula Vista
	Least Bell's vireo	City and County of San Diego
	California rufous-crowned sparrow	City and County of San Diego
Chula Vista		
	Otay tarplant	County of San Diego
	Light-footed clapper rail	City of San Diego
	Western snowy plover	City of San Diego
	Long-billed curlew	City of San Diego
	California least tern	City of San Diego
	Burrowing owl	County of San Diego
	Coastal cactus wren	City and County of San Diego
	Least Bell's vireo	City and County of San Diego
	Belding's Savannah sparrow	City of San Diego
County of San Diego		
	Orcutt's bird's-beak	City of San Diego
	Del Mar Mesa sand aster	City of San Diego
	California least tern	City of San Diego
City of San Diego		
	Orcutt's brodiaea	County of San Diego
	Wart-stemmed ceanothus	County of San Diego
	Snake cholla	County of San Diego

¹ Jurisdictions with approved subarea plans needed to add species to the list of Covered Species Subject to Incidental Take.

The implementing agreements will assure that conservation/mitigation identified in the subarea plans and implementing regulations is implemented and the take authorization holders would not be required to commit additional land, land restrictions, or financial compensation, beyond that described in the subarea plan, for the protection of any covered species (see the Model Implementing Agreement in Attachment A). If, in the future, a covered but unlisted species becomes listed as endangered or threatened by the federal or state governments, the take authorization will become effective concurrent with its listing.

The standards for protecting the covered species and issuance of take authorizations are consistent with the state's NCCP guidelines, California Endangered Species Act, and criteria in Section 10(a) of the federal Endangered Species Act, namely:

- The taking will be incidental to otherwise lawful activities;
- The impacts of the taking will, to the maximum extent practicable, be minimized and mitigated;
- Adequate funding for long-term protection of the species will be provided; and
- The taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild.

As a policy, the protection of species on the covered species list is not required to exceed the federal 10(a) or state Endangered Species Act and NCCP standards for purposes of obtaining federal and state take authorizations. The analysis of adequate protection for covered species focused on the proportion of major populations conserved in the MHPA. The proportion of suitable habitat conserved was used for those species with few documented occurrences in the study area. Potential occupiable habitat (carrying capacity) conserved in the MHPA was considered for the California gnatcatcher. Wide-ranging species, for which the MSCP study area comprises only a small portion of their distribution, are included as covered species. The degree of protection outside the MHPA, afforded by federal and state wetland regulations and topographic inaccessibility, also was considered in the analysis. Specific management actions will be required of the take authorization holders to address the potential effects of development on species within the preserve.

Data, specific conditions for coverage, and general basis of analysis for coverage for each species evaluated are included in Table 3-5 at the end of this section. Species were grouped for general analysis of coverage based on their life history characteristics, degree of rarity, regional and global context, need for and response to management, extant population size and trend, specific preserve design requirements, and other variables.

The groupings of MSCP species for general analysis of coverage were:

1. Preserve design/landscape level. Species in this analysis category are generally widespread within and often outside the MSCP area; have relatively robust populations; have life history characteristics that respond to habitat-scale conservation; are known or suspected to respond to appropriate management of preserves; or a combination of the above. Species within this general analysis category are most appropriately conserved by designing preserves based on the NCCP Conservation Guidelines, as is the case with the MSCP preserve.

2. Preserve design/landscape level with site-specific consideration(s)/management. Species within this analysis category are generally well distributed within one or more vegetation communities in the MSCP area; have core populations that must be conserved; need specific mitigation measures to ensure conservation; or a combination of the above. For species in this analysis category, the habitat/vegetation community(s) and/or most known locations would be conserved, and specific management measures would be implemented.
3. Site-specific preserve design and special measures/management. Species in this analysis category generally have patchy distribution, often with a narrowly defined range; require specific management conditions for conservation; or a combination of the above. For species in this analysis category, the MSCP has incorporated site-specific design criteria, avoidance, and minimization requirements and preserve management measures.

3.3.1 Severability of Take Authorizations

The wildlife agencies assessed the amount of mitigation versus impacts of take proposed for each species in each jurisdiction. Based on this assessment, each jurisdiction's implementing agreement will have two attachments entitled "Covered Species" and "Covered Species Subject to Incidental Take." The Covered Species list will include those species within the MSCP study area for which the state and federal take authorization requirements are met by the MSCP as a whole (Table 3-4a). Covered Species Subject to Incidental Take are those species for which the state and federal take authorization requirements are met by an individual jurisdiction's subarea plan (see Section 2.8 of the Model Implementing Agreement). These lists are modified based on which local jurisdictions have valid take authorizations. Table 3-4b lists species by jurisdiction that are affected by the severability provisions and the jurisdiction(s) with approved subarea plans needed to have the species on the list of Covered Species Subject to Incidental Take. The implementing agreements for each jurisdiction will specify which jurisdictions need to have take authorizations for a species to move from the Covered Species list to the Covered Species Subject to Incidental Take list.

3.3.2 Modification to the Covered Species List in the Public Review Draft

Additions to the Covered Species List

The Public Review Draft for the MSCP (March 1995) identified 57 covered species whereas this MSCP Plan proposes to provide coverage for 85 species (Table 3-5). The factors that resulted in additions to the covered species list can be grouped into four broad categories: (1) federal and state policy clarifications, (2) changes in preserve design, (3) evaluation of additional species, and (4) new information, including species location, additional mitigation measures, taxonomic issues, etc.

1. Federal and State Policy Clarifications. Subsequent to release of the Public Review Draft, the wildlife agencies clarified their policies regarding coverage for species (a) that are unlikely to occur within the study area (discountable) or (b) for which the study area is not a significant portion of the species' range (insignificant). Ten species were added to the covered species list based primarily on wildlife agency policy clarification.
2. Changes in Preserve Design. Modification of the preserve design increased the conservation of some species and/or reduced edge effects on these species in

critical locations. Three species were added to the covered species list based on improved preserve design.

3. Evaluation of Additional Species. Subsequent to the release of the Public Review Draft, habitat requirements and degree of protection for five species, not on the original list of 93 species evaluated for the MSCP, were assessed. These additional evaluations resulted in five species being added to the covered species list.
4. New Information and Additional Conservation Measures. New information regarding species locations, location of preserve lands, taxonomic issues, and the development of additional conservation measures (including protection standards for narrow endemic species and vernal pools) resulted in reevaluation of previously uncovered species (see Section 3.3.3). The reevaluation resulted in 13 species being added to the covered species list.

Deletions from the Covered Species List

Based on reevaluation of species-specific conservation measures, data on potential species distribution, and risk to species survival as a result of plan implementation, three species were deleted from the covered species list.

3.3.3 Narrow Endemic Species

Some native species, primarily plants with restricted geographic distributions, soil affinities, and/or habitats, are referred to as “narrow endemic species.” For vernal pools and narrow endemic species, the jurisdictions and other participants will specify measures in their subarea plans to ensure that impacts to these resources are avoided to the maximum extent practicable. These additional conservation measures will apply to the following narrow endemic species for the MSCP study area:

- San Diego thorn-mint
- San Diego ambrosia
- Nevin’s barberry
- Dunn’s mariposa lily
- Short-leaved dudleya
- Palmer’s ericameria
- Felt-leaved monardella
- Snake cholla
- Shaw’s agave
- Encinitas baccharis
- Thread-leaved brodiaea
- Lakeside ceanothus
- Variegated dudleya
- Otay tarplant
- Gander’s pitcher sage
- Dehesa bear-grass



Dunn's Mariposa Lily

3.4 PROCESS FOR ADDING SPECIES TO COVERED SPECIES LIST

If a species that is not on the covered species list is proposed for listing pursuant to the federal or state Endangered Species Act, the wildlife agencies will determine whether additional conservation measures, beyond those prescribed by the MSCP, are necessary to adequately protect the species. If no such measures are necessary, the species will be added to the covered species list using the federal and state take authorization amendment process.

If the MSCP conservation measures will not adequately protect the species, the wildlife agencies will work with the participants to identify and jointly implement the steps necessary for coverage. These may include the following measures, in order of preference:

- Management practices and enhancement opportunities within the preserve system, provided these measures do not adversely affect any covered species; and/or
- Habitat acquisition through the reallocation of federal, state, and/or regional funds identified for MSCP implementation, provided such reallocation does not adversely affect any covered species.

If these options are not adequate to meet the species' conservation requirements, the wildlife agencies will determine the additional measures necessary to add the species to the covered species list, with preference given to conservation means that do not require additional mitigation or dedication of land. Although conservation measures necessary to add the species to the covered species list may be identified when or after the species is proposed for listing, the take authorization holders will not be required to approve or implement these conservation measures until such time as the species is listed. See Section 4.2.4 for a discussion of wildlife agency contributions for conservation of uncovered species listed in the future.

3.5 USE OF SUBAREA PLANS TO PROTECT BIOLOGICAL RESOURCES

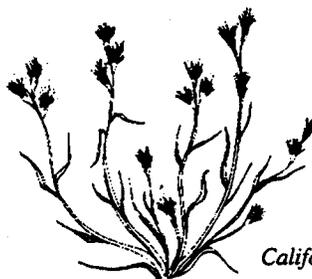
Subarea plans demonstrate how take authorization holders will achieve consistency with the MSCP Plan and its conservation targets in the following ways.

1. Methods of Meeting Conservation Targets. Each subarea plan specifies how the take authorization holder will achieve the conservation targets of the MSCP Plan and subarea plan. The conservation targets are achieved through avoidance and minimization of impacts and through preservation, restoration, and/or enhancement of habitat. Subarea plans specify how the conservation targets are achieved using combinations of encroachment allowances, zoning, biological mitigation or sensitive land ordinances, and other mechanisms.
2. Avoidance of Impacts and Allowed Encroachment. Subarea plans and their implementing regulations and ordinances emphasize avoidance of impacts to biologically sensitive resources (including narrow endemic species and vernal pools) and identify areas and circumstances where take of covered species and their habitats is authorized.
3. Wetlands. The conservation of wetland-dependent species is based on the federal policy of no net loss of wetland habitats. Subarea plans also incorporate the no

net loss concept. Jurisdictional wetlands will continue to be regulated under the federal Clean Water Act (Section 404) and Fish and Game Code Section 1600 et seq.

4. Mitigation Requirements

- a. Each take authorization holder will implement the mitigation standards specified in its subarea plan and implementing agreement. Mitigation measures in subarea plans may include avoidance of impacts; preservation, restoration, and/or enhancement of habitat; or some combination of the above consistent with achieving the goals of the subarea plan.
- b. Because habitat within a preserve planning area with an ecologically sound preserve design generally has greater conservation value than habitat occurring in fragmented or isolated patches, subarea plans can incorporate incentives (e.g., reduced mitigation requirements) to encourage conservation within the MHPA.
- c. Subarea plans require site-specific analysis of biological resources, for projects where agreements do not already exist, to determine appropriate mitigation measures and siting of the project.
- d. Subarea plans may provide flexibility in both the location and type of habitat conserved, if consistent with achieving the subarea plan's conservation goals. This flexibility allows subarea plans to de-emphasize or eliminate, if appropriate, historic "in-kind" mitigation requirements and provides an opportunity to use an "ecosystem-based" mitigation approach.
- e. Mitigation may be required for impacts to uncovered species, to the extent required through the California Environmental Quality Act and applicable federal and state regulations.
- f. Land acquired for mitigation in excess of the local agency's mitigation requirements may be used for mitigation credits or to establish a conservation bank.
- g. Subarea plans also may use "in lieu" fees to accomplish all or some of the conservation goals of the plan.
- h. Subarea plans specify the mechanism for permanent protection of lands used for mitigation. These mechanisms include conservation easements; fee title transfer to a public agency, conservancy, or land trust; or other mechanisms mutually agreed to by the take authorization holder and the wildlife agencies.
- i. Subarea plans provide for consistency in mitigation for public and private projects.



California Orcutt Grass

3.6 BIOLOGICAL PRESERVE DESIGN CHECKLIST

Subarea plans are required of each entity seeking take authorizations from the wildlife agencies (see Section 5.2). The following checklist should be used as a tool to direct and support the preparation of subarea plans, to ensure that they are consistent with the MSCP Plan, and to ensure that the protection of species on the covered species list meets issuance criteria for a Section 10(a)(1)(B) permit and California Endangered Species Act standards and NCCP guidelines for Section 2081 and 2835 management authorizations. This checklist incorporates the basic tenets for conservation planning identified in the NCCP guidelines. For purposes of obtaining federal and state take authorizations, the protection of covered species shall not be required to exceed the above requirements.

Subarea plan and habitat management plan preparation and implementation should include the following:

- An analysis of biological data gaps for the subarea;
- Detailed fieldwork using generally accepted field and analytical techniques and mapping to fill data gaps;
- Refinement of the vegetation and species databases;
- Prioritization of biological resources for conservation, using the numbered criteria below;
- Gap analysis to identify which of the most important resources in the subarea are currently protected and where there are gaps in protection;
- Analysis of existing and planned land uses to evaluate management feasibility and compatibility (Section 6);
- Development of a preserve design consistent with the numbered criteria below; and
- Ongoing evaluation of preserve management effectiveness.

To be consistent with the MSCP, a subarea plan's conservation strategy must include or address the following checklist.

1. General Preserve Design

- a. High biodiversity lands as indicated by spatially representative examples of extensive patches of sensitive vegetation communities ranked as Very High and High biological value by the MSCP habitat evaluation map (Figure 2-3) or as identified through subsequent fieldwork.
- b. Large blocks of unfragmented habitat, following natural topography (ridges and watersheds).
- c. Large, interconnected blocks of habitat that contribute to the preservation of wide-ranging species.

- d. Key existing linkage areas between core habitat blocks; restore or enhance as necessary the connections to other private or public open space lands and to other subareas and/or habitat patches outside the subarea plan area.
- e. Configuration that minimizes edge effects between habitat preserves and development and edge-to-preserve area ratio.

2. Habitat Criteria

- a. Total acreages and vegetation communities equivalent in conservation value to those conservation targets listed in the MSCP Plan (Tables 3-1 and 3-2).
- b. Representation of sensitive vegetation communities and their geographic subassociations containing priority species in large, functioning ecosystems.
- c. High-quality vernal pools (primarily but not exclusively supporting sensitive species); no net loss of wetland habitats per state and federal policies and regulations.
- d. High habitat quality and microhabitats (e.g., soil type, host plant, drainages, rock outcrops) important to sustaining long-term viable populations of individual covered species as identified in the MSCP habitat evaluation map (Figure 2-3) and subsequent fieldwork.

3. Species Criteria

- a. Core California gnatcatcher and coastal cactus wren populations and key linkage areas between them as identified in Figure 2-2 or through subsequent fieldwork.
- b. Federal and state endangered and threatened species and species proposed for listing.
- c. Key regional populations of proposed covered species within the subarea. Coverage for the entire MSCP study area is dependent on the retention and maintenance of adequate populations of these species and their habitats within the subarea.

4. Management and Biological Monitoring Criteria (see also Sections 6.3 and 6.4 and the MSCP Biological Monitoring Plan)

- a. Appropriate management within the preserve to minimize edge effects from adjacent land uses.
- b. Appropriate uses within the preserve that are compatible with and complement the biological function of the area.
- c. Biological monitoring of habitats and species should reflect priorities as determined in categories 2 and 3 above.

Table 3-5

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) ¹	CONSERVED ² (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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PLANTS					
<i>Acanthomintha ilicifolia</i> San Diego thorn-mint 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

DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

This species will be covered by the MSCP because all major populations are within the MHPA, and each of the eight major populations will be conserved from 80-100%, with 85% conserved overall. This species is on the list of narrow endemics³ which requires jurisdictions to specify and implement measures in their subarea plans to avoid or minimize impacts to all populations (including Asphalt Inc., Sky Mesa, El Capitan sites) during project design.

Notes: This species occurs on clay and gabbro soils which will be conserved at >28% and >43%, respectively.

Conditions: Area-specific management directives and the SPA for the Otay Lakes Resort area must include specific measures to protect against detrimental edge effects from the surrounding development.⁴

<i>Agave shawii</i> Shaw's agave FSC*/	100% of major populations	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 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.³

Table 3-5 (Continued)

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) ¹	CONSERVED ² (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.⁴

<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.³

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.⁴

Table 3-5 (Continued)

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) ¹	CONSERVED ² (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
DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED					
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
DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED					
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. ⁵					

Table 3-5 (Continued)

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) ¹	CONSERVED ² (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: 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.

Conditions: Area-specific management directives must include specific management measures to address the autecology and natural history of the species and to reduce the risk of catastrophic fire.⁴ Management measures to accomplish this may include prescribed fire.

<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
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DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED

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.³

Notes: This species is often associated with metavolcanic soils of which 34,000 acres are included within the MHPA.

Conditions: 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.⁴ Management measures to accomplish this may include prescribed fire.

<i>Astragalus deanei</i> Dean's milk vetch FSC*/	Unknown conservation level and therefore not covered by the plan.				NO
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Table 3-5 (Continued)

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) ¹	CONSERVED ² (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>titi</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
<p>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</p> <p>This species will be covered by the MSCP because 92% of the vegetative community that is potential habitat for this species will be conserved.</p> <p>Notes: This species historically occurred on the Silver Strand but is thought to be extirpated from the MSCP study area.</p> <p>Conditions: Area-specific management directives must provide for reintroduction opportunities, identify potential reintroduction sites, and include measures to prevent non-native species introductions.⁴ Any newly found populations shall be evaluated for inclusion in the preserve strategy through acquisition, like exchange, etc.</p>					
<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
<p>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</p> <p>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.³</p> <p>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.⁴ 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) ¹	CONSERVED ² (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
DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED					
<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.³</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/CE	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
DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED					
<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.³</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) ¹	CONSERVED ² (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>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</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.⁵</p> <p>Notes: 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>Conditions: 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.⁴</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) ¹	CONSERVED ² (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.⁴ 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.⁴

<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 measures³ 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) ¹	CONSERVED ² (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>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</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/Sanrex, and Fortuna Mountain populations are identified as critical and will be 100% protected (San Diego County Subarea Plan requirement).</p> <p>Note: This taxon has been combined with the more widespread and common <i>Caulanthus heterophyllus</i> var. <i>heterophyllus</i>.</p> <p>Conditions: Area-specific management directives must include specific management measures to address the autecology and natural history of the species and to reduce the risk of catastrophic fire.⁴ 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>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</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 measures³ for the species if a population is identified in the future. This is a Group A species in the County's proposed BMO.⁵</p> <p>Conditions: Area-specific management directives must include specific management measures to address the autecology and natural history of the species and to reduce the risk of catastrophic fire. Management measures to accomplish this may include prescribed fire.</p>					

Table 3-5 (Continued)

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) ¹	CONSERVED ² (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
DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED					
<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.⁵</p> <p>Notes: Additional important populations (30% of known populations) are found on military lands (Pt. Loma, Miramar) which are not part of the MSCP.</p> <p>Conditions: Revegetation efforts within appropriate habitats must include restoration of this species. Area-specific management directives for the protected populations must include specific measures to increase populations, including specific management measures to address the autecology and natural history of the species and to reduce the risk of catastrophic fire.⁴ 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 orcuttlana</i> Orcutt's spineflower 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) ¹	CONSERVED ² (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 orcuttianus</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).⁵ 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) ¹	CONSERVED ² (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 filaginifolia</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
DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED					
<p>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.³</p> <p>Notes: This taxon has been merged with two other <i>Corethrogyne filaginifolia</i> varieties and has been determined not to meet the taxonomic standards for listing.</p> <p>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.⁴ Management measures to accomplish this may include prescribed fire.</p>					
<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
DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED					
<p>This species will be covered by the MSCP because 98% of major populations will be conserved, primarily on lands administered by BLM.</p> <p>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.⁴ 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) ¹	CONSERVED ² (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 blochmaniae</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
<p>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</p> <p>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.³</p> <p>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.</p> <p>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.⁴</p>					
<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) ¹	CONSERVED ² (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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<p>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</p> <p>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.³</p> <p>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.⁴ 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.)</p>					
<i>Dudleya viscida</i> Sticky dudleya FSC*/	100% of major population	No major populations	Preserve design/landscape level	Monitoring Plan - Habitat Based	YES
<p>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</p> <p>This species will be covered by the MSCP because 100% of the only major population within the MSCP will be conserved.</p> <p>Notes: Persistence of this species in San Diego County depends largely on conservation efforts in the MHCP and Camp Pendleton areas.</p> <p>Conditions: Area-specific management directives must address specific measures to protect against detrimental edge effects.⁴</p>					
<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

Table 3-5 (Continued)

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) ¹	CONSERVED ² (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.³

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.⁴

Table 3-5 (Continued)

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) ¹	CONSERVED ² (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
<p>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</p> <p>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.</p> <p>Notes: Populations from San Diego County are now being treated as <i>Erysimum capitatum</i> ssp. <i>capitatum</i>, a common species of wallflower.</p>					
<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
<p>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</p> <p>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.⁵</p> <p>Notes: 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%.</p> <p>Conditions: Area-specific management directives must include measures to protect this species from edge effects and unauthorized collection;⁴ directives should also include appropriate fire management/control practices to protect against a too frequent fire cycle.</p>					

Table 3-5 (Continued)

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) ¹	CONSERVED ² (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
DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED					
<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.³</p>					
<p>Conditions: 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.⁴</p>					

Table 3-5 (Continued)

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) ¹	CONSERVED ² (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
DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED					
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). ⁵					
Conditions: Area-specific management directives must include: (1) specific measures to protect against detrimental edge effects; (2) specific measures to promote increase of populations; and (3) specific management measures to address the autecology and natural history of the species and to reduce the risk of catastrophic fire (management measures to accomplish this may include prescribed fire). ⁴					
<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) ¹	CONSERVED ² (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.³

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).⁴ 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.⁴

Table 3-5 (Continued)

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) ¹	CONSERVED ² (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>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</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.³ This is a Group A species in the County's proposed BMO.⁵</p>					
<p>Notes: Persistence of this species in San Diego County depends, in part, on conservation efforts outside the MSCP area.</p>					
<p>Conditions: Area-specific management directives must also include measures to protect against detrimental edge effects and uncontrolled access.⁴</p>					
<i>Monardella linoides</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>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</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.⁵</p>					
<p>Conditions: 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) ¹	CONSERVED ² (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>Muilla 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>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</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.⁵</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.⁴</p>					
<i>Myosurus minimus</i> ssp. <i>apus</i> Little mousetail FSC*/	The MSCP preserve does not include adequate habitat to conserve this species.				NO
<i>Navarretia fossalis</i> Prostrate navarretia PT/	63% of only major population, 88% of vernal pool habitat	37% of only major population, 12% of vernal pool habitat may be impacted, but this habitat is subject to no net loss of function and value and 404(b)1 guidelines	Site-specific preserve design and special measures/ management	Area-specific Management Directives (wetlands)	YES

Table 3-5 (Continued)

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) ¹	CONSERVED ² (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.⁵

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 McGinty 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).⁷ 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.³

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 effects⁴ 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) ¹	CONSERVED ² (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
DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED					
<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.³</p> <p>Notes: Additional important populations are found on military lands (Pt. Loma) which are not part of the MSCP.</p> <p>Conditions: Area-specific management directives must include (1) specific measures to protect against detrimental edge effects to this species⁴ 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) ¹	CONSERVED ² (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
DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED					
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. ³					
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.					
Conditions: Area-specific management directives must include specific measures to protect against detrimental edge effects to this species ⁴ and measures to maintain surrounding habitats for pollinators.					
<i>Pinus torreyana</i> Torrey pine FSC*/	100% of native population	No major populations	Preserve design/landscape level	Monitoring Plan - Habitat Based	YES
DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED					
This species will be covered by the MSCP because the single naturally occurring population at Torrey Pines State Reserve will be conserved and appropriately managed.					
<i>Pogogyne abramsii</i> San Diego mesa mint FE/CE	88% of vernal pool habitat	12% of vernal pool habitat may be impacted, but this habitat is subject to no net loss of function and value and 404(b)1 guidelines	Preserve design/landscape level with site-specific consideration(s)/management	Area-specific Management Directives	YES

Table 3-5 (Continued)

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) ¹	CONSERVED ² (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
DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED					
<p>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.</p>					
<p>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.</p>					
<p>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.</p>					
<p><i>Pogogyne nuduscula</i> Otay Mesa mint FE/CE</p>	<p>91% of the major population, 88% of vernal pool habitat</p>	<p>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</p>	<p>Preserve design/landscape level with site-specific consideration(s)/management</p>	<p>Area-specific Management Directives</p>	<p>YES</p>

Table 3-5 (Continued)

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) ¹	CONSERVED ² (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 the one major population will be conserved, and federal wetland regulations will provide additional protection for vernal pool habitats.

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

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.

<i>Rosa minutifolia</i> Small-leaved rose /CE	Only known MSCP occurrence transplanted into preserve, propagation and restoration in appropriate habitat	Only known MSCP occurrence transplanted into preserve	Site-specific preserve design and special measures/management	Area-specific Management Directives (1 population)	YES
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Table 3-5 (Continued)

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) ¹	CONSERVED ² (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

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

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

1. The rose population shall be salvaged, propagated, and transplanted to a new location that will support a healthy, reproducing population in perpetuity. This goal shall be achieved through a 5-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.
2. 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.
3. 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 5-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.

<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
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Table 3-5 (Continued)

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) ¹	CONSERVED ² (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
DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED					
<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.³</p> <p>Conditions: Area-specific management directives must include specific management measures to address the autecology and natural history of the species and to reduce the risk of catastrophic fire. Management measures to accomplish this may include prescribed fire. This species will be conserved at the 80+% 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
DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED					
<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).⁵</p> <p>Notes: 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>Conditions: Area-specific management directives must include: (1) specific measures to protect against detrimental edge effects to this species;⁴ and (2) measures to address the autecology and natural history of the species.</p>					
<i>Solanum tenuilobatum</i> Narrow-leaved nightshade FSC*/	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) ¹	CONSERVED ² (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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<p>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</p> <p>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.</p> <p>Notes: This species is now taxonomically included in <i>Solanum xanti</i>.</p>					
<p><i>Tetracoccus dioicus</i> Parry's tetracoccus FSC*/</p>	<p>80-100% of major populations</p>	<p>0-20% of major populations</p>	<p>Preserve design/landscape level</p>	<p>Monitoring Plan - Habitat Based and Photo Plot</p>	<p>YES</p>

<p>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</p> <p>This species will be covered by the MSCP because 80-100% of major populations will be conserved.</p> <p>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).⁵ 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.</p> <p>Conditions: Area-specific management directives must include specific measures to protect against detrimental edge effects to this species.⁴</p>					
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Table 3-5 (Continued)

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) ¹	CONSERVED ² (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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ANIMALS					
Invertebrates					
<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
DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED					
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.					
Conditions: Area-specific management directives must manage for the host species (Tecate cypress). ⁴ 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) ¹	CONSERVED ² (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
<p>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</p> <p>This species will be covered by the MSCP because 93% of its potential habitat will be conserved.</p> <p>Conditions: Area-specific management directives must include measures to: (1) control exotic weeds and invertebrate predators, where appropriate, and (2) control access to saltmarsh habitat.⁴</p>					
<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) ¹	CONSERVED ² (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.⁴

<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.⁴

Table 3-5 (Continued)

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) ¹	CONSERVED ² (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
Reptiles and Amphibians					
<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
<p>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</p> <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.).¹ 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) ¹	CONSERVED ² (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
DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED					
<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.⁴</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) ¹	CONSERVED ² (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 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</i> <i>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
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Table 3-5 (Continued)

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) ¹	CONSERVED ² (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 59% 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.⁴

<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.⁴

Table 3-5 (Continued)

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) ¹	CONSERVED ² (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
Birds					
<i>Pelecanus occidentalis californicus</i> California brown pelican FE/CE	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
DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED					
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.					
Notes: Most of the important roosting and foraging habitat occurs on military lands and waters under Port Authority jurisdiction which are not included as part of the MSCP. Participating jurisdictions' guidelines and ordinances and state and federal wetland regulations will provide additional habitat protection resulting in no net loss of wetlands. This species is a common to very common non-breeding visitor which uses mud flats, piers, jetties, etc. to roost, and it forages primarily in coastal ocean waters and San Diego Bay.					

Table 3-5 (Continued)

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

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<i>Egretta 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
DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED					
This species will be covered by the MSCP because 90% of its potential habitat will be conserved.					
Notes: Additional important habitat occurs in waters under Port Authority and military jurisdiction which are not included as part of the MSCP. Participating jurisdictions' guidelines and ordinances and state and federal wetland regulations will provide additional habitat protection resulting in no net loss of wetlands. This species forages 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.					
<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) ¹	CONSERVED ² (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 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.

Conditions: Area-specific management directives must include specific measures to protect against detrimental edge effects to this species.⁴

<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
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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) ¹	CONSERVED ² (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
DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED					
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) ¹	CONSERVED ² (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) ¹	CONSERVED ² (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.⁴

Table 3-5 (Continued)

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) ¹	CONSERVED ² (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
<p>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</p> <p>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.</p> <p>Notes: The plan will not adversely affect the <u>species</u>' long-term survival. Additional conservation of grassland habitats should be a priority and one of the primary factors in the design of preserves in the major amendment areas. This species is a rare migrant through the area.</p>					
<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
<p>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</p> <p>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.</p> <p>Notes: The plan will not adversely affect the <u>species</u>' long-term survival. Additional conservation of grassland habitats should be a priority and one of the primary factors in the design of preserves in the major amendment areas. This species is not known to nest within the MSCP study area.</p>					

Table 3-5 (Continued)

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) ¹	CONSERVED ² (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>Aquila chrysaetos</i> Golden eagle BEPA/SSC	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.	Viability of 4 of the 11 active nesting territories (partially or fully within the plan area)	Preserve design/landscape level with site-specific consideration(s)/management	Monitoring Plan - Habitat Based and Management Plans/Directives (site-specific nest territories)	YES

Table 3-5 (Continued)

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) ¹	CONSERVED ² (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.⁴ 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) ¹	CONSERVED ² (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
DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED					
This species will be covered by the MSCP because more than 89,000 acres of potential foraging habitat will be conserved.					
Notes: This species has very low population numbers in the county, being primarily a rare fall and winter visitor. All three nest sites occur outside of the MHPA: one on Coronado Bridge, one on a crane in Port Authority jurisdiction, and one on Pt. Loma federal lands. Participating jurisdictions' guidelines and ordinances and state and federal wetland regulations will provide additional habitat protection resulting in no net loss of wetlands.					
<i>Rallus longirostris levipes</i> Light-footed clapper rail FE/CE	93% of potential habitat (1,700± 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) ¹	CONSERVED ² (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% of its habitat will be conserved.

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

Conditions: Area-specific management directives must include active management of wetlands to ensure a healthy tidal saltmarsh environment and specific measures to protect against detrimental edge effects to this species.⁴

<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
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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. 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.

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

Conditions: Area-specific management directives must include protection of nesting sites from human disturbance during the reproductive season and specific measures to protect against detrimental edge effects to this species.⁴ 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) ¹	CONSERVED ² (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
DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED					
<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 <u>species'</u> long-term survival.</p>					
<p>Notes: 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>Conditions: Area-specific management directives for the Tijuana River Valley should specifically address the habitat requirements for this species.⁴</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) ¹	CONSERVED ² (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.⁴ 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) ¹	CONSERVED ² (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>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</p> <p>This species will be covered by the MSCP because 93% of its potential habitat will be conserved.</p> <p>Notes: 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>Conditions: Area-specific management directives must include protection of nesting sites from human disturbance during reproductive season, predator control, and specific measures to protect against detrimental edge effects to this species.⁴ 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) ¹	CONSERVED ² (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) ¹	CONSERVED ² (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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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.⁴

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.

<i>Empidonax traillii extimus</i> Southwestern willow flycatcher FE/CE	76% of potential habitat (4,900± acres) - 93% of riparian woodland, 80% of riparian scrub - 88% of known localities	24% of potential habitat (1,400± 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 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 4,900± acres (76%) of potential habitat will be conserved.

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

Table 3-5 (Continued)

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

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<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
DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED					
<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>Notes: This species also uses other habitat types (coastal sage scrub and chaparral) containing cactus patches. Small clusters of birds at Black Mountain and Spring Valley will also be conserved. Conservation of the Salt Creek population is critical to the persistence of the species in San Diego County, and it would only be conserved under the City of Chula Vista's "Modified GDP B" alternative. The existing distribution of cactus wrens in the MSCP Plan area has been greatly reduced, and restoration of suitable cactus wren habitat and its management are important components of the MSCP Plan. Significant opportunities for restoration within the MHPA occur on Otay Ranch, Spring Canyon (and adjacent areas), Dennery Canyon, San Miguel Ranch, Lake Hodges/San Pasqual Valley, Otay River Valley, and Santee/Lake Jennings. The participating jurisdictions should seek OHV funds for restoration, 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>Conditions: The restoration of maritime succulent scrub habitat as specified in the Otay Ranch RMP and GDP must occur at the specified 1:1 ratio. Area-specific management directives must include restoration of maritime succulent scrub habitat, including propagation of cactus patches, active/adaptive management of cactus wren habitat, monitoring of populations within preserves, and specific measures to reduce or eliminate detrimental edge effects.⁴ 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) ¹	CONSERVED ² (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>Poliptila 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
DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED					
<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 (Otay, 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>Notes: 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>Conditions: Area-specific management directives must include measures to reduce edge effects and minimize disturbance during the nesting period, fire protection measures to reduce the potential for habitat degradation due to unplanned fire, and management measures to maintain or improve habitat quality including vegetation structure.⁴ 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) ¹	CONSERVED ² (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.⁴ 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) ¹	CONSERVED ² (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>Aimophila 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>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</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>Notes: This species is tolerant of edge effects, small habitat patches, low shrub volume, and short-term habitat disturbance.</p> <p>Conditions: Area-specific management directives must include maintenance of dynamic processes, such as fire, to perpetuate some open phases of coastal sage scrub with herbaceous components.⁴</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) ¹	CONSERVED ² (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.⁴

<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.⁴

Table 3-5 (Continued)

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) ¹	CONSERVED ² (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>Ammodramus 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>DETAILS OF RATIONALE FOR IDENTIFYING SPECIES AS COVERED</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>Conditions: Project approvals must require avoidance of active nesting areas during the breeding season. Area-specific management directives must include measures to avoid impacts to breeding colonies and specific measures to protect against detrimental edge effects to this species.⁴</p>					

Table 3-5 (Continued)

SPECIES EVALUATED FOR COVERAGE UNDER THE MSCP

SCIENTIFIC NAME COMMON NAME STATUS (Federal/State) ¹	CONSERVED ² (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
Mammals					
<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) ¹	CONSERVED ² (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.⁴

<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) ¹	CONSERVED ² (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
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 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

¹ **Status (Federal/State)**

FE=Federally Endangered	BEPA = Bald Eagle Protection Act	protected = moratorium on hunting
PE=Proposed for federal listing as Endangered	CE = State Endangered	none = no federal or state status
FT=Federally Threatened	CR = State Rare	
PT=Proposed for federal listing as Threatened	CT = State Threatened	
C=Candidate for federal listing	SSC = State Species of Special Concern	
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.		

² 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.

³ 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).

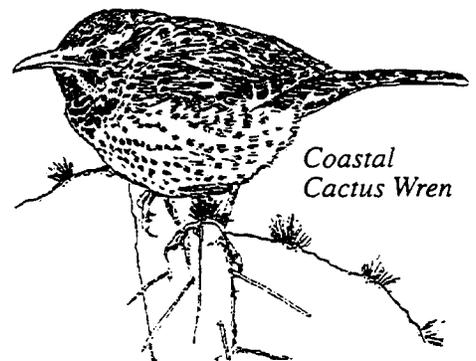
⁴ Area-specific management directives for preserve areas will include specific guidelines for managing and monitoring covered species and their habitats, including following best management practices. Edge effects may include (but are not limited to) trampling, dumping, vehicular traffic, competition with invasive species, parasitism by cowbirds, predation by domestic animals, noise, collecting, recreational activities, and other human intrusion.

⁵ 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.

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4.0 Assembling the MSCP Preserve



*Coastal
Cactus Wren*

4.0 ASSEMBLING THE MSCP PRESERVE

4.1 SUMMARY OF POLICIES AND METHODS OF PRESERVE ASSEMBLY

The MSCP preserve will be assembled through a combination of the following methods:

- Conservation of lands already in public ownership;
- Public acquisition of private lands with regional habitat value from willing sellers; and
- Private development contributions through development regulations and mitigation of impacts.

The relative contributions of these three methods of preserve assembly and the equitable distribution of costs have been the subject of extensive discussion and consideration by public elected officials. The MSCP Working Group, composed of private development groups, environmental groups, local jurisdictions, and public agencies, made recommendations through development of issue papers and financing and acquisition strategy principles. These recommendations were considered by the MSCP Policy Committee, composed of elected officials from the region, and by local city councils and the County Board of Supervisors. As a result of these discussions, an agreement was reached among Mayor of San Diego Susan Golding, U.S. Secretary of the Interior Bruce Babbitt, and California Undersecretary for Resources Michael Mantell. In addition, the Board of Supervisors approved deal points or points of negotiation for the unincorporated area, and the wildlife agencies provided responses to these points. This section summarizes the policies for assembling the MSCP preserve. Subarea plans may include policies different from or more detailed than those contained in this subregional plan.

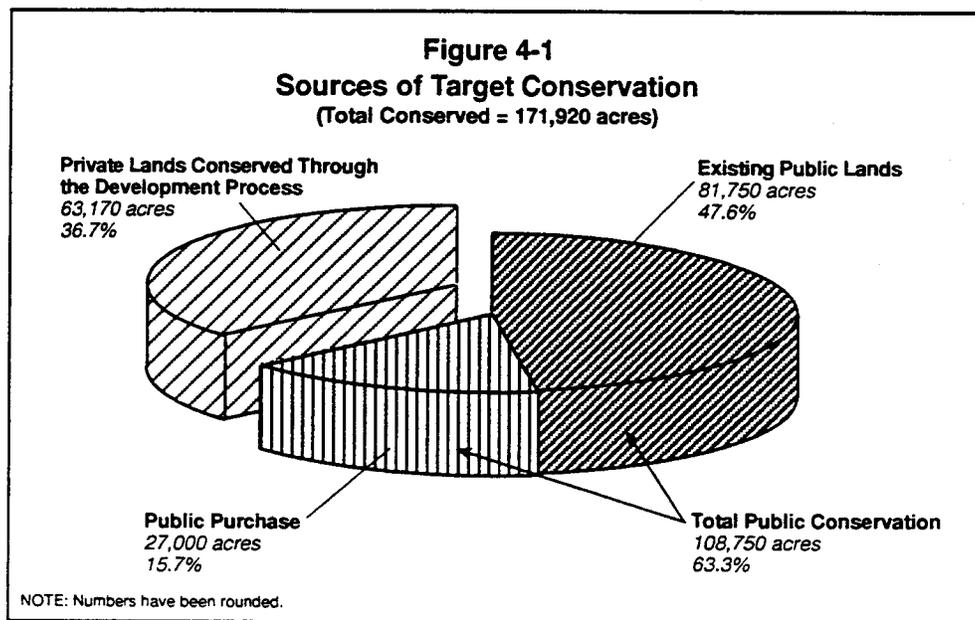
Conservation of Existing Public Lands. The MSCP preserve system incorporates public lands to the greatest extent possible, to minimize the need to acquire private lands and to avoid increasing exactions on private land development beyond the existing requirements of local, state, and federal regulations.

Public Acquisition of Private Lands. Private property rights will be fully respected and upheld. Where public funds are used to acquire lands for the MSCP preserve, the lands will be acquired only from willing sellers at fair market value or upon terms mutually satisfactory to the buyer and seller. Condemnation proceedings will not be used unless specifically requested by a property owner (i.e., "friendly condemnation"). The division of acquisition, management, and monitoring costs among public agencies is described below and in Section 7. For purposes of this discussion, lands acquired through public purchase are in addition to and separate from lands acquired as mitigation for impacts of public or private projects.

Private and Public Development Contributions. Private development exactions should not be increased beyond existing requirements. Development contributions should be made in accordance with development regulations, where habitat impacts are avoided, and through compensatory mitigation of unavoidable impacts. Mechanisms for contributions from private and public development are specified in the jurisdictions' subarea plans.

4.1.1 Sources of Preserve Assembly

Upon completion, the MSCP preserve will contain approximately 171,920 acres, including 167,670 acres of natural habitat and 4,250 acres of other vacant lands that contribute to preserve design. (To simplify discussion, acreage figures are rounded to the nearest 10 acres.) Of the total, public sources (federal, state, and local governments and the general public in the MSCP study area) will contribute 81,750 acres of public lands to the preserve and acquire approximately 27,000 acres of private lands. Approximately 63,170 acres of private lands will be conserved through the development process, including mitigation for impacts to biological resources outside the preserve. In total, the public sector will contribute 108,750 acres (63.3%) of the MSCP preserve, and private sector development will contribute 63,170 acres (36.7%) (Figure 4-1 and Table 4-1).



Public Sector Contributions

Public sector contributions to the MSCP preserve are divided into those of the federal and state governments and those of local jurisdictions and special districts. Federal and state governments will contribute 36,510 acres of existing public lands to the preserve and will manage and monitor those lands in perpetuity for species and habitat protection. Local jurisdictions and special districts will contribute 45,240 acres of currently owned habitat lands to the preserve (Table 4-1). Some of these lands are already managed for habitat protection; others will be committed to permanent habitat protection through implementation of the MSCP. For purposes of this plan, preserve management includes management of biological resources and field operation and maintenance (Section 6.3).

Over a period of 30 years, the federal and state governments, collectively, and local jurisdictions and the general public in the MSCP study area, collectively, will each contribute half of the approximately 27,000 acres (subject to no more than 10% adjustment, upward or downward) to be acquired by public means. That is, the federal and state governments have committed to acquire approximately 13,500 acres, and the local jurisdictions will acquire approximately 13,500 acres. This division reflects the partnership among federal, state, and local governments in assembling the MSCP

Table 4-1

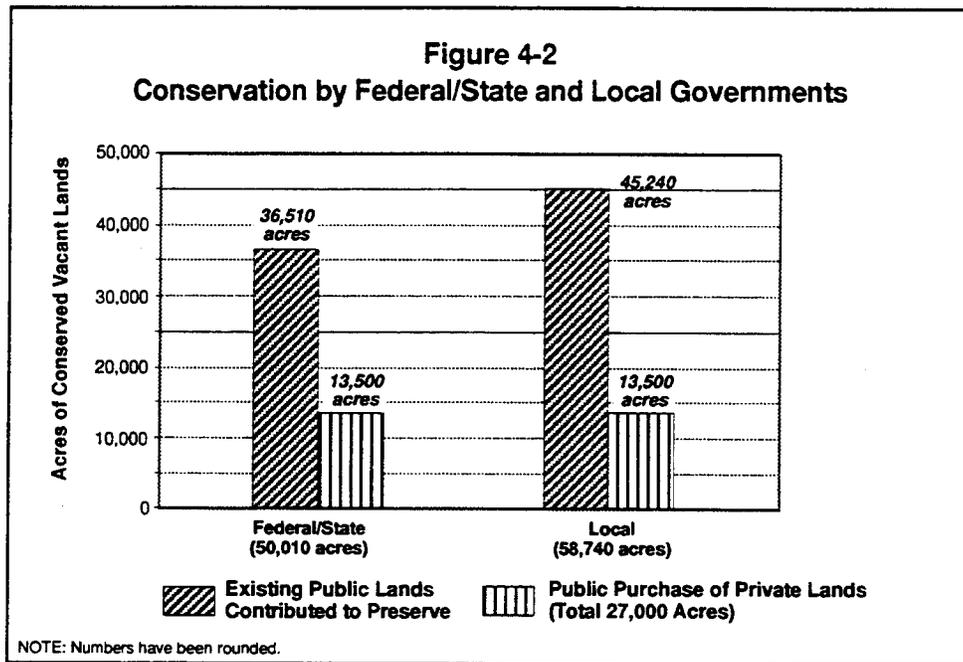
SUMMARY OF PRESERVE ASSEMBLY

	Acres Targeted for Conservation in MHPA
1. Federal and State Governments	
• Manage existing federal and state lands located in MHPA according to MSCP guidelines.	36,510 ac
• Contribute half of 27,000 acres of lands to be acquired by public means (subject to no more than 10% adjustment, upward or downward) through purchase or non-cash transactions, such as land exchanges. ¹ Manage and monitor those lands with federal and state funds.	13,500 ac
Total targeted for conservation by federal and state governments	50,010 ac
2. Local Jurisdictions	
• Manage currently owned lands located in MHPA according to MSCP guidelines.	45,240 ac
• Acquire privately owned habitat lands in MHPA by purchase or by non-financial methods. Manage and monitor lands acquired under the local program. ¹	13,500 ac
• Assure conservation of natural habitat on privately owned lands and appropriate mitigation in accordance with local land use regulations and environmental review.	See below.
Total targeted for conservation by local jurisdictions	58,740 ac
3. Private Development	
• Conserve through the development process habitat lands currently in private ownership, and provide offsite mitigation through purchase of privately owned habitat lands inside MHPA, in accordance with local land use regulations and environmental review.	63,170 ac
Total targeted for conservation by private development	63,170 ac
Total Targeted for Conservation in MHPA	171,920 ac

Numbers have been rounded.

¹ Public projects also will conserve habitat through offsite mitigation, in addition to acquisition solely for conservation purposes.

preserve. Relative contributions of the federal/state and local governments are shown in Figure 4-2. Existing public lands contributed to the preserve are shown in Figure 3-3.



Private Sector Contributions

Privately owned habitat lands within the MHPA, totaling 63,170 acres, will be conserved through the development process, either through avoidance of impacts or as compensatory mitigation for unavoidable impacts. Local jurisdictions will establish a framework for this conservation through land use regulations and through environmental review required by the California Environmental Quality Act. To this end, local jurisdictions will adopt policies, regulations, and procedures consistent with achieving the conservation targets or goals of their subarea plans (see Section 3.2).

Balance of Conservation and Development in the MHPA

Participating local jurisdictions have identified the preserve planning areas of the MHPA and conservation targets associated with those areas (see Figure 3-2 and conservation targets in Tables 3-1 and 3-2). The MHPA excludes developed lands. In the City of San Diego, the MHPA includes some disturbed and agricultural lands because these lands are needed to maintain wildlife corridors and linkages. In portions of San Diego County's MHPA, there are no preserve planning area boundaries. Instead, there are conservation goals and criteria for protecting biological resources, and habitat will be conserved incrementally through mitigation for unavoidable impacts and public acquisition from willing sellers. Table 4-2 and Figure 4-3 indicate how much public and private lands in the MHPA will be conserved or developed.

In 1996, 85,190 acres (43.8%) of lands in the MHPA were owned by federal, state, and local governments, including special districts, and 109,130 acres (56.2%) were owned by private landowners. Of the MHPA lands currently in private ownership, 57.9% will be conserved in conjunction with private development, according to local land use

regulations or through offsite mitigation; 24.7% will be publicly acquired; and 17.4% will potentially be developed (Table 4-2).

Table 4-2
CONSERVATION OR DEVELOPMENT OF VACANT LANDS IN MHPA,
BY OWNERSHIP

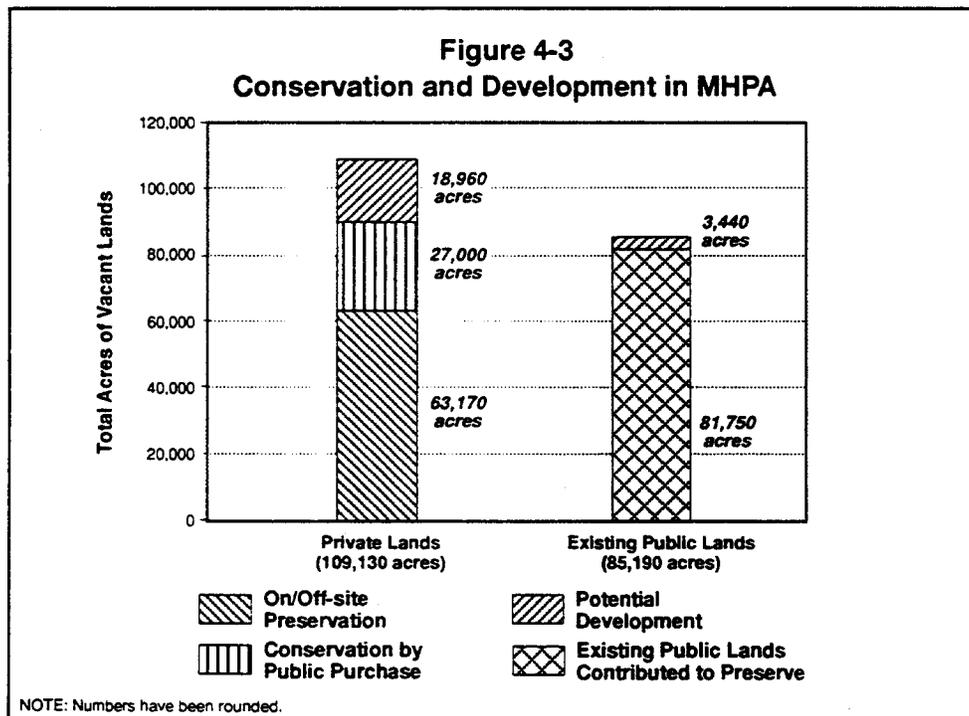
Ownership	Conserved On- or Offsite (acres)	Conserved Through Public Acquisition (acres)	Potentially Developed (acres)	Total Vacant Lands in MHPA (acres)
Public	81,750 ¹ (96.0%)	— ³	3,440 (4.0%)	85,190 (100.0%)
Private	63,170 ² (57.9%)	27,000 (24.7%)	18,960 (17.4%)	109,130 (100.0%)
Total	144,920	27,000	22,400	194,320

Source: 1996 MSCP GIS database (Ogden, SourcePoint); Onaka Planning & Economics.
Numbers have been rounded. Percentages are calculated relative to total public or private land in MHPA.

¹ Management of existing public lands for habitat use.

² Conserved through the development process as avoidance or mitigation.

³ Federal, state, and local governments will acquire 27,000 acres from willing sellers.



4.1.2 Estimated Need for Acquisition by Public Means

Most of the privately owned habitat lands within the MHPA are located in five of the jurisdictions participating in the MSCP: the cities of Chula Vista, Poway, San Diego, and Santee and the County of San Diego. To assemble the MSCP preserve, some private lands would need to be acquired by federal, state, or local governments in these jurisdictions. The estimates of acquisition need were prepared by the jurisdictions and reviewed by the wildlife agencies. The estimates, shown in Table 4-3, were based on detailed, site-specific reviews of the following factors:

- Land ownership and parcel sizes;
- Presence of biological resources;
- Potential for private land development, including proposed and approved projects and project designs negotiated between landowners and the wildlife agencies; and
- Future applications of local land use regulations and impact mitigation anticipated as a result of environmental review according to the California Environmental Quality Act.

In estimating acquisition needs, the jurisdictions and wildlife agencies recognized that each jurisdiction should contribute its fair share of the preserve lands through development regulations and mitigation. Therefore, each jurisdiction's implementation program incorporates a combination of mechanisms for conservation. The estimated acquisition need shown in Table 4-3 reflects these implementation programs.

In the City of Chula Vista, the estimated acquisition need represents target conservation on privately owned lands in Minor Amendment Areas. An undetermined amount of habitat on these lands may be conserved through application of criteria and goals for linkages and corridors as described in the City of Chula Vista Subarea Plan. In the cities of Poway and Santee, the respective subarea plans indicate that all of the estimated acquisition needs may be met by offsite mitigation for impacts of public or private projects. In the City of San Diego, approximately 1,000 acres of the 2,400 acres of estimated acquisition need may be met by offsite mitigation. Total offsite mitigation estimated in the subarea plans of Poway, San Diego, and Santee is 4,550 acres.

It is assumed in this plan that all of the estimated acquisition needs, or 25,160 acres, will be publicly purchased (Table 4-3). Actual need for public acquisition may be less than this estimate if some of the habitat is acquired through offsite mitigation, as anticipated in the cities' subarea plans. On the other hand, acquisition need may exceed the estimate if both offsite mitigation and habitat conservation through the development process are less than anticipated. A contingency has been added to deal with the latter possibility. For planning purposes, the total need for public acquisition of privately owned habitat is estimated to be 27,000 acres, subject to no more than 10% adjustment, upward or downward.

Table 4-3

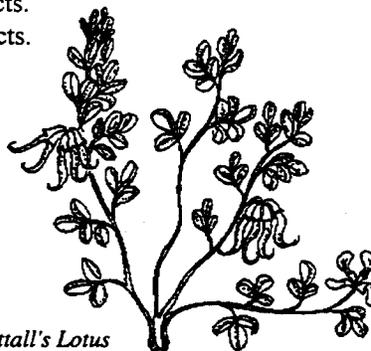
**ACQUISITION AND CONSERVATION OF PRIVATE
VACANT LANDS BY SUBAREA**

Subarea/Segment	Estimated Acquisition Need ¹ (acres)	Land Conserved Through the Development Process (acres)	Total Private Land Conserved (acres)
Chula Vista	360 ²	340	700
Poway	3,200 ³	3,170	6,370
San Diego	2,400 ⁴	12,910	15,310
Santee	350 ³	1,460	1,810
County of San Diego			
Lake Hodges	1,150	3,410	4,560
Metro-Lakeside- Jamul	13,000	11,570 ⁵ 10,970 ⁶	35,540
South County	<u>4,700</u>	<u>20,620</u>	<u>25,320</u>
Total County	18,850	46,570	65,420
Other Subareas	<u>0</u>	<u>560</u>	<u>560</u>
Total All Subareas			
Estimated Total	25,160	65,010	90,170
With Contingency	27,000	63,170	90,170

Source: Cities of Chula Vista, Poway, San Diego, and Santee, and County of San Diego; Onaka Planning & Economics.

Numbers have been rounded.

- ¹ To be acquired by the federal and state governments and the regional funding program.
- ² Target conservation (75%) of Minor Amendment Areas; an undetermined portion of this amount may be conserved through application of criteria and goals for linkages and corridors.
- ³ According to the subarea plans of Poway and Santee, all of these needs may be met through offsite mitigation of public or private projects.
- ⁴ According to the City of San Diego Subarea Plan, an estimated 1,000 acres of this need may be met through offsite mitigation for public or private projects.
- ⁵ Currently conserved in approved or negotiated projects.
- ⁶ To be protected.



Nuttall's Lotus

4.2 PRESERVE ASSEMBLY BY FEDERAL AND STATE GOVERNMENTS

Sensitive species and their habitats are public resources, and the benefits of protecting these resources accrue broadly to the citizens of the state and the nation. The federal and state governments have acknowledged their role in habitat conservation and agreed to assist the local jurisdictions and property owners in creating a preserve that reduces or avoids the need to list additional species. The federal government and the State of California have committed to meet a portion of the acquisition, management, and monitoring requirements of the MSCP Plan. In fact, because there are important habitat areas on federal and state lands, their participation is essential to the success of the MSCP. Through the MSCP Plan and implementing agreements with participating jurisdictions and special districts, the federal and state governments have agreed to be partners with the participating local jurisdictions and the private sector in the creation and management of the MSCP preserve.

The federal and state governments will take the following actions to contribute toward assembly of the MSCP preserve:

1. Contribute 36,510 acres of existing federal and state lands, excluding military lands, to permanent habitat conservation and management;
2. Acquire 13,500 acres of privately owned habitat lands in the MSCP preserve from willing sellers; and
3. Manage and monitor the federal and state share of the MSCP preserve.

4.2.1 Contributions of Existing Federal and State Lands

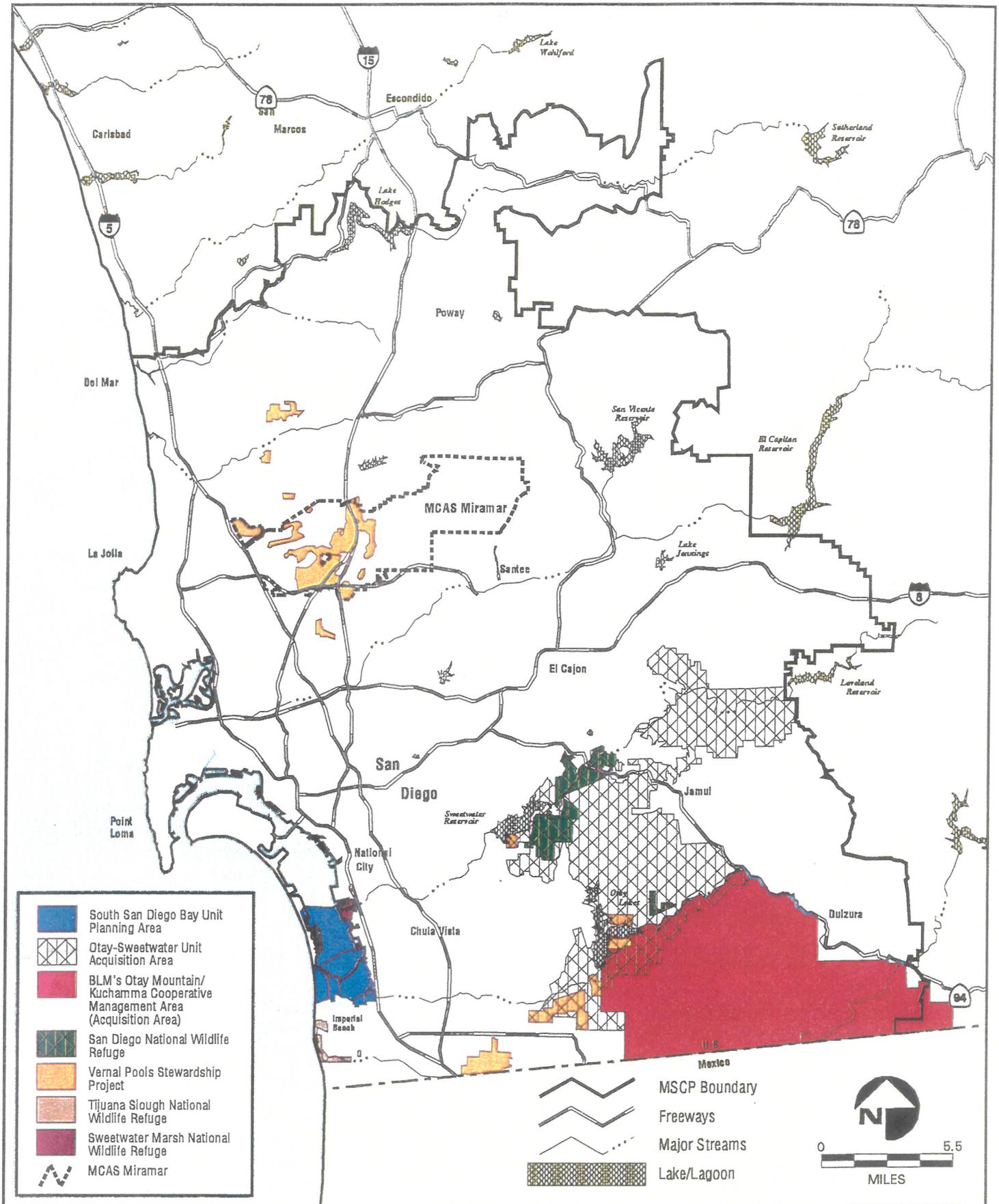
In keeping with the policy to maximize use of existing public lands in the MSCP preserve, the federal and state governments have agreed to conserve and manage 36,510 acres in the preserve for protection of their biological resources (Table 4-4). On some of these lands, such as the Tijuana River National Estuarine Sanctuary and the Torrey Pines State Reserve, natural habitat is already protected. In other cases, programs have been initiated to protect natural habitat.

U.S. Bureau of Land Management

Among federal agencies, the Bureau of Land Management manages the largest amount of habitat lands in the region for multiple objectives, such as resource protection, grazing, mineral extraction, and recreation. In a Memorandum of Understanding executed with the California Executive Council on Biological Diversity, USFWS, CDFG, City of San Diego, County of San Diego, and SANDAG, the Bureau of Land Management has committed to conserve and permanently manage habitat on its lands in the county in accordance with local conservation strategies, including the MSCP. This includes lands around Otay Mountain, called the Otay Mountain/Kuchamma Cooperative Management Area.

U.S. Fish and Wildlife Service

The MHPA contains three wildlife refuges that are part of the National Wildlife Refuge System: Sweetwater Marsh National Wildlife Refuge in Chula Vista, the Tijuana Slough National Wildlife Refuge near the U.S./Mexico border, and the recently designated San Diego National Wildlife Refuge (Figure 4-4).



Department of the Interior Conservation Efforts

FIGURE
4-4



Table 4-4

**CONSERVATION OF VACANT LANDS ADMINISTERED BY FEDERAL
AND STATE GOVERNMENTS IN THE MHPA¹**

Ownership	Total Acres Administered in MHPA	Acres to Be Conserved
Federal Government²		
Bureau of Land Management	24,760	24,510
Fish and Wildlife Service	3,240	3,240
Forest Service	170	170
Other Federal Agencies	910	730
State of California	8,260	7,860
Total	37,340	36,510

Source: 1996 MSCP GIS database (Ogden, SourcePoint); USFWS; Onaka Planning & Economics. Numbers have been rounded.

¹ Vacant lands administered by the federal and state governments inside the MHPA; includes disturbed and agriculture.

² Excluding Department of Defense lands at Miramar, Point Loma, North Island/Silver Strand, and South San Diego Bay.

State of California

The State of California administers important habitat lands within the MSCP preserve, including Silver Strand State Beach, Torrey Pines State Reserve, San Pasqual Battlefield State Historic Park, Borderfield State Park, Blue Sky Ecological Reserve, McGinty Mountain Ecological Reserve, Sweetwater Ecological Reserve, San Dieguito Ecological Reserve, and Sequan Peak Ecological Reserve. All of these habitat lands will be managed consistent with the goals of the MSCP.

4.2.2 Habitat Acquisition by Federal and State Governments

Level of Commitment and Methods of Acquisition

The federal government and State of California have committed to contribute in the aggregate, over 30 years, half of the lands to be acquired by public means, or 13,500 acres (subject to no more than 10% adjustment, upward or downward, based on evaluation of new information). In selecting the lands to be acquired, the wildlife agencies will consider biological value, cost, vulnerability to development, relationship to the Bureau of Land Management study areas and proposed wildlife refuge boundaries, and proximity of existing public lands, including state ecological reserves. Emphasis will further be given to those lands that can be obtained through non-cash transactions (e.g., land exchanges). The federal and state governments also will seek to distribute acquisition equitably among the participating jurisdictions.

The federal and state acquisition is expected to occur over a 30-year period. If following the exercise of all available authority and utilization of all available resources, the federal and/or state contribution committed to the MSCP cannot be provided, the MSCP will be reevaluated, with possible adjustments made to permit coverage and assurances, considering the extent of the federal/state contribution.

Wildlife Agencies' Contribution for Uncovered Species Listed in the Future. The wildlife agencies also have committed to contribute toward conservation of uncovered species, or species not covered by the MSCP Plan, if they become listed in the future. The level of commitment will vary, depending on whether the uncovered species occur in vegetation communities defined as "significantly" or "sufficiently" conserved by the MSCP. As described in Section 4.2.4, if uncovered species dependent on *significantly* conserved vegetation communities are listed in the future as endangered or threatened, the wildlife agencies will contribute toward their conservation to the same extent as committed for covered species. If uncovered species dependent on *sufficiently* conserved vegetation communities are listed, the wildlife agencies will provide for the conservation of those species. This commitment for uncovered species dependent on sufficiently conserved vegetation communities becomes effective once the cities of San Diego, Poway, and Chula Vista and the County of San Diego have received their take authorizations (see Section 4.2.4 for further discussion of this policy).

Methods. The federal and state governments may use the following methods to acquire privately owned habitat:

- Direct purchase from willing sellers/landowners using appropriated funds;
- Cooperative federal/state programs for the conservation of endangered or threatened species;
- Land exchanges (including bundling lands for sale or exchange);
- Grants and matching funds; and
- Tax credits (if available) and other processes including the Base Closure and Realignment Program and through the Federal Deposit Insurance Corporation.

Potential sources of federal and state funds are described in Section 7.5.

Baseline Measurements. March 1, 1995, the date of the public release of the Public Review Draft MSCP Plan, is the baseline date for computing public acquisition by federal/state and local governments. Lands acquired by the local jurisdictions or by federal and state governments, that contribute to achieving the MSCP conservation goals and that are acquired after the baseline date, will be credited toward meeting their respective acquisition obligations of 13,500 acres, subject to no more than 10% adjustment.

Federal Programs for Habitat Acquisition

In the MSCP study area, there are both existing and proposed federal programs for habitat acquisition.

Otay Mountain/Kuchamma Cooperative Management Area. The Bureau of Land Management has designated the Otay Mountain/Kuchamma Cooperative Management Area as an acquisition project area. The Bureau of Land Management's goal is to acquire

privately owned inholdings in this area to consolidate public land ownership and establish an open space and wildlife area. Acquisition will be accomplished through exchanges of other Bureau of Land Management lands and appropriations from the Land and Water Conservation Fund.

San Diego National Wildlife Refuge. The USFWS has efforts underway to expand the San Diego National Wildlife Refuge. The following areas are included in these efforts (Figure 4-4).

1. Otay-Sweetwater Unit — The approved refuge acquisition area boundary for this unit includes up to 43,860 acres from Otay Mesa north and east to the upper Sweetwater River. Newly acquired areas will be added to the existing San Diego National Wildlife Refuge.
2. Vernal Pools Stewardship Project — The approved refuge acquisition area boundary for this unit includes up to 8,200 acres of vernal pool complexes on Del Mar Mesa, Lopez Ridge, Otay Mesa, Montgomery Field, lands near Otay and Sweetwater reservoirs, and MCAS Miramar. The first acquisition for this unit, in spring 1998, will be 53 acres on Del Mar Mesa.
3. South San Diego Bay Unit — The Draft Environmental Assessment and Land Protection Plan for this proposed unit to the San Diego National Wildlife Refuge was distributed in January 1998. The South San Diego Bay planning area includes up to 4,994 acres of deep baywater, tidelands, and coastal dunes located within the cities of Chula Vista, Coronado, Imperial Beach, National City, and San Diego.

For wildlife refuges, the USFWS has the authority to purchase land for habitat conservation from individual landowners. The USFWS will acquire land only from willing sellers. In addition to purchasing lands in fee title, the USFWS can acquire conservation easements, negotiate cooperative agreements or land exchanges, or accept donations of land. Most funds for acquisition come from Congressional appropriations. The USFWS is authorized to acquire lands only within an approved National Wildlife Refuge boundary. Thus, establishment of a refuge is necessary for using monies allocated to the USFWS from the federal Land and Water Conservation Fund, Migratory Bird Conservation Fund, and other sources.

Federal Payments In Lieu of Local Taxes. Lands acquired for national wildlife refuges are removed from the tax rolls. However, the loss of local tax revenues is partially offset under provisions of the Refuge Revenue Sharing Act, which requires USFWS to annually reimburse the counties in which the wildlife refuges are located for revenues lost due to federal acquisitions. Payments are based on the greatest of three measures: three-fourths of 1% of the fair market value, 25% of net receipts from operation such as user fees, or \$0.75 per acre. Additionally, Congress may appropriate supplemental funds to compensate local governments for shortfalls in revenue sharing payments through the budget process. For its wildlife refuges in San Diego County, the USFWS in-lieu payments totaled \$155,200 in fiscal year 1995.

Similar payments are made by the Bureau of Land Management under the Payments in Lieu of Taxes Act of 1976. Payments are made for tax-exempt federal lands administered by the Bureau of Land Management, U.S. Forest Service, National Park Service, USFWS, and other federal projects to support local services such as fire and police protection, search and rescue operations, and road construction. Payments to San Diego County in fiscal year 1995 totaled \$284,700.

Mitigation for Federal and State Projects

Consistent with existing law, federal and state agencies should mitigate impacts of public works projects in the MSCP study area through purchase and/or protection of habitat within the preserve. Federal and state public works projects in the study area include new and/or expanded federal and state highways and correctional facilities. This mitigation will be in addition to federal and state habitat acquisition.

Recent Land Acquisitions by the Federal and State Governments

Between March 1995 when the Public Draft MSCP was distributed, and December 1997, the federal and state governments acquired 4,785 acres of habitat in the MSCP study area. Most of these acquisitions are in addition to lands included in Table 4-4. These lands will be managed as part of the National Wildlife Refuge system or State Ecological Reserves. These preserves will protect covered species and their habitats and assist in assembling the MSCP preserve. The federal government (BLM and USFWS) has acquired and is managing the following lands as part of the San Diego National Wildlife Refuge: Rancho San Diego (1,840 acres purchased by SANDAG, County of San Diego, and Caltrans as a conservation bank), 255 acres north of Otay Lakes, 363 acres south of Otay Mountain, and 1,469 acres of San Miguel Ranch (partially a conservation bank). The state-acquired lands include Sequan Peak Phase I (593 acres) and Phase II (125 acres) in Alpine; Willow Glen (199 acres) in the El Cajon area; the Ryckman property (95 acres) in Poway; and the Lambron Otay Lakes property (480 acres), Rancho Jamul property (629 acres), and San Miguel Ranch (217 acres) in south San Diego County.

4.2.3 Sale of Federal or State Lands to Local Governments

The federal and state governments can preferentially sell habitat lands to local governments for habitat conservation purposes. For example, the Bureau of Land Management offers excess lands with sensitive species and habitats to local governments, prior to their being offered to private parties. The Bureau of Land Management transferred lands to the cities of Poway and San Diego and the County of San Diego, which are included in the MSCP preserve.

Although not a federal agency, the Resolution Trust Corporation, prior to its dissolution and merging of its activities with the Federal Deposit Insurance Corporation, held in trust tracts of undeveloped land and other properties previously owned by failed savings and loan institutions. Under a program that gave local governments priority in purchasing lands with important biological resources, the Resolution Trust Corporation sold the following two properties in the MSCP study area to local public agencies. These properties are included in the proposed MSCP preserve.

1. The 232-acre Paraiso Cumbres property in Rancho Peñasquitos, purchased by the City of San Diego; and
2. A 1,872-acre portion of Rancho San Diego in southern San Diego County, later designated as the San Diego National Wildlife Refuge. The purchase was funded cooperatively by the County of San Diego, California Department of Transportation, SANDAG, Otay Water District, and USFWS. The purchase was intended, in part, to mitigate impacts of transportation projects in the county, including State Routes 125 and 54.

4.2.4 Wildlife Agency Contributions for Conservation of Uncovered Species Listed in the Future

This section describes how the wildlife agencies will contribute to conservation of uncovered species, should they become listed in the future. The MSCP differs from traditional habitat conservation plans in the variety and range of habitats that will be protected. Rather than conserving habitat for one or a few species, the MSCP will conserve diverse vegetation communities which are habitats for many species of animals and plants. In recognition of this approach and the conservation level achieved by the MSCP, the wildlife agencies have agreed to provide additional habitat-based assurances for uncovered species.

In this approach, certain vegetation communities are classified as “significantly” and/or “sufficiently conserved.” Implementation of the MSCP will result in better protection of uncovered species that are dependent on sufficiently conserved vegetation communities than for species dependent on significantly conserved vegetation communities. The wildlife agencies determined which vegetation communities were significantly or sufficiently conserved based on a variety of factors, including:

- Preserve configuration;
- Extent of the vegetation community and associated ecological or edaphic conditions (e.g., coastal influence, soil types) conserved outside the MSCP study area;
- Level of conservation in the MSCP study area;
- Juxtaposition of the vegetation community to other vegetation communities in the MHPA and current and future development in the MSCP study area;
- Potential for uncovered species, dependent on the vegetation community, to meet the criteria for listing as a threatened or endangered species in the future;
- Patch size of the vegetation community inside the MHPA;
- Composite habitat values of the portion of the vegetation community conserved;
- Amount of ecotone of the vegetation community conserved;
- Conservation level of the vegetation community within the identified core and linkage areas; and/or
- Functionality of linkages (for uncovered species dependent on the vegetation community) between patches of the vegetation community.

Sufficiently Conserved Vegetation Communities

Based on evaluation of the above factors, the wildlife agencies determined that the MSCP will sufficiently conserve the following vegetation communities:

- Southern coastal bluff scrub
- Riparian scrub
- Disturbed wetlands
- Riparian forest
- Southern coastal saltmarsh
- Saltpan
- Coastal sage scrub (that portion of coastal sage scrub that comprises the range of the California gnatcatcher)
- Southern foredunes
- Riparian woodland
- Torrey pine forest
- Natural flood channel
- Tecate cypress forest

If an uncovered species dependent on a sufficiently conserved vegetation community is listed under the federal or state Endangered Species Act, the federal and state governments will provide for the conservation and management of the habitat for such species. Except for implementation of and conformance with the MSCP Plan and applicable subarea plans, the take authorization holders would not have additional requirements for the conservation of such species. This assurance is applicable only when the County of San Diego and the cities of Chula Vista, San Diego, and Poway have received their take authorizations. The sufficiently conserved vegetation communities assurance is applicable as long as all of the take authorizations remain in effect for the County of San Diego and the cities of Chula Vista, San Diego, and Poway.

Significantly Conserved Vegetation Communities

All of the sufficiently conserved vegetation communities are also significantly conserved. In addition, based on evaluation of the above factors, the wildlife agencies determined that the MSCP will significantly conserve the following vegetation communities:

- Beach
- Oak riparian forest
- Freshwater marsh
- Coastal sage scrub
- Maritime succulent scrub
- Southern maritime chaparral
- Open water

The above vegetation communities are significantly conserved when the County of San Diego and the City of San Diego have received their take authorizations. If an uncovered species dependent on a significantly, but not sufficiently, conserved vegetation community is listed under the federal or state Endangered Species Act, the federal and state governments and the take authorization holders will both contribute, in the same proportions as described in the MSCP Plan and subarea plans for covered species, toward land acquisition, management, and biological monitoring. The commitment of USFWS and CDFG to contribute their proportionate share(s) to conservation of the species shall be contingent on the local jurisdictions' commitment of their proportionate share. This assurance is applicable as long as the take authorizations remain in effect for the County of San Diego and the City of San Diego.

Other Vegetation Communities

Other vegetation communities, including grasslands, chaparral, and oak woodland, are neither sufficiently nor significantly conserved by the MSCP. If an uncovered species depending on these other vegetation communities is listed, the federal and state Endangered Species Act requirements in effect at the time of listing will apply.

4.3 PRESERVE ASSEMBLY BY LOCAL JURISDICTIONS

This section describes the estimated contributions of local jurisdictions to the MSCP preserve. Sections 5.2 and 5.4 and each jurisdiction's subarea plan contain development guidelines and a description of the development review process. Financing, including establishment of a regional funding source and a timetable for establishing such a source, is addressed in Section 7.

The local jurisdictions participating in the MSCP are responsible for taking the following actions to assemble the MSCP preserve:

1. Contribute identified existing public lands to permanent habitat conservation and management;
2. Establish a regional funding source or alternative sources for the acquisition, management, monitoring, and program administration of the local jurisdictions' share of the MSCP preserve;
3. Acquire privately owned habitat in the MSCP preserve from willing sellers when a regional funding source is established;
4. Manage and monitor habitat lands that are currently owned or newly acquired in the MSCP preserve for habitat conservation, using the regional funding source; and
5. Review and approve conservation or development of privately owned habitat in accordance with local land use regulations, including zoning, biological and resource protection ordinances, and environmental review. Significant portions of the MSCP preserve will be assembled using the local jurisdictions' normal land use planning and project approval process.

4.3.1 Contributions of Existing Local Public Lands

Local governments collectively own approximately 47,850 acres of habitat in the MHPA, of which 45,240 acres (94.5%) are targeted for conservation (Table 4-5 and Figure 4-2). Most of these lands are already protected in existing passive recreation parks and open space preserves, including:

- Mission Trails Regional Park;
- Los Peñasquitos Canyon Preserve;
- Sycamore Canyon County Open Space Preserve;
- Lakeside County Park;
- Tijuana River County Open Space Preserve; and
- Former Bureau of Land Management lands transferred to the cities of Poway and San Diego.

Table 4-5

**CONSERVATION OF VACANT LANDS OWNED BY LOCAL
GOVERNMENTS IN THE MHPA**

	Total Acres Owned in MHPA ¹	Acres to Be Conserved
Cities (including City of San Diego Water Utilities Department lands, but excluding Cornerstone Lands)	25,980	24,090
City of San Diego Water Utilities Department Cornerstone Lands	10,400	10,400
County of San Diego	8,000	7,740
Special Districts	3,470	3,010
Total	47,850	45,240

Source: 1996 MSCP GIS database (Ogden, SourcePoint); Onaka Planning & Economics. Numbers have been rounded.

¹ Vacant lands owned by local governments inside the MHPA, including disturbed and agriculture.

In addition, habitat is committed for conservation in portions of parks and dedicated open spaces in urban areas, such as Mission Bay Park, Tecolote Canyon Natural Park, Rose Canyon and Marian Bear Memorial Parks, and open space areas of Rancho del Rey.

City of San Diego Cornerstone Lands

A portion of lands owned by the City of San Diego Water Utilities Department will be committed to habitat conservation through a conservation bank agreement with the USFWS and CDFG. These include 10,400 acres considered to be "cornerstone lands" in forming a regional habitat preserve system, as described in the Joint EIR/EIS for the Secondary Treatment System and Associated Sludge Management Facilities of the Metropolitan Sewerage System, operated by the City of San Diego. Per the City Charter, fair market value must be paid for encumbrances that restrict use of this land. Therefore, a conservation bank agreement will be signed which incrementally applies conservation easements in exchange for 3,900 acres of mitigation credits. The mitigation credits can be sold to public utility and public service providers constructing projects in San Diego County and, to a limited extent, to private parties requiring mitigation. The cornerstone lands include portions of watershed areas around Hodges Reservoir (including the portion of San Pasqual Valley from the reservoir east to an area called "the narrows"), Upper and Lower Otay Lakes, and San Vicente Reservoir and lands located in Marron Valley along the U.S./Mexico border.

4.3.2 Habitat Acquisition by Local Jurisdictions

Level of Commitment and Methods of Acquisition

The local jurisdictions participating in the MSCP will be collectively responsible for acquiring one-half of the lands to be acquired by public means and funding the management, monitoring, and administrative costs of lands acquired by the jurisdictions. The local jurisdictions will acquire 13,500 acres, subject to no more than 10% adjustment, upward or downward. The establishment of a regional funding source to meet this obligation will be subject to a voter approval. Optional funding sources and the process for establishing them are described in Section 7. Lands acquired as mitigation for public or private projects or through land use regulation will not be included as part of the acquisition obligation of the local jurisdictions.

In the event that adequate regional funding for the MSCP is not provided, the wildlife agencies will assess the impact of the funding deficiency on the scope and validity of the take authorizations. The wildlife agencies and jurisdictions will meet and confer to develop a strategy to address the funding shortfall and will undertake all practicable efforts to maintain the level of coverage afforded by the take authorizations under the program until the situation can be remedied.

Methods. Funding of the local share of the preserve will be carried out on a regional basis. Local jurisdictions will purchase habitat lands from willing sellers, utilizing one or more regional sources of funds cooperatively established by those agencies. Habitat lands may be purchased in fee or as less than fee interest, such as a permanent conservation easement recorded in favor of a public agency or qualified nonprofit conservation organization. Private habitat lands that are preserved through development regulations by means of avoidance of impacts may be transferred in fee title to a government or nonprofit agency if the landowner voluntarily dedicates the land. Lands also may be acquired through exchanges of local government lands or through a transfer of development rights program. Section 7.2 contains an analysis of regional funding sources.

Baseline Measurements. March 1, 1995, the date of the public release of the Public Review Draft MSCP Plan, is the baseline date for computing public acquisition by federal/state and local governments. Lands acquired by the local jurisdictions or by federal and state governments, that contribute to achieving the MSCP conservation goals and that are acquired after the baseline date, will be credited toward meeting their respective acquisition obligations of 13,500 acres, subject to no more than 10% adjustment.

The purchase of the Paraiso Cumbres property, described in Section 4.2.3, contributes toward the local share of habitat acquisition.



Least Tern

4.4 PRESERVE ASSEMBLY BY LOCAL SPECIAL DISTRICTS AND OTHER AGENCIES

Local special districts with substantial holdings of habitat lands in the MSCP study area include the Port of San Diego (Port District) and water districts. The Helix Water District, Padre Dam Municipal Water District, and Sweetwater Authority have prepared a subregional Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP), similar to the MSCP Plan, and component subarea plans. Otay Water District also has prepared a subarea plan. Other special districts have the option of preparing either independent NCCP/HCPs or subarea plans for incorporation in the MSCP, as described in Section 5.6. The special districts collectively own 3,470 acres of habitat and other vacant lands in the MHPA. Based on proposed NCCP/HCPs and subarea plans, the districts plan to conserve 3,010 acres (86.7%) for habitat use (Table 4-5).

4.5 CONSERVATION BANKING

A mitigation or conservation bank is land that is permanently conserved and managed for its natural resource values, with the intent of selling mitigation credits to either private or public parties requiring mitigation. Conservation banks are intended to protect resources in large, connected areas in advance of the need for mitigation and therefore are considered a valuable tool for assembling the MSCP preserve.

Conservation banks may be established by public or private parties. Proposed banks should follow the official policy established by the California Resources Agency and the California Environmental Protection Agency and the supplemental policy issued by the USFWS and CDFG for banks in the NCCP area of southern California. For a private conservation bank, the owner of habitat would voluntarily conserve habitat or purchase habitat lands in anticipation of the future sale of mitigation credits to project proponents requiring offsite mitigation. Conservation banks also could be established by public agencies, private nonprofit organizations, or private parties in conjunction with a mitigation fee program, where impacts to habitat may be mitigated by payment of a fee rather than provision of offsite mitigation lands. The fees collected by jurisdictions could then be paid to the owners of the conservation bank. The cost of offsite mitigation, whether or not a bank is utilized, will depend on the demand for and supply of mitigation lands.

4.5.1 Marketable Mitigation Credits

An extension of the conservation banking concept is a proposal by development industry representatives to establish a currency in mitigation credits, whereby mitigation credits could be sold to buyers needing mitigation. Potential buyers and sellers of mitigation credits would negotiate their sale or exchange. Such a system could reduce the need for cumbersome land transactions but would require government or wildlife agency involvement in establishing a common currency and determining the value of habitat lands relative to that currency. This type of system would need to be established on a regional scale, could be highly speculative for owners of the currency, and could require high administrative costs. Therefore, this type of system is not recommended. The MSCP Plan provides each jurisdiction with flexibility in the type, location, and quality of habitat purchased as offsite mitigation for project impacts, thereby incorporating some of the benefits of marketable mitigation credits.

4.6 OPTIONS FOR NONFINANCIAL METHODS OF HABITAT ACQUISITION

Privately owned habitat may be acquired for the MSCP preserve using optional methods that do not require the expenditure of public funds. These nonfinancial methods include land exchange, transfer of development rights, and private land donation, which could be supported by tax credits.

4.6.1 Land Exchange

Public agencies that own developable lands without important habitat can exchange those lands for private lands with important habitat. The Bureau of Land Management and City of San Diego have used this method to acquire habitat lands. Additionally, public agencies with developable lands could exchange lands with other public agencies or nonprofit organizations owning habitat lands. Funds from the sale of closed military bases also have been proposed for use in purchasing habitat lands, the result of which would be similar to a land exchange.

4.6.2 Transfer of Development Rights or Credits

A transfer of development rights or credits program involves the transfer of development from a sending site to a receiving site. This type of program has been used in California in the Lake Tahoe basin, Santa Monica Mountains, Monterey County, and other areas. Frequently, the challenge in implementing such a program is in locating acceptable receiving sites for added development intensity and in maintaining a market that makes the additional development rights profitable. A transfer of development rights or credits program can be established by local jurisdictions, using private lands within the MHPA as sending sites and addressing the development of receiving sites in local land use plans and policies.

4.6.3 Private Land Donation

Private owners can donate habitat lands to wildlife agencies, local governments, or qualified nonprofit conservation organizations. Alternative forms of donation include:

- Outright gift of fee title;
- Donation of a remainder interest, where the donor or a family member retains the right to use or live on the property for a specified period;
- Donation by will, where the donation occurs as a bequest; or
- Sale at less than fair market value and donation of the remainder of the fair market value.

Outright donation has the greatest tax advantage, while other forms of donation continue specified rights for use of the property by the donor or others and realize smaller tax advantages.

Financial incentives are available to landowners who donate land or easement for conservation purposes. The value of the property interest that is donated may qualify as a charitable contribution for federal and state income tax deduction. Donating land with significant conservation value, but limited development value, also can reduce the total

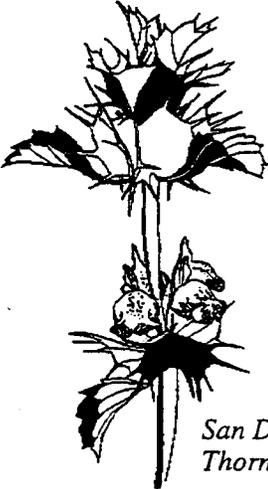
value of an estate subject to inheritance tax. Grant of conservation easement or an "enforceable restriction" for conservation purposes also qualifies a property to be assessed for property tax based on current use, which is often substantially lower than market value. A bill has been introduced and is pending (1996) in the California Legislature (Senate Bill 1280, O'Connell) that would provide tax credits for qualified donations of property to the state for conservation purposes. Tax credits directly reduce tax obligations and are financially more attractive than tax deductions, which reduce taxable income.

4.6.4 Additional Methods

Participating jurisdictions, other agencies, and nonprofit organizations could undertake programs to encourage charitable donations for conservation purposes. Nature walks, bird-watching, and other activities could be organized in conjunction with fund-raising for habitat acquisition. Trails, benches, and other improvements may be funded by individuals or corporate sponsors in exchange for public recognition of financial contribution. General conservation activities such as recycling could be promoted in the community, with proceeds directed to habitat conservation.

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5.0 Implementation Strategy and Structure



*San Diego
Thorn-mint*

5.0 IMPLEMENTATION STRATEGY AND STRUCTURE

Implementation of the MSCP requires coordinated actions among the participating local jurisdictions, other take authorization holders, the wildlife agencies, and the private sector. Generally, local jurisdictions will implement the MSCP through their normal land use planning and approval process and through management of contributed local public lands. Specific implementation measures are contained in individual subarea plans and implementing agreements and may differ from those described below. This section describes the implementation steps and obligations of MSCP participants.

5.1 POLICIES FOR PLAN IMPLEMENTATION

The MSCP was developed based on guidance and policies discussed and developed in public forums that included the major stakeholders in the process. These forums included the MSCP Working Group, the MSCP Policy Committee of elected officials, the City Councils of the participating jurisdictions, and the County Board of Supervisors. In addition, two documents developed by elected officials and the wildlife agencies were used in preparing the MSCP Plan and individual subarea plans and associated documents:

1. The April 22, 1996, agreement regarding Ecosystem Conservation Partnership, Shared Responsibilities and Assurances for the MSCP Plan between Mayor Golding of the City of San Diego, Secretary Babbitt of the U.S. Department of the Interior, and Undersecretary Mantell of the California Resources Agency and the associated Guiding Principles and Policies of the MSCP document; and
2. The County of San Diego Deal/Negotiation Points and the Wildlife Agency Responses of October 11, 1995, and April 29, 1996, respectively.

The following key elements of the MSCP were based on the guidance, policies, and principles identified during the MSCP development process.

5.1.1 Cooperative Implementation Structure

Local Implementation. Local jurisdictions, special purpose districts, and regional public facility providers will implement the MSCP based on their subarea plans and implementing agreements.

No New Institutional Structures. This MSCP Plan does not create a new regional structure or authority. Section 5.8 describes the Habitat Management Technical Committee and Implementation Coordinating Committee and discusses the structure for developing a regional funding source and process for allocation. These committees do not have any regulatory or policy authority; they have only coordination roles.

5.1.2 Phased Implementation and Severability

Phased Local Implementation. Revisions to land use plans, regulations, and ordinances to implement the MSCP Plan and subarea plans can be phased, provided that current regulations, ordinances, and land use regulations are used in the interim to achieve the goals of the MSCP and subarea plans. Local public funding for the MSCP also will be phased based on the financing plan as described in Section 7. Grubbing and clearing ordinances or similar regulations will be used to ensure that habitat is not destroyed prior to local approval of habitat loss. No development moratorium is required while subarea plans are implemented incrementally.

Sequential Adoption. The MSCP provides for sequential adoption of subarea plans and execution of implementing agreements.

Severable Agreements. Subarea plans and implementing agreements are severable. Future actions or inaction of one jurisdiction will not affect other jurisdictions' take authorizations or qualify as unforeseen or extraordinary circumstances except as provided for in subarea plan implementing agreements. This severability does not apply to assurances of federal and state assistance in conserving newly listed, uncovered species in "sufficiently conserved" habitats, except as provided for in Section 4.2.4.

5.1.3 Assurances

Take Authorization Recipients. The jurisdictions and other entities receiving federal and state take authorizations for covered species will receive assurances from the wildlife agencies as described in the implementing agreements and summarized in Section 5.3.

Project Proponents. Proponents of projects approved by a local jurisdiction consistent with its take authorizations become "third-party beneficiaries" to the take authorizations and are given assurances that their mitigation obligations will not subsequently be altered for covered species by the wildlife agencies. These assurances will accrue once development approvals have been granted from the jurisdictions and mitigation has been assured. This assurance applies even in the event the jurisdiction's take authorizations are revoked or suspended, as long as the project's mitigation obligations are being met.

5.1.4 Development Process

Subarea Plan Development. The MSCP provides flexibility for jurisdictions and other entities to develop and implement their subarea plans. Guidelines for subarea plans are contained in Sections 3.5, 3.6, 5.2, and 5.4.

Improved Regulatory Process. A primary purpose of the MSCP is to simplify the project approval process by eliminating duplicative regulatory and mitigation processes, including project-by-project take authorizations for listed species. This simplification will reduce project costs and delays.

Equitable Allocation of Costs. Each take authorization holder contributes its fair share to assembly of the MSCP preserve as specified in its subarea plan. This is accomplished through development regulations, mitigation requirements, and the regional funding program.

Plan Implementation Monitoring. The MSCP Plan and subarea plans include criteria for the wildlife agencies to monitor plan implementation and ensure that habitat conservation proceeds in step with development.

Streamlining Environmental Review. Environmental compliance with the California Environmental Quality Act and National Environmental Policy Act is accomplished through a joint EIR/EIS for the MSCP Plan and all concurrently submitted subarea plans. The EIR/EIS is a programmatic environmental document for the subarea plans and a project-level environmental document for land use plan amendments submitted by the jurisdictions with the subarea plans. Subarea plans submitted subsequent to the EIR/EIS will require additional environmental review, although such documents may tier off the joint EIR/EIS. The programmatic environmental document streamlines the environmental process for projects consistent with the MSCP Plan and subarea plans.

Private Property Rights. The MSCP Plan and subarea plans are designed to respect private property rights. The acquisition of lands for implementing the MSCP will be based on purchases from willing sellers.

5.1.5 MSCP Plan Amendment

The MSCP Plan serves as a framework and guideline document for the coordinated preparation of subarea plans and is submitted with a subarea plan and implementing agreement in support of applications for federal and state take authorizations. Changes in conservation goals, policies, or implementing procedures will be accomplished through amendments to subarea plans rather than through amendments to the MSCP Plan. Portions of the MSCP Plan may be updated with additions to the covered species list or with additions of geographic areas. Additional subarea plans prepared consistent with the MSCP would not require an amendment to the MSCP Plan.

5.2 SUBAREA PLANS

5.2.1 Subarea Plan Approval and Implementation Process

Subarea plans and implementing agreements are prepared by local jurisdictions, special purpose agencies, regional public facility providers, or utilities, collectively referred to as take authorization holders. The MSCP Plan, a subarea plan, and its implementing agreement are the basis for issuance of federal and state take authorizations. The federal take authorization is a permit issued pursuant to Section 10(a)(1)(B) of the federal Endangered Species Act. The state take authorization is a management authorization issued pursuant to California Fish and Game Code Section 2050 et seq. (California Endangered Species Act) and 2800 et seq. (NCCP Act). Local jurisdictions, special purpose districts, regional public facility providers, or utilities also may apply for take authorizations separately from the MSCP, but they would not receive any benefits of the MSCP.

For the federal permit process, the MSCP Plan with its constituent subarea plans serves as a Habitat Conservation Plan as required by the Endangered Species Act for issuance of incidental take permits for listed species. With regard to the state NCCP Act, the MSCP has been recognized as an Ongoing Multi-Species Plan, pursuant to a March 1993 agreement signed by local agencies and the wildlife agencies. In recognizing the MSCP as an Ongoing Multi-Species Plan, the wildlife agencies acknowledged that the MSCP planning effort was already underway at the time the NCCP Act became effective (January 1, 1992) and agreed that the program may differ in detail from but is consistent with the process described in the nonregulatory NCCP Process Guidelines.

The primary purpose of a subarea plan is to specify how the take authorization holder will conserve habitat and build the MSCP preserve using, in part, its existing land use decision process. Take authorization holders will approve public or private projects, or siting of facilities, consistent with the subarea plan. Jurisdictions will incorporate the MSCP Plan and subarea plan into their policies, land use plans, and regulations. Local jurisdictions will continue to act as lead agencies under the California Environmental Quality Act for projects they approve. Site-specific biological surveys may be needed to accurately determine the allowable development encroachment and/or project-specific mitigation and avoidance measures required to implement the subarea plan.

Proponents of a project approved by a take authorization holder (consistent with its subarea plan) will be third-party beneficiaries to the subarea plan, and any take of covered species incidental to the project is allowed based on terms of the take authorization.

Subarea plans contain criteria, such as conservation targets, mitigation standards, and encroachment limits, to ensure that habitat conservation proceeds in step with development. MSCP Plan and subarea plan implementation monitoring provides the wildlife agencies with the information needed to monitor compliance and overall progress of the program without project-by-project approval by the wildlife agencies.

Table 5-1 describes a generalized chronology of actions for subarea plan approval and initial steps for implementation. Approval and implementation of subarea plans is the responsibility of the local jurisdiction or agency preparing a subarea plan and the wildlife agencies.

Subarea plans prepared concurrently with this MSCP Plan as well as other MSCP subarea plans being developed and subregional plans that complement the MSCP are described in Section 5.6.

5.2.2 Subarea Plan Contents

This section defines the elements of an MSCP subarea plan necessary to obtain take authorizations from the wildlife agencies based on the framework MSCP Plan. A general outline for subarea plans is included in Attachment B and summarized below.

- Description of how the proposed preserve design is consistent with the MSCP Plan (Biological Preserve Design Checklist, Section 3.6);
- Description of the subarea, the subarea plan's preserve (including applicable maps), and how the subarea plan's preserve achieves the biological conservation goals of the MSCP;
- List of proposed covered species;
- Discussion of how good land use planning will be used to avoid or minimize project impacts to the preserve;
- Description of how local regulations will implement the MSCP, including an interim and permanent protection strategy and a project mitigation strategy;
- Preserve management plan or a schedule for its preparation; and
- Commitment to participate in developing a local funding source (regional or subregional) for MSCP implementation.



Salt Marsh Skipper

Table 5-1

APPROVAL AND IMPLEMENTATION PROCESS FOR SUBAREA PLANS

For Participants Preparing a Subarea Plan and Opting to Participate Prior to Release of the Draft Joint EIR/EIS

1. After obtaining tentative approval of a draft subarea plan from the wildlife agencies, the draft subarea plan is submitted for inclusion in the MSCP Plan and Draft Joint EIR/EIS.
2. An individual implementing agreement is prepared in consultation with the wildlife agencies, including language pertaining to the subarea plan and substantially conforming to the Model Implementing Agreement. Tentative approval of the draft implementing agreement is obtained from the wildlife agencies.¹
3. The MSCP Plan and a revised Draft Joint EIR/EIS, analyzing all submitted subarea plans and covering the entire MSCP study area, are completed. The City of San Diego is the lead agency for the Program EIR. USFWS is the lead agency for the Program EIS. Other participating local jurisdictions, upon their declaration, are responsible agencies for the EIR. The City of San Diego and wildlife agencies will recirculate the revised Draft Joint EIR/EIS for a 45-day public review period. For USFWS, recirculation involves announcing its availability and dates of the comment period in the Federal Register and document distribution. After the wildlife agencies and participants respond to comments, the Final Joint EIR/EIS is published for subsequent decision-making.
4. The subarea plan and implementing agreement are authorized to be submitted to the wildlife agencies, and the Final EIR is certified by the lead agency. A Notice of Determination is filed.
5. The final subarea plan and implementing agreement are forwarded with a federal permit application and covered species list to USFWS and CDFG.
6. USFWS publishes the Notice of Availability of the Record of Decision for the Final EIS and the permit applications in the Federal Register for a 30-day period.
7. After close of the 30-day period, presuming no legal or technical issues, the USFWS signs the Record of Decision and the respective implementing agreements and issues a Section 10(a)(1)(B) incidental take permit. Concurrently, the CDFG signs the implementing agreement and issues California State Fish and Game Code Sections 2081 and 2835 management authorizations.
8. Participants with take authorizations implement the MSCP Plan, subarea plans, and implementing agreements incrementally through:
 - Incorporation into local general plans and, if necessary, zoning ordinances;
 - Interim protection of habitats, if required;
 - Local project review and approval process;
 - Management of local portion of preserve system and provision of acreage information for preserve development accounting process; and
 - Participation in design, formation, and implementation of local habitat acquisition funding program.
9. Wildlife agencies and take authorization holders cooperatively monitor subarea plan implementation through an annual coordination meeting, annual preserve development accounting process, and biological monitoring reports.

Table 5-1 (Continued)

APPROVAL AND IMPLEMENTATION PROCESS FOR SUBAREA PLANS

For Participants Preparing a Subarea Plan and Opting to Participate Following Release of Final EIR/EIS, follow the steps on previous page, except as noted below:

- At Step 3.** The USFWS will require the preparation and submittal of an Environmental Assessment (EA) to address impacts of the proposed subarea plan. The EA will tier off the certified Joint EIR/EIS for the MSCP Plan. Subsequent subarea plans could require an EIS if impacts are significant and substantially different from the MSCP Joint EIR/EIS analysis.
- At Step 4.** If a finding is not or cannot be made that the environmental impacts of the subarea plan are consistent with those identified in the certified EIR, an Initial Study leading to a Negative Declaration, Mitigated Negative Declaration, or Supplemental EIR will be required. Any required subsequent environmental analysis may use the certified EIR for information and data.
- At Step 6.** The USFWS will publish a Notice of Availability for a 30-day review of the EA and permit application in the Federal Register.
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¹ Jurisdictions may forward a federal permit application, implementing agreement, and subarea plan to USFWS and CDFG for publication in the Federal Register with the Draft Joint EIR/EIS, or wait until after the Final EIR is certified. In either case, the availability of the permit application and associated documents must be published in the Federal Register for a minimum of 30 days.



Otay Tarplant

5.3 IMPLEMENTING AGREEMENTS

An implementing agreement is the binding contract signed by a participating local jurisdiction, special purpose agency, or public facility provider and the wildlife agencies. It identifies responsibilities to implement the subarea plan, binds the parties to their respective obligations, and specifies remedies should any party fail to perform its obligations. It also specifies the wildlife agencies' assurances for unlisted species on the covered species list and assurances regarding sufficiently and significantly conserved habitats. Severability of the take authorizations also is accomplished based on each take authorization holder having a separate implementing agreement.

A Model Implementing Agreement, acceptable to the wildlife agencies, has been developed for use as a template in preparing more specific implementing agreements and is contained in Attachment A. Each of the local jurisdictions, special districts, or regional public facility providers in the study area may develop a subarea plan and enter into an implementing agreement with the wildlife agencies. Some local jurisdictions, particularly those that are primarily built out, may choose not to prepare a subarea plan.

5.3.1 Assurances

Some of the key assurances in the Model Implementing Agreement that the local jurisdictions will receive from the wildlife agencies are listed below.

1. Local Land Use. The wildlife agencies will issue long-term (30 to 50 years) take authorizations for covered species to the participating local jurisdictions (or special districts and regional public facility providers), which authorize the take of covered species in compliance with the federal and state Endangered Species Acts. This will provide long-term predictability for private and public projects. In addition, the MSCP Plan and subarea plans eliminate most wildlife agency involvement in project-specific review and approval. Impacts to wetlands will continue to be regulated through the Clean Water Act and Fish and Game Code Section 1600 et seq. and through local regulations.
2. New Development. Those undertaking land development will be allowed to take covered species incidental to project construction, operation, and maintenance based on the take authorizations. The extension of the local jurisdiction's take authorizations will occur through the local project permitting process.
3. Changes in Circumstances. The wildlife agencies will not require the take authorization holder or a third-party beneficiary to commit any additional land, land restrictions, or financial compensation for covered species, provided that the take authorization holder is in compliance with its obligations under its subarea plan and implementing agreement. Moreover, the wildlife agencies will not seek additional conservation measures for covered species except where "extraordinary circumstances" (as defined in implementing agreements) adversely change the population of a covered species. Additional conservation measures will emphasize changes in preserve management or the acquisition program within the context of existing obligations.
4. Future Listings of Covered and Uncovered Species. Sections 3.3 and 3.4 describe the assurances regarding covered species and the process that will be used for uncovered species should they become listed. The assurances and processes

described will eliminate uncertainty regarding covered species and significantly reduce uncertainty regarding species not on the covered species list.

5. Other Permits. Compliance with the MSCP will constitute the full extent of mitigation directed specifically at the protection and conservation of covered species required or recommended by the wildlife agencies in conjunction with issuance of any other federal and state permits required for development covered by the MSCP and a subarea plan. Additional mitigation may be required for jurisdictional wetland habitats and associated species through the Clean Water Act permitting process and any necessary Section 7 consultations.
6. Phased Implementation and Severability. The wildlife agencies have agreed to phased implementation of the MSCP Plan and subarea plans. The take authorizations granted by the wildlife agencies also will be severable from those granted to other jurisdictions or entities, protecting each take authorization holder from noncompliance by others, to the extent contemplated by the MSCP Plan and implementing agreements.
7. Obligations of the Federal, State, and Local Governments. The implementing agreement obligates the parties to (a) acquire, manage, and monitor preserve lands as specified in the MSCP Plan and subarea plans; (b) conserve, manage, and monitor existing identified public lands consistent with the MSCP Plan; and (c) review and process development projects consistent with the MSCP Plan.

5.4 LOCAL JURISDICTION ACTIONS TO IMPLEMENT THE MSCP

Local jurisdictions have the authority to regulate land use and to determine how the MSCP can best be implemented within their jurisdictional boundaries. The MSCP Plan and subarea plans incorporate this flexibility while establishing a regional framework for habitat conservation. The actions for MSCP implementation may be phased, provided that existing regulations on grading and grubbing protect habitats consistent with the MSCP in the interim between signing of an implementing agreement and permanent conservation actions.

5.4.1 Required Actions

Local jurisdictions will undertake the following actions to implement the MSCP through their approved subarea plans.

1. Amend land use plans, as needed, to be consistent with the jurisdiction's MSCP subarea plan, including land use designations and guidelines for development.
2. Adopt or amend zoning ordinances, codes, guidelines, and other development regulations, as needed, to ensure that approval of private and public development projects is consistent with the MSCP subarea plan.
3. Implement mitigation and/or encroachment standards consistent with achieving habitat conservation targets in the MSCP subarea plan.
4. Implement policies, regulations, and cooperative agreements to ensure that conserved lands are managed and monitored in conformance with the MSCP Plan and subarea plan, following approval of development permits.

5. Conduct environmental review of projects as required by the California Environmental Quality Act, including review of feasible alternatives and incorporation of avoidance and mitigation measures, consistent with the MSCP Plan and subarea plan, to reduce or eliminate biological impacts.
6. Develop and implement, in conjunction with the wildlife agencies, a process to monitor the overall progress of the MSCP that reduces or eliminates the need for project-by-project wildlife agency review and/or approval.
7. Prepare and implement habitat management plans for existing local public lands contributed for habitat conservation, habitat lands acquired using local funds, habitat lands dedicated through the development process, and other lands as applicable.
8. Maintain records and maps of habitat acreage conserved and developed, and prepare an annual report as described in Section 5.9.
9. Meet annually with the wildlife agencies regarding implementation of the subarea plan.
10. Participate in public hearings on the implementation status of the MSCP, and submit a status report, including any new biological data, to the wildlife agencies every 3 years as described in Section 5.9.
11. Coordinate conservation actions with adjoining jurisdictions and multi-jurisdictional habitat and open space planning efforts.
12. Participate in the planning, development, and implementation of regional or subregional funding for the MSCP.

5.4.2 Subarea Plan Amendments and Preserve Boundary Adjustment Process

Amendments to subarea plans may occur according to the amendment process specified in subarea plans and/or their implementing agreements. Amendments to subarea plans should be included in annual reports to the wildlife agencies and in MSCP status reports, prepared every 3 years.

Adjustments to Boundaries of the MHPA or Subarea Plan Preserve - "Like or Equivalent" Exchange Concept

Adjustments to the MHPA boundaries and/or approved subarea plan preserve boundaries may be desirable under some circumstances. For example:

- New biological information is obtained through site-specific studies;
- Unforeseen engineering design opportunities or constraints may be identified during the siting or design of projects that require modification of the preserve boundary; and/or
- A landowner may request that a portion or all of his property be included within the preserve boundary.

Adjustments to the MHPA and/or preserve boundaries can be made without the need to amend the MSCP Plan or subarea plan if the adjustment will result in the same or higher biological value of the preserve. The determination of biological value of the proposed change is made by the local jurisdiction and must have the concurrence of the wildlife agencies. No amendment of the subarea plan is needed for an approved equivalent exchange. The comparison of biological value will be based on the following biological factors:

- Effects on significantly and sufficiently conserved habitats (i.e., the exchange maintains or improves the conservation, configuration, or status of significantly or sufficiently conserved habitats, as defined in Section 4.2.4);
- Effects to covered species (i.e., the exchange maintains or increases the conservation of covered species);
- Effects on habitat linkages and function of preserve areas (i.e., the exchange maintains or improves a habitat linkage or wildlife corridor);
- Effects on preserve configuration and management (i.e., the exchange results in similar or improved management efficiency and/or protection for biological resources);
- Effects on ecotones or other conditions affecting species diversity (i.e., the exchange maintains topographic and structural diversity and habitat interfaces of the preserve); and/or
- Effects to species of concern not on the covered species list (i.e., the exchange does not significantly increase the likelihood that an uncovered species will meet the criteria for listing under either the federal or state Endangered Species Acts).

Most adjustments to the boundaries will be in areas immediately adjacent to the MHPA or identified preserve areas. Any agreed upon modification of the MHPA or preserve boundaries should be reported to the entity responsible for the regional preserve system accounting and to adjacent jurisdictions, if the modification might affect their portion of the preserve.

The take authorization holder is responsible for determining if any environmental documentation, pursuant to the California Environmental Quality Act, will be required as a result of the boundary adjustment. In most cases, the environmental documentation associated with the project needing the boundary modification should be adequate. An approved equivalent exchange will not require further review pursuant to the National Environmental Policy Act.

5.4.3 Annexations

Three categories of annexations involving local jurisdictions could occur in the future. These categories and the process for extending take authorization coverage to the annexation area are described below.

Annexation of Lands Outside the MSCP Study Area into the Corporate Boundaries of Participating MSCP Jurisdictions. To extend take authorization coverage to the annexation area would require an amendment to the appropriate documents, and the wildlife agencies would process it consistent with applicable laws and regulations

(including the National Environmental Policy Act, California Environmental Quality Act, and Endangered Species Acts) in effect at the time the request for amendment was received.

Anticipated Annexation of Lands within the MSCP Study Area. The City of Chula Vista's Subarea Plan and the County of San Diego's Subarea Plan (South County Segment) include consistent conservation and implementing strategies for those areas where annexations might occur in the foreseeable future. As a result, no plan amendments are required when annexations occur within these areas, and the take authorizations applicable to a specific parcel of land will be based on which jurisdiction has land use authority at the time the project is permitted.

Annexation of Lands within the MSCP Study Area Involving MSCP Participants Where Subarea Plans and Implementing Strategies Are Not Identical. Annexations between jurisdictions where conservation and implementing strategies differ will require major amendments to the take authorizations to modify the geographical limits of the take authorizations.

5.4.4 Annual Implementation Meetings

An annual meeting will be held between individual take authorization holders and the wildlife agencies to review and coordinate subarea plan implementation. The annual accounting of habitat acreage within the subarea will include land conserved through land use regulations, acquisitions, and loss of habitat acres (Section 5.9.1). Progress toward achieving the conservation targets will be reviewed, and habitat management issues will be discussed. If the wildlife agencies determine that the subarea plan is not being implemented as required, the wildlife agencies and the take authorization holder will take the actions specified in the subarea plan and implementing agreement to remedy the situation. These actions may include additional management activities, modification of the project compliance process, or redirection of acquisition funds, as long as they are consistent with the provisions of the implementing agreement.

5.5 WILDLIFE AGENCY ACTIONS TO IMPLEMENT THE MSCP

The wildlife agencies, as partners in implementation of the MSCP Plan and subarea plans, will undertake the following actions.

1. Assist local jurisdictions in preparing subarea plans and implementing agreements, and issue take authorizations for covered species based on these documents.
2. Contribute to preserve assembly by managing identified federal and state lands and acquiring lands as described in Section 4.2.
3. Coordinate the biological monitoring program, maintain the biological database, and monitor biological resources on federal and state lands in the preserve.
4. Monitor implementation of subarea plans.
5. Meet annually with take authorization holders to discuss their progress in implementing their subarea plans.

6. Ensure that consultations and permit actions, including those required under Section 404 of the Clean Water Act, Sections 7 and 10(a) of the federal Endangered Species Act, and California Fish and Game Code Sections 2081, 2090, and 2835, are coordinated and consistent with the MSCP Plan and subarea plans.
7. Work with the Habitat Management Technical Committee described in Section 5.8 to furnish information and advice on habitat management and biological monitoring.
8. Provide technical assistance on subarea plan implementation issues.
9. Expediently review proposed subarea plan amendments or preserve boundary adjustments as described in Section 5.4.2.
10. Expediently determine conservation measures needed and conservation responsibilities for both newly listed species and species proposed for listing that are not on the covered species list.
11. Include, within annual budget proposals, funding to carry out obligations for MSCP implementation.
12. Assist local jurisdictions, agencies, and other organizations in developing a regional funding source.
13. Assist local jurisdictions, agencies, and other organizations in developing and implementing MSCP-focused public education and outreach programs.

5.6 SUBAREA PLANS AND SUBREGIONAL PLANS IN THE MSCP STUDY AREA

5.6.1 Subarea Plans Incorporated in the MSCP Plan

The following subarea plans were prepared concurrently with the MSCP Plan and are addressed by the environmental document (joint EIR/EIS) for the MSCP Plan.

Coronado

The City of Coronado Subarea Plan addresses lands in the MHPA along the Silver Strand peninsula. Through the plan the City will avoid and minimize impacts on public lands in the development of predominantly recreational facilities. In exchange, the City will receive take authorizations that will enable such improvements to be developed in limited areas. The City Council adopted the Coronado Subarea Plan on July 18, 1995.

Chula Vista

The City of Chula Vista Subarea Plan addresses the conservation of sensitive habitat within important biological core areas and linkages through the formation of an open space preserve defined largely by land use designations identified on its existing General Plan map. The City's subarea plan boundary covers an area of approximately 52,476 acres, of which only 22,808 acres are presently located within the City's municipal boundaries. The remaining 29,668 acres within the City's subarea plan are located in the unincorporated area of San Diego County. However, over 9,000 acres of Otay Ranch,

presently located within the unincorporated lands of the County, are being considered for annexation to the City of Chula Vista. The unincorporated portion of the City's subarea plan is addressed identically by the County's subarea plan (South County Segment). This approach has been used in anticipation of the impending annexation of large segments of Otay Ranch and San Miguel Ranch mixed use development projects into the City. Preserve lands within the City's subarea plan include wetlands and coastal shoreline along South San Diego Bay, wetlands linking the bay to the Sweetwater and Otay reservoirs through the Sweetwater and Otay rivers, and upland habitats in numerous finger canyons flanked by developed mesa tops and rolling hills, trending easterly to significant drainages and prominent land forms, such as San Miguel, Jamul, and Otay mountains.

The primary goals of the City's subarea plan are (1) reduce or eliminate redundant federal, state, and local review of individual projects by obtaining federal and state Endangered Species Act take authorizations, and (2) conserve habitat for covered species through creation of an open space preserve that achieves long-term conservation goals while assuring economic viability through managed growth. The City's subarea plan preserve boundaries represent a "hard line" plan, which will be implemented through policies contained within the subarea plan, the City's General Plan, and development review processing, including applying the findings of individual California Environmental Quality Act documents prepared for individual master planned development projects.

Del Mar

The Del Mar Subarea Plan focuses on implementation in six areas with significant resources in the mostly built-out city. Although take authorizations are being sought, very little taking for development is anticipated, and the focus is on limited exclusions for recreational access and public facilities in a few areas. The primary consideration is the northern area of the city, which includes a portion of the San Dieguito Lagoon. The plan provides assurances that the anticipated enhancement of the lagoon will not be constrained by placing those lands in the preserve system.

San Diego

The City of San Diego's Subarea Plan, approved by the City Council on March 18, 1997, was developed utilizing preserve design criteria contained in the MSCP Plan and City Council-adopted criteria for creation and implementation of the preserve. The subarea plan identifies a "hard line" preserve with defined boundaries. In general, it is considered an urban preserve that is constrained by existing or approved developments and is comprised of linkages connecting large habitat areas.

An average of 90% of the City of San Diego's MHPA will be conserved for biological purposes. The City of San Diego's Subarea Plan conserves approximately 52,012 acres, about 30% of the conserved acres in the MHPA. It includes lands within the City's jurisdiction, spanning from the San Pasqual Valley in the north to the Tijuana River Valley in the south, as well as City-owned lands (called cornerstone lands) in the unincorporated areas around San Vicente Reservoir, Otay Lakes, and Marron Valley. The City's preserve captures 77% of the core biological resource areas within its subarea and 77% of the habitat linkages. Existing open space lands permanently conserved outside of the core areas also were included, as they provide aesthetic as well as some long-term conservation value.

Lands within the MHPA are proposed to be conserved by one of the following methods: (1) conservation of existing public lands; (2) open space exactions on new private development through zoning and resource regulations; (3) inclusion of open space

previously negotiated on private lands as part of the development review process; (4) mitigation for impacts occurring outside the preserve; and (5) public acquisition of private lands. The City will manage and maintain properties it owns and for which it holds conservation easements.

County of San Diego

The Board of Supervisors approved the County of San Diego Subarea Plan on October 22, 1997. The County's Subarea Plan was developed using the Deal/Negotiation Points negotiated with the wildlife agencies. The subarea plan utilizes developer agreements, goals, criteria, and ordinances to incrementally assemble the open space system through mitigation of development projects. Within the Metro-Lakeside-Jamul segment of the subarea plan, goals and criteria, in combination with the pre-approved mitigation area map developed by the wildlife agencies, can be used to determine how much of each vegetation community must be conserved. The criteria also provide for the preserve design necessary to maintain functional corridors and linkages and populations of sensitive plant species. The County Subarea Plan addresses the broadest range of both wetland and upland habitats in the MSCP study area.

The primary tool for implementing the subarea plan goals and criteria is a Biological Mitigation Ordinance. The Biological Mitigation Ordinance is intended to maintain the existing level of regulation but, through incentives, encourage mitigation in areas that would contribute to building a regional preserve system.

The unincorporated portion of the MSCP Plan has been designed as one subarea plan with three different segments: the Lake Hodges Segment, the Metro-Lakeside-Jamul Segment, and the South County Segment. For the Lake Hodges and South County segments, the foundation of an open space preserve system has been created using publicly owned lands and lands on which property owners have agreed to protect open space. In those segments, lands are divided into three categories: (1) lands to be conserved as a result of project design and property owner approval, (2) lands to be developed in conformance with the plan and for which no additional biological mitigation is necessary, and (3) land that is not now part of the plan. Land in the first two categories is considered to be "covered" by the plan. For land that is not part of the plan, the owners would need to process an amendment to the plan to include it in the plan. These amendments are referred to as Major Amendments or Minor Amendments.

Major Amendments require a federal review process and publication within the Federal Register. Minor Amendments are administrative in nature, require concurrence from the wildlife agencies, and will be added to the segment plan if development and mitigation occur in a manner consistent with the segment plan criteria.

Within the Metro-Lakeside-Jamul Segment there are no lands considered "covered" by the plan without incorporating mitigation and avoidance requirements. For that segment, there are several parcels of land on which open space has been designated or that are approved mitigation banks. However, at the time of creation of this plan, there are no large connected blocks of preserve land like those in the Lake Hodges and South County segments. In this area, development may proceed as long as it conforms to subarea plan criteria and the Biological Mitigation Ordinance, and it will receive take authorizations at the time of discretionary approval for as long as the permit is active. The pre-approved mitigation area map could be used as an option to identify mitigation requirements.

Management of the preserve areas will vary, depending on the origin and disposition of the land. On some large projects, the areas of open space may be managed by entities

established through the development process, while others may be managed by individual organizations. The USFWS also may be involved in the management of preserve lands.

Under this process, the County plan will receive full coverage for all the covered species associated with the MSCP Plan.

Santee

The City of Santee Subarea Plan will conserve approximately 2,067 acres of habitat in the MHPA. These lands are almost entirely biological core areas. This is a "hard line" subarea plan, although there are limited areas that represent 90% conservation, thus allowing 10% development encroachment given certain design constraints. The MHPA is located predominantly in the northern portion of the City, but it also includes the San Diego River running through the central portion of the City, as well as an area within and adjacent to Mission Trails Regional Park. The Santee MHPA is dominated primarily by coastal sage scrub and secondarily by chaparral, grassland, and riparian/wetlands communities. The City is considering the option of conserving a greater portion of Fanita Ranch than indicated in its original subarea plan. Should this option be pursued, there would be a significant increase in habitat conservation within Santee.

Implementation of the Santee Subarea Plan involves a three-part strategy. Approximately 70% of the eventual 2,067-acre preserve will be attained through open space dedication as a condition of development, utilizing existing development permit processes. An additional 20% of the preserve is either already under public ownership or, in the case of the San Diego River floodway, is considered to be undevelopable, constrained land. The remaining 10% of the preserve will need to be purchased, either as mitigation for development elsewhere or through public funds.

Otay Water District Subarea Plan

The Otay Water District Subarea Plan identifies land that will be managed by the District for conservation purposes and describes water provision facility improvements that will be mitigated by permanent conservation of habitat on District lands. The District maintains a biological reserve of 230 acres known as the San Miguel Habitat Management Area, which serves as a mitigation bank for District project impacts. Conserved lands will function as components of the MSCP preserve system; ownership and habitat management responsibilities will be retained by the District.

5.6.2 Subarea Plans in Preparation

At the time this document was prepared, two jurisdictions, El Cajon and La Mesa, were preparing subarea plans that will become components of the MSCP when completed and approved. The separate environmental documents for these plans will tier to the MSCP Plan's environmental document.

El Cajon

The City of El Cajon is preparing a Subarea Habitat Conservation Plan and implementing agreement to implement its portion of the MSCP. The City has prepared an Environmental Assessment to allow approval of this subarea plan by USFWS.

The MSCP study area contains all of the City of El Cajon and its Sphere of Influence. In preparing the subarea plan, the MSCP Plan and mapping, including MSCP habitat evaluation model mapping and vegetation mapping for the entire city and its Sphere of

Influence, were reviewed. The MSCP goals, objectives, and guidelines were consulted and will be adopted by reference in the subarea plan at the time of approval. The policies of El Cajon's Subarea Plan are compatible with and uphold the intent of the biological preserve design criteria in the MSCP Plan.

La Mesa

The City of La Mesa has prepared a Habitat Conservation Plan in accordance with the criteria and policies of the MSCP Plan. La Mesa's habitat areas consist largely of coastal sage scrub, of which approximately 50 acres will be conserved. Impacts to habitat areas within La Mesa will be mitigated through acquisition of in-kind habitat within the MHPA of other jurisdictions. Approval of the plan and implementing agreement by the wildlife agencies is anticipated by spring 1998.

5.6.3 Poway Subarea Habitat Conservation Plan

The City of Poway adopted the Poway Subarea HCP and companion Implementing Agreement/California Endangered Species Act Memorandum of Understanding on August 15, 1995, and the wildlife agencies approved the plan on July 19, 1996. Poway's plan was developed to be consistent with the conservation goals of the MSCP and serves as a subarea plan of the MSCP. The plan designates a Mitigation Area within which biological resources are protected while compatible development of public and private projects continues to be permitted. Within the Mitigation Area, approximately 91% (10,800 acres) of natural habitat will be permanently conserved through future dedications, local land use controls on development, and acquisition.

Virtually all privately owned land in the Mitigation Area is designated for rural residential use, where subdivision potential is determined by slope of the property and availability of City water. The Poway plan provides for the full subdivision potential of every property under the existing General Plan, including the full potential if City water were made available throughout the planning area. In addition to allowing full current development density, the plan allows clearing of up to 2 acres of habitat per allowable lot for development of uses permitted by the zoning development code and General Plan. If an existing parcel could be subdivided, the amount of habitat that can be cleared for each allowable lot, pursuant to an associated approved parcel map or subdivision map, will not exceed 2 acres. Any available federal or state funds for habitat will be spent on acquiring properties within the Mitigation Area.

Take authorizations issued to the City cover 43 species; the list will expand as other MSCP subarea plans are adopted and implementing agreements are signed. A private property owner may voluntarily opt to satisfy the requirements of federal and state environmental laws by applying for coverage under the Poway master permit/management authorization. Alternatively, a private property owner may choose to obtain individual permits from federal and state agencies. The City will process projects through the normal environmental review and development application approval process; established local public hearing notification requirements will continue to apply.

The Poway Subarea HCP is consistent with the existing goals, policies, and strategies of the Poway General Plan and Redevelopment Plan relevant to natural resources. The right to develop land with a public project or private project is not precluded by the conservation plan. The general development requirements (City regulations in existence prior to adoption of the conservation plan) apply to all parcels of land in the City that contain native or natural vegetation and wildlife.

5.6.4 Jurisdictions Not Currently Preparing Subarea Plans

Three cities in the MSCP study area have chosen not to develop subarea plans at this time. Imperial Beach and National City reserve the option of developing a plan at a future date when resolution may be needed between a proposed project and the limited habitat resources in those jurisdictions. Lemon Grove has no significant habitat resources remaining and none in the MHPA; thus, there is no need for a subarea plan in this city.

5.6.5 Actions by Other Agencies that Complement the MSCP Plan

Regional public facility providers and utilities with regional or subregional responsibilities may prepare subarea or subregional plans consistent with the MSCP Plan and other subregional Natural Community Conservation Plans. Special districts that provide water and/or wastewater services are also eligible and are encouraged to prepare such plans. These agencies will receive take authorizations separate and independent from those of the local jurisdictions. This permit structure is appropriate because these agencies are not required to obtain approval of their public improvements from local land use authorities, according to state law. However, the agencies must meet the same federal and state Endangered Species Act permit requirements as any other public or private landowner.

Subregional plans can incorporate one or more subarea plans and may span several subregions, depending on the location of their areas of responsibility. Whether a subregional or subarea plan is prepared, it should contain the information required by the wildlife agencies in the subarea plan outline (Attachment B), addressing the specific conservation, facility development, management, or other activities proposed by the agency.

This section describes subarea and subregional plans that have been prepared concurrently with, but are separate from, the MSCP Plan and that are entirely or partially within the MSCP study area.

Joint Water Agencies Subregional Plan

The Joint Water Agencies Subregional Plan describes how certain water districts in San Diego County will manage their lands to conserve natural habitats and species while continuing to provide their mandated water services. The plan addresses potential impacts to natural habitats and species due to water agency actions and develops a strategy to actively mitigate for the loss of species and habitats. The subregional plan currently serves as an umbrella document for the subarea plans of four water districts:

- Helix Water District
- Padre Dam Municipal Water District
- Sweetwater Authority
- Santa Fe Irrigation District

The subregional plan is designed to accommodate additional water district or similar public agency plans. Estimated conservation levels for water district lands within the MSCP study area are shown in Figure 3-2. More precise conservation targets will be included in the final subarea plans.

San Diego Gas & Electric Subregional Plan

San Diego Gas & Electric has an approved avoidance-based subregional plan that focuses on management activities on utility lands and easements. The plan provides coverage for 110 species of plants and animals. It permits the operation, maintenance, and new construction of company facilities both within and outside of preserve areas in return for adherence to biologically driven operational protocols, agreement to utilize selected rights-of-way for wildlife conservation purposes, and conservation of biologically significant parcels of land as a conservation bank. This plan complements the MSCP and other conservation planning efforts in San Diego and Orange counties.

San Diego County Water Authority Subregional NCCP/Habitat Conservation Plan

The San Diego County Water Authority is preparing a subregional NCCP/HCP for current facility operations and maintenance, as well as planned future projects, in western San Diego County and portions of southern Riverside County. The plan will reflect the limited nature and extent of habitat and species impacts resulting from predominantly linear subsurface utility projects. With the exception of the San Diego Gas & Electric Subregional Plan, other plans either already adopted or under development rely on land use controls and permanent allocation of large tracts of land to specific purposes. In addition, the Authority's area of interest extends beyond the boundaries of any existing plan, making it impractical to directly utilize any of the jurisdictions' subarea plans.

The subregional plan will describe measures that will be taken to conserve sensitive species and habitats potentially impacted by Authority activities in the coverage area. It will analyze a number of specific planned projects and provide the necessary flexibility to accommodate future changes in Authority project needs, changes to the plan area, or additions to the covered species list. The plan will serve as a programmatic document and allow participation by all Authority member agencies, at their option, through adoption of plan protections and mitigation measures and documentation of anticipated take.

Port of San Diego

The Port Master Plan states that the Port District will remain sensitive to the needs of and will cooperate with adjacent communities and other agencies in bay and tideland development, including MSCP implementation. The Port District, however, retains all land use and mitigation rights and decisions on all land use within the Port District's jurisdiction.

Department of Defense

The Department of the Navy is preparing a habitat conservation plan for MCAS Miramar that will identify Habitat Management Zones at Miramar.

The Navy also has developed a Natural Resources Management Plan for the Point Loma Naval Complex, prepared in cooperation with the USFWS and other federal, state, and local agencies. The Navy has executed a Memorandum of Understanding with the USFWS and has designated an Ecological Reserve Area, which encompasses approximately 77% of the natural habitat on Point Loma.

In addition, the Navy, in conjunction with the Port of San Diego, is developing the San Diego Bay Integrated Natural Resources Management Plan, an ecosystem plan for the entire bay. Completion is planned for September 1998.

5.7 ROLE OF NONPROFIT ORGANIZATIONS

Nonprofit organizations can contribute to both the direct implementation of the MSCP and the funding of land acquisition from federal, state, and regional sources. Examples of these contributions are described below.

5.7.1 Foundations and Private Conservation Organizations

Local, state, and national foundations and conservation organizations can contribute to MSCP implementation in the following ways.

1. Acquisition of Key Parcels. Organizations such as The Nature Conservancy, Trust for Public Land, and others can obtain options to purchase key parcels so that development risk is eliminated until a permanent funding source is found. These organizations also could facilitate land exchanges or trades.
2. Public Education. Private conservation organizations and foundations may apply their resources effectively to educate the public on the environmental and economic value of habitat conservation planning and conservation. This education is particularly important in advance of seeking public support to finance the local share of MSCP implementation. The Nature Conservancy is currently working with regional stakeholders on a public information and outreach effort that will describe the economic, environmental, aesthetic, and overall quality of life issues associated with creation of a regional habitat preserve.
3. Research. Achieving the biological goals for the MSCP preserve will require an adaptive management program based on focused research on species and habitats. The Nature Conservancy, in cooperation with federal and state agencies, is helping identify scientific research needs for covered species and habitats that will be used in the adaptive management programs.
4. Management. Local conservancies such as The Environmental Trust have formed to protect and manage lands. The Environmental Trust coordinates its acquisition and management programs with the MSCP so that acquired lands function as a part of the MSCP preserve system.

5.7.2 Local Organizations with a Conservation Focus

The San Diego region is home to important institutions that focus on habitat and wildlife conservation. Local conservation organizations and local chapters of national and statewide organizations could play a role in MSCP implementation. Many of the goals of these groups can be realized through the MSCP. Their active support in education, outreach, fundraising, and volunteer programs is important. Local organizations are also able to acquire and manage lands in the preserve.

The Zoological Society of San Diego has expertise in wildlife conservation here and abroad, and it plans to support habitat conservation through an education program focused on the biological diversity in the San Diego region.

5.7.3 Local Organizations with a Focus Other Than Conservation

Many organizations have habitat lands on which they conduct recreational activities or that have been given to them as bequests. These organizations can contribute to both the preserve system and their institutional goals in the following ways.

1. Joint Use of Lands. Organizations may agree to manage their lands consistent with MSCP guidelines. They also may grant conservation easements on their lands in exchange for mitigation credits or infrastructure improvements. Organizations that own the property could still retain access to their lands for activities consistent with MSCP guidelines.
2. Establishment of Conservation/Mitigation Banks. Organizations may establish conservation/mitigation banks on habitat lands that contribute to the implementation and success of the MSCP and associated subarea plans. The Boys and Girls Club of East County, San Diego, created a conservation bank, and the club is marketing its conservation credits to enhance operating and capital funds.

5.8 INSTITUTIONAL STRUCTURE FOR MSCP IMPLEMENTATION

The MSCP Plan does not create a new regional structure or authority. However, the jurisdictions will identify a new or existing structure for establishing a regional funding source and for allocating funds. The jurisdictions also may choose to establish a regional conservancy to aid preserve system implementation, based on the following:

- Participation of jurisdictions would be voluntary;
- A conservancy should not have any land use authority nor power of eminent domain and would work cooperatively with the local jurisdictions, Implementation Coordinating Committee, and regional funding body discussed below;
- The value of establishing a conservancy should consider its ability to attract and leverage public and private funds from an innovative set of sources and to facilitate land transactions between jurisdictions and/or individuals; and
- A conservancy could consider the establishment and operation of innovative approaches to assembling preserve lands.

The participating jurisdictions also will create two coordination committees, a Habitat Management Technical Committee and an Implementation Coordinating Committee, to address preserve management and implementation issues on a subregional or regionwide basis. Neither committee will have any discretionary powers.



San Diego Ambrosia

5.8.1 Structure to Develop a Regional Funding Source

A requirement of the MSCP implementing agreements is that local jurisdictions and other take authorization holders cooperatively establish a regional funding source within 3 years of signing the initial implementing agreements (initial implementing agreement signed by City of San Diego, July 17, 1997). The jurisdictions will identify a new or existing structure or policy body for establishing this funding source. This body would be responsible for design and implementation of the regional or subregional funding ballot measure discussed in Section 7.4. The tasks requiring policy-level decisions include (1) determining the amount, timing, and formula for sharing proceeds from the measure; (2) developing the specific ballot language for what would be funded; and (3) sponsoring the ballot measure. The MSCP Working Group identified the following options for such a coordinating body:

- An existing single jurisdiction as the lead agency;
- An existing association or committee of local jurisdictions; or
- A new open space/conservation district, board, committee, or commission created by the local jurisdictions.

5.8.2 Structure to Allocate Funds

Within 3 years of signing the initial implementing agreements (July 1997), the participating jurisdictions will identify or create a structure through which regionally generated funds will be allocated. This structure will allocate funds for acquisition, management, monitoring, and administration of the preserve on a subregion or regionwide basis.

5.8.3 Habitat Management Technical Committee

The structure of the Habitat Management Technical Committee is based on its function as a coordination forum for technical issues associated with preserve system management. Members of the committee will include staff of jurisdictions that have entered into implementing agreements and representatives of preserve management entities. Members of this committee will be expected to have technical skills in preserve management and operation. The wildlife agencies will work with the technical committee to furnish information and advice on habitat management and biological monitoring. The Habitat Management Technical Committee will have the following responsibilities:

1. Coordinate ongoing preserve management activities;
2. Maintain a current library of all management plans from the various preserves (state ecological reserves, state parks, federal wildlife refuges, county and city parks, military ecological reserves) within the MSCP study area and plans from preserves outside the MSCP area that deal with the same habitats and/or management issues;
3. Provide technical assistance, if requested, to preserve managers developing or revising management plans;
4. Provide information on new management techniques that can be incorporated into adaptive management programs, and identify future research needs as they relate to management issues;

5. Coordinate development of a computer database for management issues; and
6. Coordinate distribution of preserve management reports.

5.8.4 Implementation Coordinating Committee

The structure of this committee is based on its function as a coordination forum for MSCP implementation among local jurisdictions and other participants. Membership of the Implementation Coordinating Committee will include MSCP take authorization holders, the wildlife agencies, one member representing the local environmental community, one member representing large landowners, and one member representing small landowners.

The meetings of the Implementation Coordinating Committee will be noticed and open to the public. The agenda will be designed specifically to allow for plan implementation issues to be raised by individuals, special interest groups, and other stakeholders. The Implementation Coordinating Committee will have the following responsibilities:

1. Coordinate implementation of subarea plans in areas where jurisdictions have common boundaries or issues;
2. Coordinate the annual accounting to determine MSCP land conserved and permits issued, and maintain the database;
3. Cooperate with current and future public outreach efforts;
4. Provide a forum for discussing regional or subregional funding measures; and
5. Coordinate with the Habitat Management Technical Committee.

5.9 REPORTING ON MSCP PLAN IMPLEMENTATION

Tracking implementation of the MSCP Plan involves two independent processes:

- Annual accounting of the acreage, type, and location of habitat conserved and destroyed (taken) by permitted land uses and other activities; and
- Biological monitoring to determine if the preserve system is meeting conservation goals for covered plant and animal species and habitats (see Section 6.4.1).

5.9.1 Conservation Accounting and Annual Reports

Each take authorization holder will account, both by project and cumulatively, for the habitat acreage destroyed and conserved within its subarea and will submit this information annually to the wildlife agencies and regional coordinating entity. Take authorization holders will maintain records (both ledger and map-based) of the amount and location of habitat (by vegetation community): (1) authorized for clearing/development; and (2) conserved as part of meeting the take authorization holder's obligation for conservation of habitat. The loss of habitat will be accounted for when the project accrues the benefits of the take authorization. For conserved lands, the conservation of habitat will be accounted for when habitat is permanently conserved (e.g., date of recordation of title transfer, recordation of a conservation easement, or execution/recordation of any other instrument that confers third-party beneficiary status

to the project/property). The accounting information for conserved acres also will identify the protection mechanism, owner and agency or person responsible for conservation management, and other related information. The information will be entered into the database on a regular basis. The information in the database will be provided to the wildlife agencies in both hard copy and electronic format concurrent with the annual public report identified in Section 14 of the implementing agreement. The annual report and the records set forth above will be maintained as public records. The information in the annual report will be used by the wildlife agencies to evaluate the take authorization holder's compliance with the terms and conditions of the subarea plan, implementing agreement, and take authorization.

This accounting process will be utilized by each take authorization holder to ensure that habitat conservation proceeds in rough proportion with habitat losses to development and that it is in compliance with the MSCP Plan and its implementing agreement. This information will be compiled annually, by calendar year, and submitted to the wildlife agencies by February 15 of the following year. Annual meetings will be held between individual take authorization holders and the wildlife agencies to review subarea plan implementation and coordinate activities (Section 5.4.4). Section 5.8.4 describes an Implementation Coordinating Committee to coordinate the annual accounting process.

5.9.2 Consolidated Reporting and Public Hearings

A MSCP status report will be issued and public hearings held every 3 years by participating jurisdictions to publicly report on the status of the MSCP. The report will describe the amount of land currently within the preserve, the amount of land added to the preserve in the previous 3 years, and the total expenditures toward acquisition to date and over the preceding 3-year reporting period. A biological monitoring report also will be prepared every 3 years by the wildlife agencies (Section 6.4.1), at the same time as the status report, to present data on the habitats and species monitored.

Additionally, the managers of each preserve area will submit a report to the wildlife agencies every 3 years that summarizes management activities, describes management priorities for the next 3-year period, reports on restoration activities, and evaluates funding and the ability to meet resource management goals.

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6.0 MHPA Guidelines, Preserve Management, and Monitoring



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6.0 MHPA GUIDELINES, PRESERVE MANAGEMENT, AND MONITORING

As an urban preserve for wildlife, the MHPA will enhance the region's quality of life, providing the San Diego community with extraordinary recreational and educational opportunities while conserving its unique biodiversity. As an urban preserve, the MHPA will require management practices and land use guidelines that give special consideration to the interface between developed lands and wildlands. This section establishes general guidelines for compatible land uses and development in the MHPA and provides a framework for consistent and coordinated management of the preserve.

Existing legal land uses within and adjacent to the preserve may continue, and existing ownerships will be maintained unless lands are otherwise obtained by public entities through purchase, dedication, or donation. On private lands that become part of the preserve, public access will be allowed only on properties where access has been granted by the owner through an appropriate easement or on property that has been voluntarily dedicated in fee title to a public agency or nonprofit organization. All new public facilities will be reviewed for consistency with the MSCP to maximize public safety and minimize management concerns and biological impacts.

6.1 ROLE OF SUBAREA PLANS IN LAND USE COMPATIBILITY AND PRESERVE MANAGEMENT

Subarea plans will provide specific land use, site design, and management guidelines to ensure preserved lands are managed for the long-term conservation of biological resources. Subarea plans should address which uses will be allowed within the MHPA, ensure that permitted uses are compatible with preserve objectives, and require that direct and indirect impacts to sensitive habitats and covered species be reduced or eliminated by activity restrictions, design, and/or management practices. Land uses that have unavoidable direct or indirect significant impacts to preserve functions are considered incompatible with the preserve.

Guidelines for land uses, site design, and management actions included in subarea plans should consider the following factors as they relate to the MHPA:

- Type and location of resources to be protected;
- Sensitivity to disturbance of the species to be protected;
- Type of vegetation and topography;
- Type and intensity of land uses and cumulative impacts of a combination of uses; and
- Type and intensity of human activity adjacent to the preserve.

The subarea plans and implementing regulations will include specific site design objectives to ensure that development impacts on biological resources in the preserve are appropriately avoided or minimized. The subarea plans also will prescribe guidelines to ensure that, to the extent practicable, development impacts are contained within the development area and do not affect the preserve. As there are no requirements for buffers outside the preserve system, except as may be provided for by individual subarea plans, incorporating appropriate site design measures into projects abutting the preserve will be

the primary method of avoiding, minimizing, and mitigating impacts to the preserve from new development.

Where impacts to the preserve from development are unavoidable, specific management measures may be required, especially where individuals or populations of covered species are located in preserve areas adjacent to development. Habitat linkages and corridors that abut development also may require specific management actions and activity restrictions.

Additional preserve management measures needed to reduce impacts to individuals or populations of covered species from development abutting the preserve will be incorporated into subarea plans and/or associated framework management plans as described in Section 6.3.1.

6.2 GUIDELINES FOR LAND USES WITHIN THE MHPA

This section assesses general compatibility of land uses with the MHPA and provides suggestions to reduce impacts. Site-specific land use compatibility may differ between individual subarea plans, depending on the factors noted in Section 6.1. In the event of any inconsistencies between the general guidelines in the MSCP Plan and specific guidelines or requirements in a subarea plan, the subarea plan shall take precedence.

6.2.1 Public Use

A key objective of this plan is to provide public recreation and educational opportunities within the preserve, while providing adequate protection for biological resources and ensuring that private property rights are respected. Riding and hiking trails will be allowed within appropriate portions of the preserve to provide passive recreational opportunities for the public. Other passive activities such as photography, bird watching, scientific research, and public education programs also should be encouraged. Sailing, swimming, and fishing also can be compatible with biological objectives of the MSCP.

Individual subarea plans and framework management plans should address allowable recreational uses and their location to ensure protection of biological resources. Trail systems must be clearly defined with appropriate signs and regular maintenance. Existing recreation facilities also should be managed to promote the improvement of habitat nearby. Most importantly, the public should be encouraged to assume pride of ownership in the preserve system.

Active recreational uses, such as camping, athletic fields, and other organized sports activities, are generally incompatible with preserve areas and linkages but may be compatible at the edges of preserves provided that light, noise, and trash impacts are controlled. Off-highway vehicle use is incompatible within preserves and linkages, except on designated roads and as provided for in subarea plans.

Many recreational uses occur in federal or state wildlife refuges, management areas, or parks, some of which may be established in the MSCP preserve. For state park facilities, California state law (Section 5019.5, Public Resources Code) requires a land carrying capacity survey before a development plan is prepared for a park or recreation area. A similar analysis would be required if part of the preserve is designated as a National Wildlife Refuge or National Wildlife Management Area (administered by the Department of the Interior) or a National Recreation Area (administered by the National Parks Service).

6.2.2 Agriculture

Agricultural uses are compatible with adjacent preserve areas. The MSCP recognizes that agricultural lands can be important to the needs of wildlife, providing linkages between native habitats and providing foraging habitat for raptors. Furthermore, agricultural lands may serve as transition areas between the preserve and intensive development.

The MSCP does not impose new regulations on existing agricultural activities, including the use of pesticides and fertilizers, and may provide benefits as described below. Moreover, the program does not attempt to displace existing agriculture. Only agricultural lands of biological significance that are acquired from willing sellers will be included in the preserve.

The MSCP provides for the following:

1. Incidental Take Provision for Ongoing Agricultural Activities. At the option of participating jurisdictions, take authorizations may apply to agricultural activities on lands specifically identified in the MSCP database and as shown on MSCP Plan Figure 2-1 as being actively used for agricultural purposes (agricultural activities include crop, animal, and forage production and grazing). Take authorizations for ongoing agricultural activities would become effective for such lands upon the participating jurisdiction's issuance of a "certificate of inclusion," or other similar documentation, to the landowner. This certificate would identify the parcel number, acreage affected, and current landowner and would include a map specifying the location of the parcel. (Additional lands now being grazed, but not included in Figure 2-1, may be identified and analyzed. If appropriate, an amendment will be sought to bring such areas into the MSCP Plan to provide for continued agricultural use in a manner that conserves species. These additional lands will be subject to the same conditions as those lands currently identified in Figure 2-1.)
2. Safe Harbor Provision. The MSCP Plan supports the formation of cooperative Safe Harbor agreements between the wildlife agencies and agriculturists, without requiring the involvement of local jurisdictions. The Safe Harbor policy provides assurances to private landowners, who undertake voluntary conservation actions on their lands, that their future land use activities will not be further restricted as a result of these conservation efforts. Thus, landowners who agree to manage their lands in a manner that attracts endangered or threatened species or expands their presence will be guaranteed that, as a result of their good stewardship, they will not be penalized with additional regulatory requirements for those lands. The policy is intended to create incentives for landowners to engage in land use and management practices that benefit rare and endangered species.

6.2.3 Development

The development of the MSCP Plan has been guided by the fundamental principle that private property rights shall be respected. Subarea plans are expected to identify permitted land uses and their location and design in relation to the preserve. Through the subarea plans and regulations, the participating jurisdictions and other take authorization holders will ensure that direct and indirect impacts of new development on the preserve will be minimized using good land planning and design principles and preserve management provisions. These issues will be addressed through the existing project review process and California Environmental Quality Act as required.

The subarea plan and/or implementing regulations will address the following site design objectives: avoidance and/or minimization of impacts to biological resources within the preserve from new development, and retention of core areas and functional linkages. Potential impacts from new development on biological resources within the preserve that should be considered in the design of any project include:

- access
- nonnative predators
- nonnative species
- illumination
- drain water (point source)
- urban runoff (nonpoint source)
- noise

The determination of the specific measures necessary to contain impacts from a new development project, and thereby avoid, reduce, or mitigate edge effects on the preserve to less than significant levels, will be the responsibility of the take authorization holder through the applicable project and environmental review process.

Development activities usually have profound and permanent impacts on native vegetation and wildlife, both during and after construction. Therefore, subarea plans should include only limited, compatible development within the MHPA, particularly within linkages, and should direct development, where practicable, outside the MHPA or within disturbed or lower value habitats.

New, higher intensity uses, such as urban density residential (more than one dwelling unit per acre), commercial and industrial uses, and landfills, generally are not compatible within the MHPA. Lower intensity uses, such as low density residential (one dwelling unit per one or more acres), utility corridors, and limited water facilities, may be compatible with certain restrictions. Residential development can promote habitat loss and fragmentation; degrade soil, air, water, and visual quality; promote brood parasitism by increasing cowbird populations; introduce nonnative species; alter the composition of wildlife communities; and increase predation by domestic animals. Commercial development may have fewer indirect impacts, although lighting impacts can be greater.

Low density residential development represents a particular challenge, as approximately 39% (121,946 acres) of the remaining habitat in the MSCP study area is planned for low density residential development according to current general plans. Subarea plans and associated regulations and ordinances should provide incentives to cluster development away from core biological areas and sensitive resources. Careful planning of access, building pads, utilities, fencing, brush management, and landscaping can further minimize impacts.

Existing and planned regional public facilities identified in existing general plans, such as roads, landfills, and other infrastructure, are expected to be incorporated into subarea plans in a manner that will allow planned preserve areas to function. Such facilities, if subject to the discretionary authority of the take authorization holder, must conform to the appropriate subarea plan with regard to site design criteria and mitigation. Heavily used roads and rail lines can isolate populations, increase mortality, restrict wildlife movement, interrupt breeding cycles, and affect runoff, among other impacts. Roadway widths have a critical effect on wildlife movement and should be minimized. When roads cannot be relocated, bridges or structures providing wildlife undercrossings should be used instead of culverts for all riparian crossings and regional wildlife corridors, and fences should be placed to direct wildlife toward these crossings. If culverts must be

used, they should be at least 30 feet wide by 15 feet high with a maximum 2:1 length-to-width ratio. Future and currently unplanned regional facilities (as of date of take authorization issuance) will avoid preserve areas, except as needed for public health and safety. Any projects thus constructed cannot compromise overall levels of conservation in the MHPA or adversely affect preserve and species goals and must mitigate in accordance with the applicable subarea plan. Mitigation must be directed into the MHPA.

6.2.4 Mineral Extraction

In the MSCP study area, mining consists primarily of sand, rock, and gravel extraction using open pit and instream mining methods. Mining causes long-term or permanent impacts to the landscape, including the loss of habitat and topsoil; increased dust, noise, and traffic; nonnative species invasion; habitat fragmentation; and changes to the topography. In addition, instream mining may alter, temporarily or permanently, hydrologic regimes and species' habitat.

The MSCP Plan does not impose any new regulations on owners or operators of existing mining operations. These owner/operators may obtain management authorizations/permits directly from the wildlife agencies. Alternatively, participating jurisdictions may develop a process to amend previously approved local permits, subject to necessary mitigation and approval from the wildlife agencies, to allow owners/operators to avail themselves of take authorizations and third-party beneficiary status, pursuant to the MSCP.

New or expanded mining operations on lands conserved as part of the preserve are incompatible with MSCP preserve goals for covered species and their habitats unless otherwise agreed to by the wildlife agencies at the time the parcel is conserved.

New or expanded rock, sand, and gravel extraction facilities outside of lands conserved as part of the preserve must be designed and mitigated for, consistent with the subarea plan and/or implementing regulations. New or expanded mining operations are considered compatible within the MHPA if they meet the following conditions:

- The facility location, operation, and restoration plans (after taking into consideration the mitigation for the facility and its operation) meet the requirements of the local subarea plan and do not reduce the value and function of the preserve for covered and sensitive species in the long term. Short-term impacts will be avoided where feasible, minimized to the extent practicable, and mitigated in a manner that maintains function and value.
- Restoration plans are developed and implemented to assure restoration of habitat impacted by mining activities located inside the MHPA.

Direct and indirect impacts of new mining operations on the preserve and special preserve management provisions will be addressed through the California Environmental Quality Act process.

Land associated with abandoned mining operations should be assessed for reclamation potential. Lands suitable for reclamation should be restored using native species. If such lands are not suitable for restoration, a compatible second use should be identified, such as trail access points, park headquarters, parking areas, interpretive centers, and research stations.

6.2.5 Itinerant Worker Camps

Transients and migrant workers sometimes maintain shelters and living areas illegally within habitat areas. Such living areas have a detrimental effect on native vegetation and wildlife use, including an increase in refuse, poaching of wildlife, increased fires, and raw sewage disposal which can pollute water resources. The volume of refuse generated attracts black rats, which contribute to the decline of native rodent populations. Although scattered living areas will be difficult to control, villages of transients are incompatible with the preserve areas and linkages and should be removed.

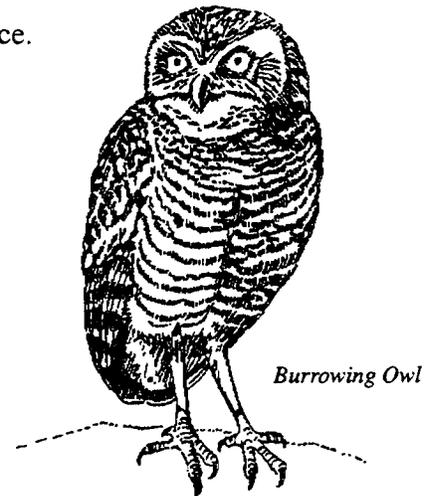
6.2.6 Border Patrol

The MSCP is not intended to constrain activities of the Border Patrol or other law enforcement agencies. Framework management plans should include provisions that allow immigration enforcement officials to carry out their duties.

The Border Patrol and other enforcement agencies should use existing unpaved roads for off-highway activities and thereby minimize impacts to vegetation. If conflicts arise between law enforcement and other public safety activities and conservation of habitat within the MSCP preserve, a resolution process should be established to identify remedies and clarify responsibilities among public agencies. An existing *ad hoc* task force for federal agencies could be utilized for future conflicts between habitat protection and other federal mandates.

For purposes of controlling illegal immigration, larger wildlife undercrossings are recommended over smaller undercrossings to enable enforcement personnel to patrol or pursue suspected illegal immigrants. To the extent feasible, public roads in border areas should be located between development and canyon rims to allow for surveillance, or access points should be provided from public roads to outlooks along canyons. This development design throughout the preserve system would have the following multiple benefits:

- Increased surveillance capabilities of open space for enhanced public safety and enforcement;
- Increased safety from wildland fires; and
- Improved public vistas of the natural open space.



6.3 GUIDELINES FOR PRESERVE MANAGEMENT ACTIVITIES

6.3.1 Preparation of Framework Management Plans

Each take authorization holder will prepare a framework management plan as a condition of its implementing agreement with the wildlife agencies. The framework management plan will provide general direction for all preserve management issues within the subarea plan's boundaries. Area-specific management directives must be developed in accordance with the framework plan to address management issues at the site-specific level. Area-specific management directives will be prepared, as necessary, as lands are conserved as part of the preserve.

Framework Management Plans

Framework management plans will identify the species and vegetation communities to be managed and identify management activities that address covered species requirements and preserve objectives. Framework management plans will establish a process to develop area-specific management directives and describe how adaptive management will be undertaken based on new information on species and ecosystem needs. Unless otherwise included within the subarea plan, each take authorization holder will submit to the wildlife agencies for review a draft framework management plan within 6 months of issuance of take authorizations. Draft framework plans will be available for public review. Framework management plans will be reviewed and approved by the wildlife agencies, and finalized by the take authorization holders, within an additional 3 months.

Area-Specific Management Directives

Area-specific management directives will be prepared by federal, state, and local agencies responsible for managing lands conserved as part of the preserve. Area-specific management directives will be developed using generally accepted practices and procedures for management of biological preserves. These directives will be developed and implemented to address species and habitat management needs in a phased manner for logical and discrete areas, once conserved as part of the preserve, including any species-specific management required as conditions of the take authorizations. For private projects, the California Environmental Quality Act document, when necessary, will include management directives.

Both framework plans (generally) and area-specific management directives (specifically) will address the following management actions, as appropriate:

Preserve-level actions

- Fire management
- Public access control
- Fencing and gates
- Ranger patrol
- Trail maintenance
- Visitor/interpretive services
- Volunteer services
- Hydrological management
- Signage and lighting
- Trash and litter removal
- Access road maintenance
- Enforcement of property and/or homeowner requirements

Species-level actions

- Removal of invasive species
 - Nonnative predator control
 - Species monitoring
 - Habitat restoration
 - Management for diverse age classes
 - Use of herbicides and rodenticides
 - Biological surveys
 - Species management conditions
- (See Table 3-5)

Coordination of Preserve Management

The preparation and implementation of framework plans and area-specific management directives will be coordinated among subareas to ensure that the overall needs of species and habitats are met on a regional basis. Preserve managers will be required to review and update management plans as necessary. A status report shall be submitted every 3 years to the wildlife agencies (Section 5.9). A Habitat Management Technical Committee of local jurisdiction staff and managers of private, local, state, and federal land within the preserve will coordinate management issues and help reduce costs through sharing of resources or other arrangements (Section 5.8). The technical committee will not be an official advisory body and will not have discretionary authority; rather, the committee will ensure that policies, priorities, and activities of the adopted management plans and directives are coordinated and consistent with best management practices throughout the preserve. Wildlife agency staff will work with the committee to provide expertise on habitat management.

6.3.2 Responsibility for Preserve Management and Biological Monitoring

Each take authorization holder will be responsible (either directly or through agreements with other agencies or organizations) for the management and biological monitoring of the following:

- Its own public lands (including those with conservation easements);
- Lands obtained as mitigation (where those lands have been dedicated to the jurisdictions in fee title or easement); and
- Lands within its jurisdiction that have been acquired through the regional funding program.

Likewise, the federal and state agencies will manage and monitor their present land holdings, as well as those they acquire on behalf of the MSCP, consistent with the MSCP Plan. To ensure uniformity in data gathering and analysis, the wildlife agencies will assume primary responsibility for coordinating the MSCP biological monitoring program, analyzing data, and providing information and technical assistance to take authorization holders (see Section 6.4.1).

6.3.3 Preserve Management on Private Lands

Private lands conserved through avoidance in compliance with a jurisdiction's regulations will be transferred in fee title to a government or nonprofit agency if the landowner voluntarily dedicates the land. Active habitat management may not occur if the landowner retains fee title, though grading and clearing will continue to be regulated.

If land is used as mitigation for public or private project impacts, or if private land is purchased with public funds or voluntarily dedicated in fee title, habitat management will be required consistent with the MSCP Plan, subarea plan, and habitat management plan.

Private landowners within the MHPA who are not third-party beneficiaries of the local jurisdiction's take authorizations will have no additional obligations as a result of the MSCP for management or biological monitoring of their lands. Private landowners who are third-party beneficiaries will be responsible for habitat management of preserve lands they choose to retain in private ownership to the extent required by the jurisdiction's subarea plan and implementing regulations and as specified as conditions of development

permits. However, no additional fees will be charged to landowners for biological monitoring.

6.3.4 Fire Management

Fire management includes two activities with very different objectives:

- Fire management for human safety, protection of property, and hazard reduction; and
- Fire management for biological resources.

Many vegetation communities in the study area depend on a regular cycle of burning for maintaining a balance of species, seed viability, and reproduction. The natural fire cycle is affected by human activities, both by increasing fire frequency in some locations and decreasing it in others through fire prevention measures. Fire management for human safety should continue in a manner that is compatible with conservation of biological resources.

Detailed fire management plans should be prepared by preserve managers in consultation with local agency fire departments so that both biological and safety goals are met. Brush management to reduce fuel and protect urban uses will occur where development is adjacent to the preserve. Prescribed burning also may be used where it is practical, given safety and cost considerations.

The fuel management zone between development and the preserve will vary in width and may or may not be within the preserve. Brush management responsibility and ownership of the fuel management zone also may vary. The zone may be owned and managed by the adjacent property owner or homeowners association, or it may be incorporated into the preserve. Each subarea plan should establish guidelines, acceptable to the appropriate fire department, on the location and management of the fuel management zone. These guidelines also will affect preserve management costs and public and private liabilities associated with fire prevention.

The San Diego County Fire Chiefs' Association, together with the USFWS, CDFG, California Department of Forestry and Fire Protection, U.S. Forest Service, and staff of various jurisdictions, organized the Wildland/Urban Interface Task Force to draft countywide planning and construction standards and fuel modification standards. A draft Memorandum of Understanding (MOU) among the wildlife agencies, California Department of Forestry and Fire Protection, and Fire Chiefs and Fire Districts has been developed, which will be helpful in managing fire hazards in concert with habitat protection. These agencies also are working with the Bureau of Land Management on a similar MOU on fire safety and the use of fire in biological management.

6.3.5 Restoration

Restoration is the process of re-establishing historic biological conditions to degraded habitats. Restoration methods range from active landscaping to passive management. Partial or complete restoration may be necessary to enhance linkages and disturbed habitats and could include reintroduction of native species or eradication of nonnative ones.

Subarea plans should identify if restoration efforts are needed and where restoration is most needed as a condition of take authorizations for covered species. In most cases,

restoration will occur as mitigation measures to enhance the preserve. Restoration priorities should be based on the need for connectivity, territory size, and the potential to enhance habitats of sensitive species. Restoration feasibility should be based on an assessment of the level of effort required, costs, access, physical factors, biological conditions, and adjacent land uses.

Restoration plans should be prepared where active landscaping methods are proposed, with formal construction documents and seed and plant procurement specifications. The source of seed and plants used for restoration has tremendous genetic implications. Therefore, propagules should be utilized only from sources in the vicinity of the restoration site. Site protection, irrigation, and maintenance standards should be specified, along with monitoring and exotic species removal, to ensure that restoration is successful.

6.3.6 Hydrology

Native habitats in the study area have evolved based, in part, on the distribution and flow characteristics of water. Some habitats require episodic water disturbances for maintenance or rejuvenation. The preserve should be managed to maintain existing natural drainages and watersheds and to restore or minimize changes to natural hydrological processes. Proposed structures and activities should be evaluated for effects on hydraulics, and remedial actions should be taken as needed. Best Management Practices should be used both within and outside the preserve system to maintain water quality.

6.3.7 Fencing, Signage, and Lighting

Fencing

Fencing plays a critical role in the use of the landscape by humans, domestic animals, and wildlife. Fencing can restrict grazing and control human access, particularly off-highway vehicles. Fencing can direct wildlife to road undercrossings and prevent road kills. However, fencing also can restrict normal wildlife movement, restrict access to food and water, and guide wildlife onto roads.

Existing fencing inside the preserve should be dismantled, except where needed to:

- Restrict grazing;
- Limit road kills;
- Protect particularly sensitive species or habitats;
- Direct human access; or
- Define or utilize private properties in the preserve at the desire of the owners.

Human access should be limited to designated trails using natural vegetation, topography, signs, and limited fencing. Perimeter fencing may be important in linkage areas where preserve widths are narrower and there is greater exposure to adverse effects. Fences within the preserve should be designed and located so they do not impede wildlife movement. Use of 4-foot-high, 5-strand barbed wire fencing may be needed to restrict livestock from riparian corridors. Fencing should be used to funnel wildlife away from

at-grade road crossings and toward undercrossings; fencing at wildlife undercrossings should be 10 feet high.

Signage

Signs educate, provide direction, and promote the sensitive use and enjoyment of natural areas, but they can also inadvertently invite vandalism and other destructive behavior. Signs that explain the rules of the preserve (campfires, firearms usage, camping, etc.) are most effective at public entrance points. Signage for educational nature trails and on roads near wildlife corridors (to reduce road kills) also should be posted at appropriate locations.

Lighting

Artificial lighting adversely impacts habitat value of the preserve, particularly for nocturnal species. Therefore, lighting should not be permitted in the preserve except where essential for roadways, facility use, and safety. Low pressure sodium illumination sources should be used, while avoiding low voltage outdoor or trail lights, spot lights, or bug lights. Along preserve edges, major highway lighting should be limited to low pressure sodium sources directed away from preserve areas. Excessive lighting in developments adjacent to linkages should be avoided through appropriate placement and shielding of light sources.

6.3.8 Predator and Exotic Species Control

Native species are often at a disadvantage after exotic species or nonnative predators are introduced, so special management measures are needed to control exotic species and nonnative predators. Nonnative plant and animal species have few natural predators or other ecological controls on their population sizes, and/or they thrive under conditions created by humans. These species may aggressively outcompete native species or otherwise harm sensitive species. When top predators are absent, intermediate predators multiply and increase predation on native bird species and their nests. Feral and domestic animals, particularly cats, also prey on small native wildlife species. Agricultural areas, livestock holding areas, and golf courses provide resources for increased populations of parasitic cowbirds, which adversely affect native songbird populations. Litter and food waste from migrant worker camps and picnickers can contribute to an increase in Argentinean ant populations, which outcompete native ants, the primary food resource of San Diego horned lizards.

Exotic species and nonnative predator management measures include:

- Monitoring and control of cowbird populations;
- Limited, humane trapping of nonnative predators;
- Removal of exotic plant species; and
- Public education.

Cowbird trapping programs should be initiated if cowbirds are present. Monitoring of cowbird populations should focus on protection of California gnatcatcher, least Bell's vireo, and coastal cactus wren populations. Selected predator populations also should be monitored, and linkages should be maintained for movement of large predators. Smaller nonnative predators and feral animals should be controlled in problem areas. Trapping

efforts that might result in the capture of domestic pets should be conducted with appropriate public noticing and release of domestic pets to owners.

Large areas of invasive exotic plant species in the preserve should be prioritized for control or removal using an Integrated Pest Management approach and the least disruptive measures for native species. Only chemicals recommended by licensed pest control advisors should be used for pest control.

A public education program should be developed for areas within and adjacent to preserves to accomplish the following:

- Suggest ways to avoid attracting predators;
- Encourage removal of invasive exotic plant species from private properties; and
- Prohibit (through landscape ordinances) the use of invasive exotic plants, such as iceplant, for fire control or landscaping purposes.

6.3.9 Species Reintroduction

Species reintroduction refers to relocating a sensitive plant or animal species into native habitat within its historic range to enhance species survival. Reintroduction can be costly and is not yet widely conducted or overly successful. Reintroductions will require appropriate federal and state permits.

6.3.10 Enforcement

Enforcement programs are needed to ensure compliance with land use plans and restrictions, such as zoning, and to ensure that recreational uses are compatible with preserve goals. Access control and other restrictions within the preserve should be strictly enforced.

For the most part, mechanisms are in place at the local, state, and federal levels to enforce existing or revised land use regulations. The local jurisdictions and preserve managers will work together on a public education program to explain goals and regulations as well as educate the public on the area's resources. The ultimate level of enforcement lies in the implementing agreement with the wildlife agencies, because degradation of resources could result in loss or revocation of federal and state take authorizations.

6.4 BIOLOGICAL MONITORING AND RESEARCH

6.4.1 Biological Monitoring

Proper management of the preserve system will require ongoing collection and analysis of data on specific species and habitats to determine that species populations and habitats are being maintained by the MSCP preserve as expected. A Biological Monitoring Plan has been developed to identify specific covered species and representative habitat locations for monitoring and to describe standardized methodologies for collecting and analyzing the data. Biological monitoring of preserve lands will be funded jointly by the federal and state agencies and the take authorization holders through the regional funding program. To ensure uniformity in data gathering and analysis, the wildlife agencies will assume primary responsibility for coordinating the monitoring program, analyzing data, and providing information and technical assistance to take authorization holders.

Biological monitoring will address several objectives:

- Document ecological trends;
- Evaluate the effectiveness of management activities;
- Provide new data on species populations and wildlife movement; and
- Evaluate the indirect impacts of land uses and construction.

Monitoring activities will be prioritized based on available budget and specific needs of individual species and habitats, with a summary report produced every 3 years. The MSCP Biological Monitoring Plan is contained in a separate document.

6.4.2 Research

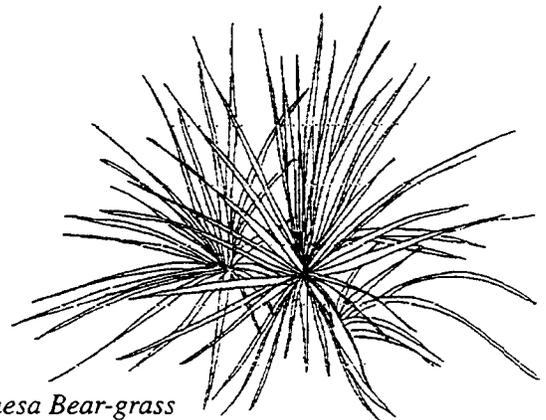
Achieving the biological goals for the MSCP preserve will require an adaptive management program based on focused research on covered species and habitats. Population studies, for example, could aid in prioritizing areas for conservation, while other studies could help in managing preserve areas and individual covered species once preserves are established. These research studies will not be the responsibility of take authorization holders. Some of these studies may be conducted by the wildlife agencies, whereas others will be the focus of longer-term university or agency research projects.

Research topics could include the following:

- Basic inventories of biodiversity, habitat value, and covered species populations;
- Taxonomic studies;
- Wildlife corridor and dispersal investigations;
- Habitat and life history requirements for enhancing populations;
- Minimum viable population size and genetic analyses;
- Habitat restoration and/or population enhancement/reintroduction; and
- Experimental fire management techniques and watershed management strategies.

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7.0 Financing Habitat Acquisition and Management



Dehesa Bear-grass

7.0 FINANCING HABITAT ACQUISITION AND MANAGEMENT

This section describes estimated costs of land acquisition, preserve management, biological monitoring, and MSCP program administration. It also includes a financial analysis of a regional funding program using five potential sources of funds, with estimated fiscal impacts to households and businesses in the region (see Sections 7.2.1 and 7.4.1). An example financing plan is presented using one of the optional sources of local funds, with the understanding that the numbers will be refined when a final financing plan is prepared before a ballot measure is presented to the voters. Potential sources of federal and state funding also are described. For purposes of this section, the words "region" and "regional" refer to the MSCP study area. Although other habitat conservation programs are under development in San Diego County (see Section 2), acquisition needs and costs for those programs have not yet been estimated.

In this plan, costs and revenues are shown in constant 1996 dollars, and future values are discounted, or converted, to 1996 dollars by removing the effect of inflation, assumed to be 3.5% per year. Exceptions are estimated assessments and taxes on households and businesses, which are shown in current dollars without discounting or adjustment for inflation.

Summary of MSCP Costs

The estimated costs of the MSCP are summarized below and described in detail in Section 7.3. Based on a 30-year benefit assessment program, the total cost to the local jurisdictions, residents, and businesses to implement the MSCP is estimated to range from \$339 million to \$411 million in 1996 dollars. This is based on a range of land acquisition costs and also includes recurring costs of preserve management, biological monitoring, and program administration. This estimate also includes establishment of a permanent endowment for management, monitoring, and administration to cover these costs in perpetuity.

Land Acquisition. The cities of Chula Vista, Poway, San Diego, and Santee and the County of San Diego estimated land acquisition needs as part of their subarea plan preparation. These jurisdictions contain most of the remaining habitat lands in the MSCP study area. The estimated acquisition needs total approximately 27,000 acres at a cost of \$262 million to \$360 million. Based on these regional estimates obtained from the jurisdictions, the average acquisition cost ranges from \$9,700 to \$13,300 per acre. One half of the acquisition need will be met by the local jurisdictions and one-half by the federal and state governments, with acquisition anticipated to occur over 30 years.

Preserve Management. The participating local jurisdictions will be collectively responsible for managing habitat lands dedicated to the preserve that they currently own (45,240 acres), those lands they acquire with regional funds (13,500 acres), and those lands that are dedicated as part of the development process (47,380 acres). At buildout of the preserve, it is estimated that the local jurisdictions will manage 106,120 acres of habitat lands in the preserve at a cost of approximately \$4.6 million per year. Local jurisdictions and special purpose agencies currently budget a total of \$1.2 million per year for maintenance of open space areas proposed for inclusion in the MSCP preserve. It is assumed that this budget will continue in the future and will pay for part of the estimated \$4.6 million annual management cost. Preserve management costs are estimated to range from \$37 per acre per year for areas isolated from urban development to \$47 per acre per year for areas near urban development.

The federal and state governments would manage 50,010 acres at preserve buildout, including 36,510 acres of existing federal and state lands and 13,500 acres of acquired lands, at an estimated cost of \$2 million per year.

Biological Monitoring. Biological monitoring includes surveys, mapping, and data collection and analysis. Different monitoring activities occur each year, and annual costs vary based on the type and frequency of monitoring activities and condition of the biological resources. The biological monitoring plan estimates annual costs over a 10-year cycle, ranging from \$109,800 to \$405,300, with an average annual cost of \$230,400. Biological monitoring will be the joint responsibility of the local jurisdictions and other local take authorization holders and the federal and state governments, with costs assumed to be funded in proportion to the amount of preserve lands managed at preserve buildout. Biological monitoring costs for the local jurisdictions are estimated to total \$3.7 million through 2029 (in 1996 dollars).

Program Administration. Program administration includes land acquisition activities, coordination of subarea plan implementation, legal support, financial management, reporting and database management, and facilities and equipment. Annual administrative costs in 1996 dollars are projected to rise from \$835,000 in 2000 to a maximum of \$1.3 million in 2004, during the period of land acquisition, then decline to \$255,000 at preserve buildout. In the years of maximum expenditures, costs are estimated to be \$7 to \$8 per acre per year.

Funding for Annual Recurring Costs. Three types of annual recurring costs to the local jurisdictions -- preserve management, biological monitoring, and program administration -- are anticipated to total \$4.6 million at preserve buildout. As mentioned earlier, the continuation of existing open space maintenance budgets is anticipated to fund \$1.2 million of this amount, leaving \$3.4 million to be funded by the regional program. The example financing plan assumes that an endowment will be established by the regional funding program to fund these costs in perpetuity. The endowment required to fund these costs is \$235 million in 2029, when the 30-year regional funding program ends, or \$75 million in 1996 dollars. As an alternative, a new funding program could be established by the voters before the end of the initial 30-year program.

Summary of the Regional Funding Program

The local share of habitat acquisition, management, monitoring, and program administration costs will be funded from a revenue source or sources to be newly established in the MSCP study area and submitted to the voters for approval. Within 36 months of the wildlife agencies' approval of the first subarea plan (initial implementing agreement signed by City of San Diego, July 1997), the participating local jurisdictions will cooperatively develop a program to fund the local share of the MSCP and place a measure on the ballot for approval by the voters. It is assumed for analysis that a regional funding program will be in effect for 30 years.

The local jurisdictions, through the MSCP Policy Committee and based on the recommendation of the Working Group, selected five potential sources of funds for analysis (Section 7.4.1.) The financial characteristics and impacts of a funding program using these sources depend on a number of factors, including the timing of habitat acquisition, use of bonds and other debt financing, and the underlying financial assumptions.

An example financing plan based on benefit assessment, similar to that authorized by Assembly Bill (AB) 2007, is described in Section 7.2. Under the example plan, the local

share of the 30-year program is estimated to be \$339 million and \$411 million, respectively, for the low and high estimates of acquisition cost. With the low acquisition cost, the average annual cost of the regional funding program is estimated to range from \$15 to \$20 per household in the first year of the program and from \$20 to \$30 per household in the last year. With the high acquisition cost, average annual cost to households is estimated to range from \$18 to \$25 in the first year and from \$25 to \$38 in the last year. In the example financing plan, benefit assessments are assumed to remain constant during the length of the regional funding program. Other assessments or taxes are assumed to escalate over time. Estimated costs to households and businesses under alternative funding sources are described in Section 7.2.3.

The example financing plan and estimated impacts of alternative funding sources are intended to illustrate a range of financing options available to the local jurisdictions to implement the MSCP. The jurisdictions will select one or more funding sources and develop a financing plan to be submitted to the voters for approval. New legislative authorization may be necessary, depending on the funding source selected. A model timetable is presented in Section 7.4.2, which describes a process for the participating jurisdictions to develop a regional funding program and a ballot measure.

The local jurisdictions' 30-year total program costs estimated in this plan differ from costs estimated in the Public Review Draft MSCP Plan (March 1995). In this plan, the estimated cost to the local jurisdictions ranges from \$339 million to \$411 million, compared with \$165 million to \$357 million shown in the draft plan. The two plans differ primarily in the following ways.

1. This MSCP Plan targets 171,917 acres for conservation, which is 7,591 acres more than that targeted for conservation (164,326 acres) in the draft plan (see Section 3.2).
2. The total estimated need for public acquisition by federal, state, and local governments in this plan is 27,000 acres, compared to a range of 24,000 acres to 40,500 acres in the draft plan.
3. The total estimated cost of public acquisition by federal, state, and local governments in this plan ranges from \$262 million to \$360 million, compared to \$271 million to \$513 million in the draft plan.
4. The average acquisition cost indicated by the cost estimates in this plan varies from \$9,700 per acre to \$13,300 per acre. The average acquisition cost indicated by the cost estimates in the draft plan varied from \$11,900 per acre to \$13,400 per acre.
5. In this plan, the local jurisdictions would acquire 13,500 acres, or one-half of the total acquisition need, at an estimated cost ranging from \$131 million to \$180 million. In the draft plan, the local jurisdictions would acquire from 2,700 acres to 11,400 acres at estimated costs of \$32 million to \$153 million. The draft plan assumed that acquisitions by the local jurisdictions would be augmented by 10,000 acres of private offsite mitigation, estimated to cost \$103 million, which is included as private conservation for purposes of this plan.
6. This plan assumes that the 30-year funding program would establish a permanent endowment of \$75 million (1996 dollars) to fund recurring local costs after the end of the funding program, which was not included in the draft plan.

Establishing a permanent endowment is an option illustrated in this plan, which may be included by the local jurisdictions in preparing the final financing plan.

7.1 FINANCING POLICIES

The analysis of alternative funding programs described in this section is based on (1) policies cooperatively developed by the elected officials of local jurisdictions through the MSCP Policy Committee and the wildlife agencies, based on recommendations from the MSCP Working Group, property owners, environmental groups, the development industry, and other interested parties and agencies; and (2) the April 22, 1996, agreement between Mayor Golding of the City of San Diego, U.S. Secretary of the Interior Babbitt, and Undersecretary for Resources Mantell of the State of California. Sections 3, 4, and 5 describe the policies associated with MSCP funding, which are summarized below.

1. Acquisition. The federal and state governments, collectively, and the local jurisdictions and the general public, collectively, will each be responsible for meeting one-half of the acquisition need.
2. Preserve Management. The federal, state, and local agencies will manage their respective public lands committed for habitat conservation, lands they acquire for the preserve, and other lands that are conserved as mitigation for public projects or that are dedicated in fee or easement for habitat conservation. Mitigation lands that remain in private ownership will be managed by the owners.
3. Biological Monitoring. Biological monitoring will be the joint responsibility of the local jurisdictions or special districts and the wildlife agencies.
4. Method of Regional Funding. The regional funding source will be broad-based and submitted to the voters for approval.
5. Uncovered Species. The federal and state governments will be fully or partially responsible for additional conservation that may be needed as a result of future listings of uncovered species, if they are dependent on habitats considered to be sufficiently or significantly conserved by the MSCP.
6. Deficiency in Public Funds. If federal/state funding is not provided as committed, the MSCP will be reevaluated with possible adjustments to take authorization coverage and assurances. In the event that adequate local funding is not provided, the wildlife agencies and local jurisdictions will develop a strategy to address the shortfall.

In addition, the following policies address the commitment of local jurisdictions and federal and state governments to obtain funding for program implementation:

7. Funding from a Regional Source. Funding of the local share of program costs, to be borne by the local jurisdictions, residents, and businesses, will be carried out on a regional basis. This regional funding will be established cooperatively by the participating local jurisdictions and submitted to the voters for approval.
8. Timing of Voter Approval. A proposal for regional funding will be placed on a ballot within the following time period. The jurisdictions will begin a process to procure funding within 18 months of federal and state approval of the first subarea plan (initial implementing agreement signed by City of San Diego, July 1997) and

will place a measure on the ballot and have one or more funding sources in place within an additional 18 months. This schedule may be adjusted, however, if the participating jurisdictions demonstrate that their good faith efforts require additional time.

7.2 FINANCING PLAN FOR LOCAL JURISDICTIONS

This section contains an example financing plan for one funding source and the estimated costs to the region's households and businesses for this and other funding sources. The financing plan describes the uses and sources of funds and debt financing. A financing plan reflects many underlying factors, such as the rate of habitat acquisition and associated preserve management costs, type of regional funding source, type of debt financing, and assumptions regarding future changes in the tax base, inflation and interest rates, and length of the funding program. For analysis purposes, most of these factors are kept the same to compare the alternative funding sources.

The example financing plan is based on constant, or nonescalating, benefit assessments. That is, an assessment for a built residential parcel is assumed to remain constant throughout the term of the funding program. Other funding sources reflect, or they may be designed to reflect, some of the inflation in acquisition and management costs. The use of a constant benefit assessment results in the highest costs to households and businesses in the early years of the funding program, in order to anticipate future price inflation. Hence, the example financing plan provides a conservative (high) estimate of financial impacts to households and businesses.

7.2.1 Options for Regional Funding Source

Several options for a regional funding source were selected for analysis by elected officials of the local jurisdictions serving on the MSCP Policy Committee, based on the recommendation of the MSCP Working Group. These options include the following:

- Benefit assessment by a regional park and open space district (AB 2007; Public Resources Code, Section 5539.3), or a new legislative authority;
- Habitat maintenance assessment (Senate Bill (SB) 445; Government Code, Section 50060 et seq.);
- Mello-Roos community facilities district special tax (Government Code, Section 53311 et seq.);
- Increase in ad valorem property tax; and
- Increase in sales tax.

Of these, the first two are special assessments, the third is a special tax, and the last two may be special or general taxes, depending on whether the additional revenues are designated for a specific purpose. Special taxes and any increase in ad valorem tax require approval by two-thirds of the voters. Special assessments can be approved by a simple majority of the voters under special state legislation. As a policy of the MSCP, any regional funding program will be submitted to the voters for approval.

State law provides different allowable uses for the revenues raised. It may be necessary to combine benefit assessment under AB 2007 or general obligation bonds repaid through a property tax increase with an additional source or sources to fund both acquisition and

recurring annual costs, due to restrictions on the uses of revenues generated (see Section 7.4.1.) In some cases, additional financial and/or legal analysis may be needed to clarify the allowed uses. For example, the extent to which habitat maintenance assessments may be used for large-scale habitat acquisition is not clear. For purposes of this analysis, it is assumed that habitat maintenance assessment would be used to fund preserve management, monitoring, and program administration, and another source, such as a benefit assessment, would be used to fund habitat acquisition.

Use of benefit assessment, habitat maintenance assessment, or community facilities district special tax would require establishment of a special agency or district, either by the County of San Diego or jointly by the participating jurisdictions. A special district may also be necessary to raise sales tax revenues for a specific purpose. New state legislation may be necessary for these sources to meet the financing goals of the MSCP. For purposes of comparison, all funding sources are assumed to last for 30 years, although in practice some sources, such as a sales tax increase, would be adopted for a shorter length of time. (For further discussion of these funding sources, see Section 7.4.1.)

In November 1996, California's voters approved Proposition 218, known as the "Right to Vote on Taxes Act." The proposition requires that all taxes and most charges on property owners be subject to voter approval. The proposition seeks to limit the use of special assessments and property-related fees, which are imposed as an incident of property ownership, to funding services that provide special benefits to parcels, as opposed to general governmental services. The passage of Proposition 218 places greater limitations than previously on the use of special or benefit assessments, which are subject to majority vote approval, for habitat and open space conservation. The proposition places fewer limitations on the use of funding sources that are subject to two-thirds vote approval, such as special taxes.

7.2.2 Description of Example Financing Plan

An example financing plan for local jurisdictions, based on a 30-year program of benefit assessments similar to that authorized by AB 2007, is shown in Table 7-1. In the example financing plan, the total cost to the local jurisdictions, residents, and businesses to implement the MSCP is estimated to range from \$339 million to \$411 million in 1996 dollars. This includes land acquisition, annual recurring costs for preserve management, biological monitoring, and program administration, and establishment of a permanent endowment for management, monitoring, and administration.

Total local jurisdiction acquisition costs of \$131 million to \$180 million represent 38.7% and 43.8%, respectively, of the total program cost in 1996 dollars. Costs for ongoing activities, such as preserve management, biological monitoring, and program administration, would vary over time, depending on the amount of habitat lands to be managed. The recurring costs between 1997 and 2029 total approximately \$120 million, which represents 35.3% (under the low acquisition cost) to 29.1% (under the high acquisition cost) of the total program cost in 1996 dollars.

The example plan assumes two optional elements, which could be retained or omitted by the participating jurisdictions in developing a final financing plan:

1. An initial acquisition of 4,000 acres prior to establishment of the long-term regional funding program, as recommended by the San Diego Dialogue and described in Section 7.2.4; and

Table 7-1

**AN EXAMPLE FINANCING PLAN FOR LOCAL JURISDICTIONS
USING BENEFIT ASSESSMENT: 30-YEAR PROGRAM
COSTS AND REVENUES¹**

	<u>Low Acquisition Cost</u>		<u>High Acquisition Cost</u>	
	1996 \$ Million	Percent	1996 \$ Million	Percent
Program Costs				
Habitat Acquisition	\$131.0	38.7%	\$180.0	43.8%
Preserve Management ²	96.5	28.5%	96.5	23.5%
Biological Monitoring ²	3.7	1.1%	3.7	0.9%
Program Administration ²	19.3	5.7%	19.3	4.7%
Deposits to Endowment ³	59.2	17.5%	64.0	15.6%
Interest and Financing Costs ⁴	<u>29.1</u>	<u>8.6%</u>	<u>47.8</u>	<u>11.6%</u>
Total	\$338.8	100.0%	\$411.3	100.0%
Program Revenues				
Regional Funding Source ¹	\$296.6	87.5%	\$366.2	89.0%
Continuation of Pre-1996 Open Space Budget ⁵	34.4	10.2%	34.4	8.4%
Local Funding of Interest Costs on Initial Acquisition ⁶	5.2	1.5%	7.1	1.7%
Interest Revenue	<u>2.6</u>	<u>0.8%</u>	<u>3.6</u>	<u>0.9%</u>
Total	\$338.8	100.0%	\$411.3	100.0%

Source: Onaka Planning & Economics; Douglas Ford and Associates.

All costs and revenues in millions of 1996 dollars; future values have been discounted.

¹ Costs and revenues shown in this table reflect a 30-year regional funding program based on benefit assessments levied by a regional parks and open space district. Costs assume establishment of an endowment for perpetual maintenance. Costs and revenues differ for other funding sources.

² Discounted sum of costs from 1997 to 2029.

³ Discounted sum of deposits into an assumed endowment fund. The undiscounted amount of endowment in 2029, including accumulated interest, is \$235 million.

⁴ Interest and bond issuance costs.

⁵ Discounted sum of continued expenditures by local jurisdictions for the management of open space preserves established prior to 1996.

⁶ Discounted sum of interest payments made by local jurisdictions for an assumed interim financing to acquire land prior to the start of a regional funding program.

2. Establishment of a permanent endowment to fund annual recurring costs in perpetuity after the period for which a regional funding source is authorized.

This analysis assumes that annual recurring costs after 2029 will be funded from a permanent endowment created by deposits from the regional funding source and accumulated interest earnings. The discounted sum of deposits into the endowment fund is \$59 million under the low acquisition cost and \$64 million under the high acquisition cost. As noted above, however, this is an optional element of the financing plan. Alternatively, a new regional source to fund annual recurring costs may be submitted to the voters before the end of the initial 30-year funding program.

Anticipated program costs in the early years exceed projected revenues, in part, because much of the habitat acquisition is projected to occur in the early years of the program. It is assumed in this analysis that both short and long-term financing will be used (see Section 7.2.4). Interest and financing costs total \$29 million using the low acquisition cost estimates and \$48 million using the high acquisition cost estimates.

The example financing plan relies principally on a new regional funding source to be established cooperatively by the participating local jurisdictions. From \$297 million to \$366 million of revenues are projected from this source. Other funding sources are assumed from continuation of the existing open space maintenance budgets of local jurisdictions, a separate local funding of interest costs for an (optional) interim financing of initial land acquisition, and interest revenues on the unused balance of the regional funding program.

7.2.3 Financial Impacts on Households and Businesses

The fiscal impact of a regional funding program on households and businesses can vary substantially, depending on which funding source or sources are selected.

Example Financing Plan (Benefit Assessment)

The example financing plan based on a benefit assessment would result in average annual assessments, over 30 years, of \$20 to \$25 per household and \$71 to \$88 per acre of commercial and industrial property. The lower assessment corresponds to the low estimate of acquisition cost, and the higher assessment corresponds to the high estimate of acquisition cost. For this analysis, the average assessment per household would apply to a household residing in a single family detached unit. Assessment for a multifamily unit is assumed to be 80% of the assessment for a single family unit. (All estimated costs to households and businesses from taxes or assessments are shown in current dollars; they are not discounted to 1996 dollars.)

The numbers of households and acres of commercial and industrial properties in future years were obtained from the San Diego Association of Governments' growth forecasts for the San Diego region (Series 8, May 1995). Growth after 2015, the final year of the forecast, was assumed to continue at the same rate as in the last 10 years. In 2000, the MSCP study area is projected to contain 694,000 "equivalent" households, with 80% adjustment for households residing in multifamily units, and 34,800 acres of commercial and industrial properties. In 2029, the study area is projected to contain 1.05 million "equivalent" households and 52,500 acres of commercial and industrial properties.

The estimated costs to households and businesses assume that a permanent endowment would be established during the 30-year regional funding program. If a permanent endowment is not established, the estimated annual assessment would be reduced by

\$2 per household and by \$6 to \$7 per acre of commercial and industrial property. That is, average annual assessment, without deposits to an endowment fund, would be \$18 to \$23 per household and \$65 to \$81 per acre of commercial and industrial property, corresponding to low and high estimates of acquisition cost.

Financing plans based on other regional funding sources would result in different costs to households and businesses (Tables 7-2 and 7-3). An important difference between the example financing plan and the others is the extent to which the assessment or tax per household or per acre of commercial or industrial property would vary over time. In the example financing plan, benefit assessment is assumed to remain constant during the 30-year program, though AB 2007 does not prohibit variable assessments. Other funding sources would reflect, or may be structured to reflect, some of the general price inflation. For example, habitat maintenance assessment would be levied according to need, up to a maximum of \$25 per lot in 1994, as specified in SB 445, and, in subsequent years, to this amount increased according to the California Consumer Price Index. Revenues from an ad valorem property tax would vary according to changes in assessed value, although the tax rate remains constant.

Benefit Assessment and Habitat Maintenance Assessment

Under a combination of benefit assessment and habitat maintenance assessment, the average annual cost per household is estimated to be \$18 in 2000 and \$27 in 2029 under the low acquisition cost and \$23 in 2000 and \$33 in 2029 under the high acquisition cost. Of these amounts, about \$3 in 2000 and \$13 in 2029 would be levied per household as habitat maintenance assessment and the remainder as benefit assessment.

Ad Valorem Property Tax

A financing plan based on an ad valorem property tax would result in an additional tax rate of \$0.14 per \$1,000 of assessed valuation under the low acquisition cost and \$0.17 per \$1,000 of assessed valuation under the high acquisition cost. For an average household, these rates translate to an annual cost of \$15 in 2000 and \$25 in 2029 under the low acquisition cost and \$19 in 2000 and \$32 in 2029 under the high acquisition cost. It may be necessary, however, to combine property tax increase with another funding source, such as habitat maintenance assessment, to fund preserve management as well as land acquisition. In such a case, the combined annual cost per household would be slightly lower in the early years and higher in the later years.

Sales Tax

If sales tax is used as the funding source over a 30-year period, tax revenues representing 0.085% of taxable sales (low acquisition cost) or 0.105% of taxable sales (high acquisition cost) would be required. This amount would be approximately \$0.01 for \$10.00 of purchase. An average household would pay \$14 in 2000 and \$28 in 2029 in sales taxes under the low acquisition cost and \$18 in 2000 and \$34 in 2029 under the high acquisition cost. In practice, however, the increment of sales tax increase would be set at 0.25% or 0.5% and be in effect for a shorter period of time. The increment could be set to 0.125%, if authorized by special legislation. The terms of a sales tax program require additional review and refinement by the participating jurisdictions prior to formulating a ballot measure.

Table 7-2

**ESTIMATED AVERAGE ANNUAL COST TO HOUSEHOLDS¹ IN
THE FIRST AND LAST YEARS OF A REGIONAL FUNDING PROGRAM²**

Alternative Regional Funding Source	Average Cost per Household ³	
	Low Acquisition Cost (first - last year)	High Acquisition Cost (first - last year)
Benefit Assessment ⁴	\$20.25	\$25.00
Benefit Assessment and Habitat Maintenance Assessment	\$17.90 — \$27.25	\$23.20 — \$32.60
Community Facilities District (Mello-Roos)	\$17.15 — \$30.45	\$21.25 — \$37.75
Ad Valorem Property Tax/ General Obligation Bond ⁵	\$15.45 — \$25.30 (\$0.14 per \$1,000 AV)	\$19.35 — \$31.60 (\$0.17 per \$1,000 AV)
Sales Tax ^{5,6}	\$14.30 — \$27.70 (0.085% of taxable sales)	\$17.80 — \$34.40 (0.105% of taxable sales)

Source: Douglas Ford and Associates; Onaka Planning & Economics.

AV = Assessed value

- ¹ Household in a single family detached unit (1.0 equivalent dwelling unit); assessment or tax for a multifamily unit is 80% of that for a single family detached unit.
- ² Costs shown are in current dollars, not discounted. Costs assume establishment of an endowment for perpetual management. Inflation of 3.5% per year is assumed. Under this rate of inflation, the general price level in 2029 would be 281% of the price level in 2000. All assessments or taxes are assumed to be collected for 30 years.
- ³ Where two figures are shown, the first is cost per household in the first year (2000) of a regional funding program, and the second is cost per household in the last year (2029).
- ⁴ Benefit assessment is constant through the 30-year program term.
- ⁵ Tax rates would remain constant through the 30-year program term. However, the average tax bill for households would increase due to inflation.
- ⁶ In practice, the sales tax increase would likely be made higher and in effect for a shorter period of time.

Table 7-3

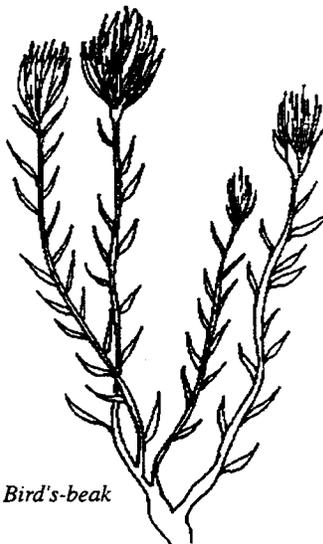
**ESTIMATED AVERAGE ANNUAL COST TO COMMERCIAL
AND INDUSTRIAL USERS IN THE FIRST AND LAST YEARS
OF A REGIONAL FUNDING PROGRAM¹**

Alternative Regional Funding Source	Cost to Commercial and Industrial User ²	
	Low Acquisition Cost (first - last year)	High Acquisition Cost (first - last year)
Benefit Assessment ³	\$71/acre	\$88/acre
Benefit Assessment and Habitat Maintenance Assessment	\$63/acre — \$96/acre	\$82/acre — \$115/acre
Community Facilities District (Mello-Roos)	\$60/acre — \$107/acre	\$75/acre — \$133/acre
Ad Valorem Property Tax/ General Obligation Bond ³	\$0.14 per \$1,000 AV	\$0.17 per \$1,000 AV
Sales Tax ^{3,4}	0.085% of taxable sales	0.105% of taxable sales

Source: Douglas Ford and Associates; Onaka Planning & Economics.

AV = Assessed value

- ¹ Costs shown are in current dollars, not discounted. Costs assume establishment of an endowment for perpetual management. Inflation of 3.5% per year is assumed. Under this rate of inflation, the general price level in 2029 would be 281% of the price level in 2000. All assessments or taxes are assumed to be collected for 30 years.
- ² Where two figures are shown, the first is cost in the first year (2000) of a regional funding program, and the second is cost in the last year (2029).
- ³ Constant rate through the 30-year program term.
- ⁴ In practice, the sales tax increase would likely be made higher and in effect for a shorter period of time.



Saltmarsh Bird's-beak

7.2.4 Phasing of Regional Funding and Assumptions for Debt Financing

The analysis of the regional financing plan assumes that the first 33 years of MSCP implementation may be divided into three periods:

1. An initial period after approval of the MSCP Plan and first subarea plans and prior to establishment of a long-term regional funding program (1997 - 1999);
2. A period of land acquisition and debt financing under the regional funding program (2000 - 2020); and
3. A final period in which outstanding bonds are repaid and an endowment, if applicable, is completed for the permanent funding of ongoing costs (2021 - 2029).

Short-term Financing of Initial Acquisition

As described in Section 7.4.2, the local jurisdictions will have a funding source in place within 36 months after the wildlife agencies' approval of the first subarea plan. Prior to a regional funding source being established, there may be a need or desire to acquire habitat lands that are at risk of development or that may be for sale at favorable terms. An interim funding source could be established for this purpose by one or several participating jurisdictions or nonprofit organizations.

To facilitate discussions on funding, a committee of the San Diego Dialogue was established in January 1996. With funding from the San Diego Community Foundation and the Bank of America, the San Diego Dialogue committee was formed of local business, banking, and building industry representatives. This committee's charge was to investigate the feasibility of funding the MSCP and to detail a financing strategy for the first 3 to 5 years of acquisition need, prior to a voter-approved regional funding source. The San Diego Dialogue has recommended that interim local funding be provided to acquire up to 4,000 acres of private habitat lands in the first 3 years, with the federal and state governments also acquiring 4,000 acres in this time period for a total of 8,000 acres. The Dialogue recommends use of a short-term loan, which is assumed in the example financing plan to be repaid from the proceeds of the initial bond issue under the long-term funding program.

This type of interim funding is an option that one or more local jurisdictions could consider to meet short-term acquisition needs. For financial planning purposes, the example financing plan assumes that short-term financing with 9% interest will be used to purchase and manage lands before the regional funding program is established and that the principal, but not the interest, would be paid out of the proceeds of bonds issued by the long-term regional funding program. Interest payments on a short-term loan for this purpose could be made through the use of current budgets for environmental mitigation of public infrastructure projects and other sources of funds. The estimated cost of purchasing 4,000 acres is \$39 to \$53 million (1996 dollars) using the low and high estimated costs of habitat lands. It is assumed that an additional \$1 million would be borrowed to pay for the management of these lands. Interest payments on the short-term financing for 3 years are estimated to total \$5 million to \$7 million in 1996 dollars.

Long-term Financing

The acquisition of habitat lands to establish the MSCP preserve is anticipated to occur over a 30-year period, with proportionately more acquisitions in the early years. As

described in Section 7.4.2, the local jurisdictions will establish a regional funding source within 36 months of the wildlife agencies' approval of the first subarea plan (initial implementing agreement signed by City of San Diego, July 1997).

The example financing plan assumes that land acquisitions will be completed within 20 years after the establishment of a regional funding program in 2000. The plan also assumes that acquisition will be accelerated so that 50% of the total acquisition target will be completed within 4 years after the start of the regional funding program, 75% within 10 years, and 90% within 15 years. The final financing plan may incorporate different assumptions on the rate of acquisition.

The example financing plan and estimates of financial impacts under other funding sources assume that a series of bonds will be issued to balance revenues with expenditures. The bonds would have a minimum coverage by annual revenues of 120%, have 8% interest and 4% issuance costs, and provide for a reserve fund equal to 1 year's debt service. All bonds would be repaid within 30 years after establishment of the regional funding program.

Annual Fund Balance. The example financing plan and corresponding plans for the other funding sources are structured so that there is annually a program fund balance of at least \$2 million; in many years fund balances substantially exceed this amount. Maintenance of an adequate program fund balance is necessary to meet unexpected financial needs and, where appropriate, to take advantage of opportunities for land acquisition.

Inflation. Inflation of 3.5% per year is assumed for all program costs, including land acquisition, management, biological monitoring, and program administration. There is a substantial compounding effect from annual inflation. Under the assumed inflation rate, the general price level in the last year (2029) of the regional funding program would be 281% of the price level in the first year (2000).

7.3 PROGRAM COSTS

Estimated acquisition costs and annual recurring costs at buildout of the MSCP preserve are shown in Tables 7-4 and 7-5. This section describes the basis for these cost estimates.

7.3.1 Land Acquisition

The acquisition of lands for the MSCP preserve will be based on purchases from willing sellers at fair market value or on terms mutually acceptable to the buyer and seller. The estimates of land acquisition costs are based on estimates of fair market value, although acquisition also may be accomplished through non-cash transactions such as land exchanges.

The five jurisdictions that estimated acquisition need (see Table 4-3) also estimated acquisition cost (Table 7-5). The jurisdictions based their preliminary estimates on their knowledge of local land values and on their experience in land acquisition for parks, street rights-of-way, and other public facilities. Costs of undeveloped land vary widely in San Diego County, depending on distance from the coast, employment centers and other regional destinations, availability of roads and other public services, and presence of physical constraints to development. The total cost of acquiring 27,000 acres is estimated to be from \$262 million to \$360 million. The average acquisition cost indicated by these estimates varies from \$9,700 per acre to \$13,300 per acre.

Table 7-4

SUMMARY OF ESTIMATED PROGRAM COSTS

	Local Jurisdictions	Federal and State Governments	Total
Land Acquisition	\$131 – \$180 million	\$131 – \$180 million	\$262 – \$360 million
Annual Recurring Costs at Buildout ¹			
Preserve Management	\$4,205,000 / yr. ²	\$1,900,000 / yr.	\$6,105,000 / yr.
Biological Monitoring ³	\$156,600 / yr.	\$73,800 / yr.	\$230,400 / yr.
Program Administration	\$255,000 / yr. ⁴	— ⁵	\$255,000 / yr.
Total Annual Costs	\$4,616,600 / yr.	\$1,973,800 / yr.	\$6,590,400 / yr.

Source: Onaka Planning & Economics; Douglas Ford and Associates; Ogden.

Note: Land acquisition costs are in millions of 1996 dollars. Annual costs are in 1996 dollars.

- ¹ Annual costs projected to be incurred in 2029, converted to 1996 dollars.
- ² Includes \$1,230,000 of continued annual expenditure by local jurisdictions for the maintenance of open space preserves established prior to 1996.
- ³ Average cost over a 10-year cycle; costs will vary by year according to the types of monitoring activity undertaken.
- ⁴ Program administration costs for local jurisdictions are assumed to increase after initiation of the MSCP, reach a maximum, and then decline to the amount shown.
- ⁵ Administrative costs for federal and state government lands are included in the operating budgets of the USFWS and CDFG offices in San Diego County.

Table 7-5

**ESTIMATED COST OF HABITAT ACQUISITION BY FEDERAL
AND STATE GOVERNMENTS AND THE
REGIONAL FUNDING PROGRAM¹**

	Estimated Acquisition Need (acres)	Estimated Cost to the Federal and State Governments and the Regional Funding Program (\$ million)
Chula Vista	360	\$3 – \$7 million
Poway	3,200	\$48 million
San Diego	2,400	\$40 – \$70 million
Santee	350	\$3 million
County of San Diego (unincorporated)	18,850	\$149 – \$206 million
Total to Be Acquired by the Federal, State, and Local Governments ¹	25,160	\$243 – \$334 million
With Contingency	27,000	\$262 – \$360 million

Source: Cities of Chula Vista, Poway, San Diego, and Santee and the County of San Diego. See also Table 4-3.

¹ The information contained in this table is intended only to estimate the total cost of lands potentially acquired for the MSCP preserve by the federal, state, and local governments, with local governments using a regional funding program. The amounts and costs for individual jurisdictions are shown for information only. The amounts do not indicate the financing responsibilities of individual jurisdictions, nor do they indicate how regional funds may be allocated to individual local jurisdictions.

Local jurisdictions will acquire one-half of the habitat lands identified for public acquisition, at an estimated cost of \$131 million to \$180 million. Federal and state governments will acquire one-half, at the same estimated cost. The range of costs provided reflects the wide variation in land prices in the MSCP study area and the fact that the program cannot anticipate which properties will be purchased or will be developed or conserved in accordance with local land use regulations. Thus, the cost of land acquisition cannot be determined with precision. The cost estimates provided by the jurisdictions are intended for planning purposes and should be refined during the initial phase of developing a regional funding measure for voter approval.

Comparison of Estimated Costs to Sales Prices

The current estimates of acquisition cost have been compared to recent sales prices of undeveloped land in the MSCP study area. Sales records of 70 transactions between 1989 and 1996 were obtained from a recent study by the San Diego Gas & Electric Company and from local brokers. The sales prices range from \$900 per acre to \$87,900

per acre, with a median sales price of \$4,400 per acre. Median price is the price above and below which one-half of the lands were sold. Approximately 89% of lands recently sold had prices below the average acquisition cost (\$9,700 per acre) associated with the jurisdictions' low estimates, and 94% of lands had prices below the average acquisition cost (\$13,300 per acre) associated with the jurisdictions' high estimates. Based on this comparison, it may be concluded that the local jurisdictions' estimates provide a conservative basis for the financing plan (i.e., existing sales are generally lower in price than the estimates used in this plan).

7.3.2 Preserve Management

Management Responsibilities

Under the MSCP, the participating local jurisdictions will be collectively responsible for managing preserve lands they currently own (45,240 acres) and preserve lands they acquire in the future (13,500 acres) (Table 7-6). In addition, it is anticipated that some of the lands conserved through the development process will be dedicated to local agencies or nonprofit organizations to be managed at public expense. For purposes of financial analysis, it is assumed that up to 75% of privately owned habitat conserved through the development process will be dedicated for public management; this would amount to 47,380 acres of the 63,170 acres of private lands estimated to be conserved. The amount of land dedicated to local jurisdictions may vary from this assumption, depending on policies adopted by the jurisdictions regarding such dedication. At buildout, it is anticipated that the local jurisdictions will be responsible for managing 106,120 acres of habitat lands in the preserve.

Table 7-6

ACRES OF LAND TO BE MANAGED BY PUBLIC AGENCIES

Source of Conservation	Local Jurisdictions	Federal and State Governments	Total
Existing Public Lands	45,240	36,510	81,750
Public Acquisition	13,500	13,500	27,000
Dedication of Private Lands	47,380 ¹	—	47,380
Total	106,120	50,010	156,130

¹ Of the 63,170 acres of habitat lands to be conserved by private owners through the development process, it is assumed that 47,380 acres will be dedicated to the local jurisdictions or nonprofit organizations for management funded by the regional funding program.

Some private landowners may choose to retain ownership of habitat lands conserved through the development process. For purposes of estimating local financing costs, it is assumed that private owners will retain ownership of 25%, or 15,790 acres, of habitat lands conserved in this way. These lands may be managed as habitat and open space by individual owners as conditions of development permits, by homeowners associations, or by local landscape maintenance districts. Private owners of land inside the MHPA who

do not develop, and are therefore not third-party beneficiaries of the jurisdictions' take authorizations, will have no additional obligations for management of their land.

Federal and state governments will be responsible for managing preserve lands they currently own (36,510 acres) and preserve lands they acquire in the future (13,500 acres), for a total of 50,010 acres. Additionally, proper management of the preserve system will require ongoing and detailed analysis of data collected through biological monitoring activities, as discussed in Section 7.3.3.

Costs of Preserve Management

Preserve management activities are described in Section 6.3. Costs associated with habitat conservation exceed those associated with general open space maintenance, due to additional activities required to protect sensitive species and prevent habitat degradation. Specific management activities are addressed in the preserve management plans of take authorization holders.

Estimated costs of preserve management activities range from \$47 per acre per year in the City of San Diego, where habitat lands are often bordered by urban development, to \$37 per acre per year in the unincorporated county, where habitat lands generally are located away from urban development. These estimates were derived from a review of current open space and habitat maintenance expenditures in the MSCP study area, with adjustments made for additional biological management. These costs may be compared with the average cost of \$38 per acre per year for the management of comparable open space preserves in California. Costs of preserve management may be reduced through the participation and efforts of volunteers, as is common in the management of open space preserves.

At preserve buildout, the estimated cost of managing 106,120 acres of preserve land under the local jurisdictions' responsibility is \$4.2 million per year (1996 dollars). Annual costs of preserve management in the years prior to buildout would vary according to the amounts of land acquired or dedicated to date.

City of San Diego. Habitat lands in proximity to urban development require a substantially higher level of management activities than those in isolated areas due to the impact of urban uses on native species. In fiscal year 1995, the City of San Diego managed approximately 18,000 acres of open space, at an average cost of \$36 per acre, exclusive of brush management. In addition, the City relies on extensive volunteer work for trail maintenance, visitor services, vegetation and species management, and incidental restoration activities. When the value of these services is added to the current budget, the average management cost is \$47 per acre per year.

County of San Diego. For the portion of the MSCP preserve located in the unincorporated area, the County of San Diego has estimated an average cost of \$37 per acre per year. This is based on a review of five open space preserves totaling 8,360 acres currently maintained by the County. The habitat areas in these preserves are relatively undisturbed. All areas allow limited public access and passive recreational use, including trails. Based on existing budget data and inferred costs of administrative, support, and volunteer services, the County Department of Parks and Recreation calculated the cost of preserve management to range from \$16 to \$105 per acre per year, depending on the level of habitat degradation and difficulty of access, with an average cost of \$37 per acre per year.

Other Cities and Special Districts. For habitat lands in the other jurisdictions and lands owned by special districts, including water districts and the City of San Diego Water Utilities Department, the estimated cost of preserve management is \$38 per acre per year. This is based on an analysis of a sample of open space preserves and wildlife refuges in California comparable to the MSCP preserve, totaling 107,000 acres. The estimated cost is the average of per acre management costs in the sample, adjusted for additional biological management.

Current (1995) Budgets for Open Space Preserves. Local jurisdictions and special purpose agencies currently budget a total of approximately \$1.23 million per year for the maintenance of open space areas proposed for inclusion in the MSCP preserve. (Where open space areas extend outside the MHPA, only a pro rata portion of the budget corresponding to areas inside the MHPA has been included.) It is assumed in the financial analysis that the existing budgets for open space maintenance will continue in the future, with adjustments for inflation.

Brush Management. It is assumed in this plan that new developments adjacent to the MSCP preserve will be responsible for and will fund the costs of brush management, consistent with policies of the City and County of San Diego and other jurisdictions. Therefore, in estimating preserve management costs for the MSCP, brush management costs were excluded. Some jurisdictions currently undertake brush management on their publicly owned lands adjacent to existing residential areas where fire hazards have been identified. It is assumed for this analysis that these brush management functions will continue to be funded from sources other than the MSCP.

7.3.3 Biological Monitoring

Biological monitoring consists of diverse activities at multiple sites, including surveys, mapping, and data collection and analysis (see Section 6.4 and the MSCP Biological Monitoring Plan). The annual cost of monitoring differs by the type and frequency of monitoring activities and by the current condition of biological resources. The Biological Monitoring Plan estimates start-up costs of \$54,800 in the first year and annual costs over a 10-year cycle, ranging from \$109,800 to \$405,300. The average annual cost over the 10-year cycle, excluding start-up costs, is \$230,400. It is anticipated that the cycle of monitoring activities will be repeated every 10 years.

Biological monitoring will be the joint responsibility of the local jurisdictions and other take authorization holders and federal and state governments. For purposes of this analysis, it is assumed that only habitat areas in the preserve that are managed by public agencies will be biologically monitored. It is further assumed that the local jurisdictions and other take authorization holders and federal and state governments will share the cost of biological monitoring in proportion to the acres of habitat they manage.

To ensure uniformity in the gathering and treatment of biological data, the wildlife agencies will assume the primary responsibility for coordinating the biological monitoring program, analyzing data, and providing information and technical assistance to the jurisdictions. These coordination costs are not included in the estimates of preserve management or monitoring costs for the local jurisdictions.

7.3.4 MSCP Program Administration

In addition to preserve management and biological monitoring, funds will be required to manage and administer the MSCP. The following are examples of administrative functions that may be required:

- Land Acquisition Process. Land acquisition, including identification of potential acquisition sites, appraisal, negotiation, and management of the acquisition process.
- Financial Planning and Management. Financial planning and management of revenues and expenditures for habitat acquisition, preserve management, and monitoring, including administration of the regional funding program and coordination of requests for federal and state funding of program activities.
- Legal Support. Legal support for land acquisition and preserve management, administration of fee titles, easements, and other land contracts.
- Report Preparation. Reporting of plan implementation, including annual accounting of land acquisition, land dedication, and habitat loss.
- Database Maintenance. Maintenance and updates of the regional geographic information system database on vegetation communities and species.
- Coordination. Program implementation and coordination, including coordination among local jurisdictions and other take authorization holders for subarea plan implementation and coordination with the wildlife agencies and other public agencies.
- Support Personnel and Facilities. General administrative support for the above activities, including support personnel, accounting, facilities, and equipment.

Based on a review of operating experiences of other large-scale conservation programs and by developing generic service budgets, costs for program administration are estimated to range from \$7 to \$8 per acre per year, during years of maximum administrative costs, to \$1.50 per acre per year, after the acquisition program is completed. Annual administrative costs in 1996 dollars are projected to rise from \$835,000 in 2000 to a maximum of \$1,317,000 in 2004, during the period of land acquisition, then decline to \$255,000 at buildout (1996 dollars).

The extent to which the above functions may be performed by individual jurisdictions or as a collective responsibility of participating jurisdictions depends on the organizational structure ultimately selected for MSCP implementation (Section 5.8). The cost estimates do not assume any economies of scale that may be associated with particular organizational structures. Whether the functions described above are performed in whole or in part by local jurisdictions, program administration would require similar overall costs and resources.

7.3.5 Funding for Annual Recurring Costs

The example financing plan addresses the first 33 years of program implementation, including a 30-year term of the regional funding program. At the end of these years, continuation of preserve management, biological monitoring, and program administration may be funded either through a permanent endowment that is established during the initial funding program or through a new regional funding program that is submitted to the voters for approval at the end of the initial funding program.

In the example financing plan and in the analysis of alternative funding sources, it is assumed that a permanent endowment will be established by the end of the regional

funding program. Assuming a net interest revenue of 4% to 4.5% per year after inflation, the permanent endowment requires a balance of \$235 million in 2029, or \$75 million in 1996 dollars.

In formulating the final financing plan, the participating local jurisdictions will select a method of funding annual recurring costs after the end of the regional funding program.

7.4 ALTERNATIVE REGIONAL FUNDING SOURCES AND TIMETABLE FOR VOTER APPROVAL

7.4.1 Alternative Regional Sources of Funds

The elected officials of several local jurisdictions serving on the MSCP Policy Committee, with input from the MSCP Working Group, recommended that five potential sources of funds be analyzed for application to the regional funding program. A source or sources of funds will be selected during the preparation of a funding measure for approval by the voters. Although the local jurisdictions will cooperatively seek voter approval for a regional funding source, no jurisdiction will be precluded from pursuing alternative funding sources.

The following section provides a summary of the funding sources selected for analysis. Each source has specific authorizations and potential applications or restrictions on the uses of revenues. Additional legal and financial analysis will be necessary prior to the selection of a specific source or sources.

Proposition 218, passed in November 1996, limits the use of special assessment districts to funding services that provide special benefits to parcels over and above general benefits on real property in the district or to the public at large. At this time, it is not known how this proposition affects the use of a benefit assessment district (AB 2007) or habitat maintenance assessment district (SB 445) for habitat conservation purposes.

Benefit Assessment (AB 2007)

AB 2007 enacted in 1993 (Public Resources Code, Section 5506.3 et seq.) provides that San Diego County can initiate proceedings for the formation of a regional open space district coterminous with the boundaries of the county. The law allows the regional open space district to levy assessments under the Landscaping and Lighting Act of 1972, except that the requirement to mail a notice of public hearing to all property owners in the district is replaced with the requirement for publication of a notice. Both the formation of the district and the levy of special assessments must be approved by a majority of the voters in the district. This approach is modeled after that used by Los Angeles County, where the voters approved "Proposition A" in November 1992 to fund \$540 million of park and recreation improvements and open space acquisition. Benefit assessments established separate from AB 2007 may be adopted by a local legislative body, after notifying all affected property owners and holding public hearings.

There are certain restrictions associated with the use of AB 2007. Since this is a funding program for a countywide open space district, the financing needs of the MSCP must be coordinated with those of the other regional habitat conservation programs in the county; however, the financing needs of the latter programs have not yet been identified. The law also stipulates that, for 20 years after assessments are first levied, at least 80% of all assessment proceeds must be used for capital outlay projects, including land acquisition. Under the MSCP, however, expenditures for management, monitoring, and program

administration in some years could exceed 20% of total annual expenditures. The benefit assessment could be combined with another source, such as a regional habitat maintenance assessment, to fund these recurring costs. It is also unclear whether the law provides authorization to set aside funds for a permanent endowment.

The law provides that the assessment must be related to benefit, and benefits of open space preservation accrue predominantly to residents. The example financing plan assumes that 85% of total assessments are levied on residential properties and that 15% are levied on commercial and industrial properties, based on a similar split used in the assessment formulas of Los Angeles County.

Habitat Maintenance Assessment District

SB 445 (Government Code, Section 50060 et seq.) provides for the establishment of an assessment district to fund the maintenance of natural habitat for up to 30 years. Any city or county may initiate proceedings for the formation of the assessment district. Although a habitat maintenance assessment district may be of any size, for purposes of the regional funding program, the district is assumed to contain the entire MSCP study area.

State legislation (SB 445) requires that all property owners in the district be given notice of a public hearing. If written protests are received from 35% or more of property owners, then the proposed district must be abandoned for at least 1 year. If protests are received from 15% to 35% of property owners, then the proposed assessment must be approved by a majority of voters in an election. If protests are received from less than 15% of property owners, then the legislative body of the city or county may proceed with the formation of the district and the levy of assessments. (As a policy of the MSCP, however, any regional funding program, including a regional habitat maintenance district, will be submitted to the voters for approval.)

The legislation on habitat maintenance assessment districts (SB 445) establishes the principle that a lot or parcel is presumed to benefit from natural habitat, if past or proposed development or use of the lot or parcel has adversely affected or will adversely affect the habitat. Historical impact is thus an accepted basis for determining current benefit from habitat maintenance.

Authorized expenditures by the habitat maintenance assessment district include habitat creation, restoration, enhancement, and maintenance; land acquisition; biological monitoring and evaluation; and related administrative costs. The act also authorizes issuance of bonds to finance the estimated cost of habitat acquisition, creation, restoration, or other improvements. However, the term of the bond is limited to 10 years. The maximum assessment that may be levied by the district on any lot or parcel is limited in 1994 to \$25, as specified in SB 445, and in subsequent years to this amount increased by the California Consumer Price Index.

Although a habitat maintenance assessment district is authorized to acquire habitat lands, it is not known if this authority is sufficient to meet the acquisition needs of the MSCP. Special legislation may be required to clarify this authorization. In any event, special legislation will be required to allow issuance of bonds with maturities greater than 10 years and to substitute the requirement of notification by mail with a requirement of notification by publication and majority approval by voters in the district.

A habitat maintenance assessment district may be used in combination with another funding source, which has the authorization to issue long-term bonds for habitat acquisition. This is illustrated in one of the funding scenarios described in Section 7.2.

Mello-Roos Community Facilities District

The Mello-Roos Community Facilities Act (Government Code, Section 53311 et seq.) authorizes a city, county, or special district to initiate proceedings to form a Mello-Roos community facilities district. The formation of the district, the levy of special taxes, and issuance of bonds must be approved by two-thirds of the voters. The special taxes and/or bond proceeds may be used to fund a wide range of public facilities and services, including open space acquisition and management. A community facilities district may be of any size. However, for purposes of the regional funding program, the district is assumed to include the entire MSCP study area. Proceedings to create the district may be initiated by the County of San Diego or jointly by the participating local jurisdictions.

Special taxes levied by a community facilities district may be structured in a way similar to that of benefit assessment. However, the special tax is more flexible than benefit assessment in the potential uses of funds and in the formulation of tax rates for various categories of land use. If used for the MSCP, the distribution of special taxes between residential and commercial/industrial properties is assumed to follow that of benefit assessment described above. A community facilities district also permits annual escalation in tax rates, allowing at least partial adjustment for inflation. Accordingly, tax rates may be set initially lower than would be the case for a fixed annual assessment over the life of the program. The analysis of cost impacts to households and businesses (Section 7.2.3) assumes an escalation of 2% per year in the community facilities district special tax.

The facilities and services financed with community facilities district special taxes may not replace facilities and services that were available in the district prior to its formation. Thus, the special taxes may not be available to manage open space preserves established prior to the formation of the district. In addition, special authorization may be required to use special taxes to fund a permanent endowment.

Ad Valorem Property Tax/General Obligation Bond Program

Subject to approval by two-thirds of the voters, local jurisdictions may issue general obligation bonds and increase the ad valorem property tax above the statutory limit of 1% to pay principal and interest. Bond proceeds may be used to acquire habitat lands and undertake habitat restoration or other improvements.

Unlike a benefit assessment or a community facilities district special tax, the ad valorem tax rate must be applied uniformly to all assessed properties. Thus, there is no flexibility to vary taxes according to land use. In 1995, commercial and industrial properties in San Diego County represented approximately 30% of the total taxable value. Thus, an ad valorem tax would allocate a higher proportion of program costs to nonresidential uses than the benefit assessment or the community facilities district special tax.

Proceeds of general obligation bonds based on ad valorem tax cannot be used to purchase equipment or to pay for management. However, general obligation bonds could be combined with another source, such as habitat maintenance assessment, to fund the MSCP program costs.

Sales Tax

Counties are authorized to establish a taxing authority to impose a sales tax at a rate of 0.25% or 0.5%. Special legislation is required to raise the sales tax by 0.125%. The establishment of a sales tax for a special purpose is a "special tax" and must be approved

by two-thirds of the voters. Subject to this approval, the sales tax increase may be used to fund habitat acquisition, preserve management, monitoring, and establishment of an endowment.

The sales tax is paid by residents, businesses, and visitors. Relative to other payers, residents would pay less under a sales tax program than under other forms of local financing.

7.4.2 Timetable for Implementation of Regional Funding

The local jurisdictions will begin a process to procure funding within 18 months of the wildlife agencies' approval of the first subarea plan (initial implementing agreement signed by City of San Diego, July 1997) and will have a funding source in place within an additional 18 months. Within this time frame, the local jurisdictions will identify a new or existing structure through which regionally generated funds will be allocated to the jurisdictions on a fair-share basis. The wildlife agencies may adjust this schedule if the jurisdictions demonstrate that their good faith efforts require additional time.

Achieving the goal of a regional funding program may be compromised if some jurisdictions choose not to participate in the MSCP. If such a circumstance arises before a regional funding source is secured, the wildlife agencies and the remaining participating jurisdictions will jointly reassess the feasibility of a regional funding program. If the jurisdictions and wildlife agencies conclude that such a program is no longer feasible, the jurisdictions will design and implement an alternative strategy or strategies for funding the local share of MSCP costs.

Timetable for a Ballot Measure

The timetable shown in Table 7-7 is an example chronology of actions necessary to place and promote a ballot measure to finance the regional share of the MSCP and potentially other habitat conservation plans in San Diego County as they enter implementation phases. It is based on the successful process that led to passage of the San Diego Transportation Program (Proposition A) in November 1987.

A regional ballot measure to finance the local share of the MSCP will require a broad focus to be successful and should address urban parks and open space, recreation, and other priorities in addition to the regional preserve system.

Structure of Responsible Groups. This chronology assumes that three groups with coordinated responsibilities are identified to carry out this process.

- An existing policy-making entity, or a combination of entities, composed of local jurisdictions (Policy Group) should be identified to provide direction to the funding effort. This entity must have access to public agency staff support.
- A broadly based group of stakeholders (Advisory Group) should be constituted, similar to the MSCP Working Group, but with a regional membership. The group would provide input and direction to the process, participate in development of the ballot measure and policy documents, and recommend actions to the local jurisdictions.
- A privately based and funded group should be formed to serve as advocates for the measure and to undertake a public information program (Advocate Group).

Table 7-7

MODEL TIMETABLE FOR A BALLOT MEASURE

Months Prior to Election	Responsible Group	Activity
30 — 24	Local Jurisdictions, Other Participants, Foundations, Nonprofit Groups	<ul style="list-style-type: none"> Establish process for public education on economic and environmental values of habitat conservation and biodiversity.
20	Local Jurisdictions	<ul style="list-style-type: none"> Select Policy Group. Establish private Advocate Group.
17	Advocate Group	<ul style="list-style-type: none"> Conduct pre-polling to test public opinions and attitudes regarding an open space bond or tax measure.
16	Policy Group	<ul style="list-style-type: none"> Establish Advisory Group. Formulate procedure for identifying components of ultimate ballot measure including MSCP, MHCP, and MHCOSP.¹ Review and comment on program direction.
14 — 10	Advisory Group	<ul style="list-style-type: none"> Identify ballot target date. Identify ballot form options. Describe potential categories of need. Refine cost estimates based on needs and priorities. Develop financing plan. Develop draft measure recommendations. <ul style="list-style-type: none"> amount of assessment or tax duration of assessment or tax costs of acquisition, management, monitoring, and administration uses of revenues distribution of revenues process/responsibility for the distribution of revenues Coordinate with Advocate Group.
	Advocate Group	<ul style="list-style-type: none"> Design ballot measure support campaign. Identify funding sources for support campaign. Formulate ballot measure polling strategy and timing. Coordinate with Advisory Group.
9	Advisory Group	<ul style="list-style-type: none"> Develop final recommendations regarding structure and content of ballot measure; submit to Policy Group.
8	Policy Group	<ul style="list-style-type: none"> Review Advisory Group recommendations. Refer recommendations to local jurisdictions for review. Select final institutional structure for collection and administration of proceeds from measure.

Table 7-7 (Continued)

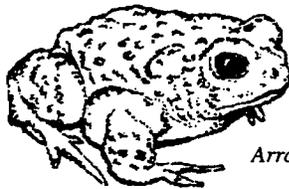
MODEL TIMETABLE FOR A BALLOT MEASURE

Months Prior to Election	Responsible Group	Activity
7 — 6	Policy Group	<ul style="list-style-type: none"> • Review ballot measure recommendations. • Conduct public hearings on measure. • Adopt measure. • Approve placing of measure on ballot (call for special election if needed). • Approve expenditure plan.
5	Policy Group	<ul style="list-style-type: none"> • Approve final measure language; submit to County Board of Supervisors. • Request that County Board of Supervisors call for special election to be consolidated with targeted general election. • Determine exact form of proposition language.
3 — 2	Policy Group	<ul style="list-style-type: none"> • Request that the Board of Supervisors adopt resolution by predetermined required date. • Registrar of Voters publishes notice for submission of arguments on proposition. • Arguments submitted.
2	Policy Group	<ul style="list-style-type: none"> • Acknowledge last day to file rebuttals.
0	GENERAL ELECTION	

¹ MHCP = Multiple Habitat Conservation Program in northern San Diego.

MHCOSP = Multiple Habitat Conservation and Open Space Program in eastern San Diego County.

State Legislation. State enabling legislation may be required, for example, to allow creation of a public funding program based on a simple majority vote. AB 2007 added sections to the Public Resources Code in 1993 enabling the adoption of a benefit assessment to be levied by a regional parks and open space district in San Diego County, that may be approved by a simple majority vote. This law could be applied to the MSCP and other regional habitat conservation programs. If a new legislation is required or if AB 2007 needs to be modified, the legislation must be passed by the State Legislature and signed by the governor at least 1 full year before the date of the general election.



Arroyo Southwestern Toad

7.5 FEDERAL AND STATE FUNDING PROGRAMS

Federal and state governments will acquire 13,500 acres over 30 years using funds from existing and future programs. The following are some of the important habitat acquisition programs in effect in 1996.

7.5.1 Federal Programs for Habitat Acquisition and Maintenance

Between 1989 and 1994, federal programs have funded an average of \$30 million per year for habitat conservation in California. About 60% of funds have been spent in southern California and the remainder in northern California.

Land and Water Conservation Fund

The revenues for this fund are generated by the sale of federal property, motorboat fuel taxes, and the leasing of oil and gas sites in coastal waters. Approximately \$900 million per year are generated. Between 1980 and 1994, an average of \$270 million per year has been appropriated to four federal agencies: National Park Service, U.S. Forest Service, Bureau of Land Management, and USFWS. The four agencies spent a total of approximately \$27 million per year in California. For fiscal year 1997, the USFWS has been appropriated \$2,700,000 for land acquisition within the San Diego National Wildlife Refuge.

National Fish and Wildlife Challenge Grants

Grants under this program are administered by the nonprofit National Fish and Wildlife Foundation. Grants are funded by federal appropriations and must be matched with nonfederal contributions. The National Fish and Wildlife Foundation has raised contributions from individuals, corporations, and foundations at an average rate of \$2 for every \$1 appropriated. Since establishment in 1984, grants of more than \$85 million have been conferred under various programs. They include the Wetlands Conservation Program and the Wildlife and Habitat Program, intended for the preservation of biodiversity and the recovery of endangered and threatened species. Between 1989 and 1994, California has received an average of \$1.9 million per year, including both grants and matching contributions.

Cooperative Endangered Species Conservation Fund

This new budget initiative, called Habitat Conservation Plan Land Acquisition Grants, is intended for the USFWS to provide grants to states for land acquisition that support habitat conservation plans. This is a separate and distinct grant process from traditional grants to state programs under Section 6 of the Endangered Species Act. Since the plans often require local conservation and land acquisition, the grant funds are intended to assist in paying for these conservation efforts. The budgetary request for fiscal year 1997 specifically cited Natural Community Conservation Planning in southern California as an example for the use of this grant. Congress approved the President's 1997 budget request for \$6,000,000 for this program. States receiving these grants will be required to provide matching funds.

U.S. Fish and Wildlife Service

The USFWS receives annual appropriations for staffing and management of the National Wildlife Refuge System. The base budget of the Carlsbad Fish and Wildlife Office, which provides assistance to Natural Community Conservation Planning efforts in

southern California, was \$3.62 million in fiscal year 1995, \$3.1 million in 1996, and projected \$3.98 million under the President's budget for 1997. In addition, funding for the operations of Sweetwater Marsh, Seal Beach, and Tijuana Slough National Wildlife Refuges totaled \$434,000 in 1995, \$518,000 in 1996, and projected \$1.08 million for 1997. The additional \$564,000 budget for 1997 includes \$400,000 for operation of the newly acquired San Diego National Wildlife Refuge.

Other Federal Programs

Other federal programs for land acquisition include the following:

- National Coastal Wetlands Conservation Grant Program
- North American Wetlands Conservation Act Grant Program
- Intermodal Surface Transportation Efficiency Act (ISTEA)
- Bay Estuary Program
- Partners for Wildlife Program

These programs, many of which emphasize protection of wetlands, require applications from state and local governments or other organizations engaged in conservation activities.

7.5.2 State Acquisition Programs

Wildlife Conservation Board

The Wildlife Conservation Board is responsible for allocating land acquisition funds from the following statewide sources:

- Wildlife Restoration Fund
- Environmental License Plate Fund
- Park and Recreational Facilities Fund (Proposition 18)
- Fish and Wildlife Habitat Enhancement Fund (Proposition 19)
- California Wildlife, Coastal and Park Land Conservation Fund of 1988 (Proposition 70)
- Public Resources Account, Cigarette and Tobacco Products Surtax Fund (Proposition 99)
- Habitat Conservation Fund (California Wildlife Protection Act of 1990)
- Inland Wetlands Conservation Program (Proposition 117)
- Riparian Habitat Conservation Program

Of these, funds from Propositions 19 and 70 have been depleted. Historically, however, new programs have been enacted to provide funding for land acquisition. Between 1989 and 1994, the Wildlife Conservation Board approved \$181 million of land acquisition, or an average of \$30 million per year. Approximately 60% of funds have been spent in southern California.

California Resources Agency

The California Resources Agency distributes funds from the Environmental Enhancement and Mitigation Program, Highway Gas Tax Fund, and a portion of the Environmental License Plate Fund that is not distributed by the Wildlife Conservation Board. Between 1991 and 1994, \$40 million was spent statewide; an additional \$60 million is budgeted through 2001.

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8.0 Acknowledgments



Otay Mesa Mint

8.0 ACKNOWLEDGMENTS

Hundreds of people have contributed in some way to the development of the MSCP Plan over the course of a 6-year period, and a comprehensive list is not possible here. We have tried to cite those persons who provided data or input for this plan. In addition to these people, hundreds of property owners (too numerous to list) allowed biological surveys of their lands. Any omission of names is not intentional.

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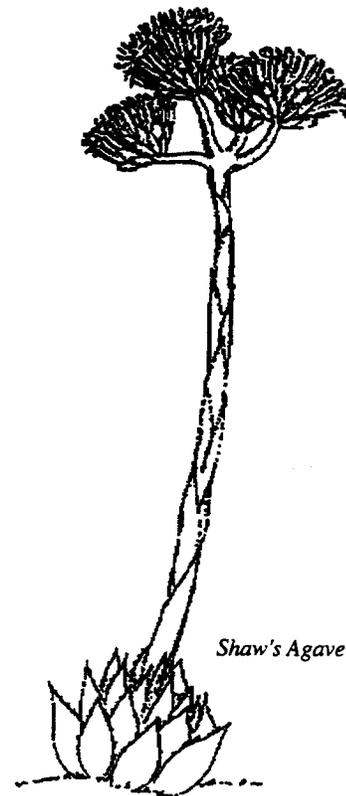
Land Management and Trusts
Steve Alexander, The Nature
Conservancy
Robin Cox, The Nature Conservancy
Amos Eno, National Fish & Wildlife
Foundation
Steve Johnson, The Nature Conservancy
Brenda Pace, Center for Natural Lands
Management
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Foundation
Trish Smith, The Nature Conservancy
Yolain Stout, Alpine Natural Land
Conservancy
Jim Sulentich, The Nature Conservancy
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Lands Management
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District of Southern California
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Commission

U.S. Navy
Jerry Boggs
Mitch Perdue
Fred Pierson
Mike Scott
Merrily Severance



Shaw's Agave

PERSONS CONTACTED REGARDING IMPLEMENTATION AND FINANCING

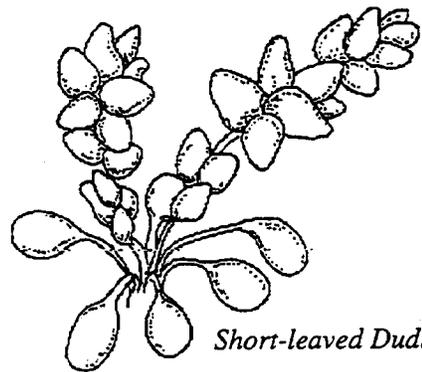
(also see Local Jurisdictions)

Cameron Barrows, The Nature Conservancy, Thousand Palms
Ernest Brasier, CIC Research
Barbara Carlson, University of California Natural Reserve System
John Diaz, The Santa Monica Mountains Conservancy
Greg Elliott, Cosumnes River Preserve, Galt
James Elliott, City of Carlsbad
Steve Frates, San Diego County Taxpayers Association
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Bob Filner, Congressman
Robert Herrell, Assembly Ways and Means Committee
Kathy Lacey, aide to Senator Finestein
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Lynn Schenk, Congresswoman
John Schmidt, California Wildlife Conservation Board
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Sandy Shultz, aide to Congressman Filner
George Wilson, aide to Congresswoman Schenk

Attachment A - Model Implementing Agreement



Short-leaved Dudleya

ATTACHMENT A

MODEL IMPLEMENTING AGREEMENT

by and between

UNITED STATES FISH AND WILDLIFE SERVICE

CALIFORNIA DEPARTMENT OF FISH AND GAME

[LOCAL JURISDICTION(S)**]**

**TO ESTABLISH A MULTIPLE SPECIES CONSERVATION PROGRAM
("MSCP") FOR THE CONSERVATION OF THREATENED, ENDANGERED
AND OTHER SPECIES IN THE VICINITY OF SAN DIEGO, CALIFORNIA**

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- C. Covered Species
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- E. Map of Subarea
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- G. Significantly Conserved Vegetation Communities, and Sufficiently Conserved Vegetation Communities
- H. Projects in the Approval Process

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This Implementing Agreement ("Agreement") is entered into as of the ___ day of _____, 1997 by and among the UNITED STATES FISH AND WILDLIFE SERVICE ("USFWS"), an Agency of the United States Department of the Interior, the CALIFORNIA DEPARTMENT OF FISH AND GAME ("CDFG"), a Subdivision of the California Resources Agency, and **[**LOCAL JURISDICTION(S)**]**, hereinafter collectively called the "Parties." **[EDITOR'S NOTE (NOT TO BE INCLUDED IN FINAL AGREEMENT): When this Model Agreement is used to prepare an Agreement for a particular jurisdiction, the term "[**LOCAL JURISDICTION**]" will be replaced throughout this document by the name of that jurisdiction. The same is true when a regional public facility provider or special district uses this model to prepare an Agreement.]**

AGREEMENT

Based upon the recitals, definitions, mutual covenants and obligations, and other provisions set forth below, and other valuable consideration, the Parties agree as follows:

1.0 RECITALS

1.1 The San Diego-area Multiple Species Conservation Program ("MSCP") describes a cooperative federal, state and local program of conservation for a number of "Covered Species" of plants and animals. The MSCP is a product of lengthy study and negotiation by the Parties and other interested persons and entities, and represents coordination of private development and conservation interests with federal, state and local governments.

1.2 The MSCP Area is depicted on the map attached to this Agreement as Exhibit A. The MSCP Area includes the territory of twelve general purpose agencies of government, listed in Exhibit B. These agencies may elect to participate in the MSCP, and upon preparing a Subarea Plan and entering into an Implementing Agreement similar in form and content to this Agreement such agencies will become a "Participating Local Jurisdiction." Some regional public facility providers and special districts which operate within the MSCP Area may also elect to participate in the MSCP. Upon entering into an Implementing Agreement similar in form and content to this Agreement, such entities will become a "Participating Special Entity."

1.3 A goal of the MSCP is to conserve biodiversity in the MSCP Area and to achieve certainty in the land development process for both private sector and public sector land development projects.

1.4 Pursuant to the federal Endangered Species Act ("ESA") and the California Endangered Species Act ("CESA"), the United States and the State of

California, respectively, have identified certain plant and animal species which are or may be found in the MSCP Area and which, pursuant to the ESA or CESA or other laws or programs, have been listed as threatened or endangered, have been proposed for listing as threatened or endangered, are candidates for listing as threatened or endangered, or which are otherwise of concern. Of such species, those which will be adequately conserved by the MSCP when the MSCP is fully implemented through Subarea Plans are referred to in the MSCP and this Agreement as Covered Species. Those Covered Species which are adequately conserved by the Subarea Plan, and other Subarea Plans in effect within the MSCP Area, are subject to the Take Authorization being granted pursuant to this Agreement and are referred to as Covered Species Subject to Incidental Take.

1.5 Future growth and land development within the MSCP Area, including both public and private projects, may result in a reduction of Covered Species habitat and/or the taking of Covered Species incidental to the carrying out of otherwise lawful activities.

1.6 The **[**LOCAL JURISDICTION**]** is sponsoring the development of the MSCP to meet the requirements of the ESA, the CESA, the Natural Communities Conservation Planning Act of 1991 ("NCCP Act"), the National Environmental Policy Act ("NEPA") and the California Environmental Quality Act ("CEQA") related to the upgrading of the Metropolitan Sewerage System and the potential obstacles to public and private development in the greater San Diego area posed by the current system of project-by-project review under the ESA and CESA. Consistent with the NCCP Act, the MSCP is a broad-based planning effort intended to provide for effective protection and conservation of the region's wildlife and plant heritage while continuing to allow appropriate development and growth. Such planning is an effective tool in protecting the region's biodiversity while reducing conflicts between protection of wildlife and plants and the reasonable use of natural resources for economic development. The MSCP has been developed through a cooperative effort involving the USFWS, CDFG, local government agencies, property owners, development interests, environmental groups, and the public within the MSCP Area.

1.7 The MSCP is a comprehensive, long-term habitat conservation plan for the Covered Species which addresses the needs of multiple species and the preservation of natural vegetation communities. The MSCP addresses the potential impacts of urban growth, natural habitat loss and species endangerment and creates a plan to mitigate for the potential loss of Covered Species and their habitat due to the direct and indirect impacts of future development of both private and public lands within the MSCP Area.

1.8 The MSCP as implemented through the **[**LOCAL JURISDICTION**]**'s Subarea Plan and this Agreement establishes the conditions under which the **[**LOCAL JURISDICTION**]**, for the benefit of itself and of public and private landowners and other land development project proponents within its Subarea boundaries, will receive from the USFWS and the CDFG certain long-term Take

Authorizations (and an acknowledgment that the MSCP satisfies the conditions established in the Section 4(d) Special Rule for the coastal California gnatcatcher) which will allow the taking of certain Covered Species incidental to land development and other lawful land uses which are authorized by the **[**LOCAL JURISDICTION**]**.

1.9 The Take Authorizations will authorize the Incidental Take of all Covered Species Subject to Incidental Take, including those Covered Species which are not presently listed as threatened, endangered or candidate species under the ESA or CESA. Conserving such unlisted Covered Species (the “taking” of which is not unlawful under the ESA or CESA) the same as listed Covered Species (the taking of which is unlawful in the absence of a Take Authorization) equally in the MSCP, the Subarea Plan and this Agreement may prevent such species from ever being in danger of becoming extinct and will provide certainty regarding how the subsequent listing of such species under the ESA and CESA will affect permitting and mitigation requirements for future land development within the MSCP Area.

1.10 Implementation of the MSCP will allow the Participating Local Jurisdictions and Participating Special Entities to maintain development flexibility by proactively planning a regional preserve system which can meet future development project mitigation needs, while recognizing the independent land use planning and permitting authority of those entities.

1.11 Preservation of natural vegetation communities and wildlife will significantly enhance the quality of life in the San Diego region and set aside lands for the future use and enjoyment of the citizens within the MSCP Area, the state and the nation.

1.12 The MSCP has been submitted to the USFWS and CDFG in support of, respectively, an application for a Section 10(a) Permit and a CESA/NCCP Authorization, by the **[**LOCAL JURISDICTION**]**. The CDFG has approved the MSCP, and the USFWS has issued written concurrence that the MSCP meets the statutory criteria for issuance of a Section 10(a) Permit. The MSCP will be implemented through individual Subarea Plans by having Participating Local Jurisdictions execute separate but coordinated agreements in a form substantially similar to this Agreement. Such agreements need not be executed at the same time. Instead, the USFWS and CDFG anticipate that implementation of the MSCP will be phased in over time, through both the periodic addition of Participating Local Jurisdictions and Participating Special Entities, and the phased implementation of their respective MSCP-related obligations.

1.13 The purposes of this Agreement are:

A. To ensure the implementation of the MSCP and the Subarea Plan;

B. To contractually bind each of the Parties to fulfill and faithfully perform the obligations, responsibilities, and tasks assigned to it pursuant to the terms of the MSCP, the Subarea Plan and this Agreement; and,

C. To provide remedies and recourse should any of the Parties fail to perform its obligations, responsibilities, and tasks as set forth in the MSCP, the Subarea Plan and this Agreement.

2.0 DEFINITIONS

The following terms as used in this Agreement shall have the meanings set forth below:

2.1 "Additional Conservation Measures" means the conservation measures beyond those provided by the MSCP and the Subarea Plan which the USFWS and CDFG may seek from the [**LOCAL JURISDICTION**] under the circumstances described in Sections 9.6 and 9.7 of this Agreement.

2.2 "Agreement" means this document.

2.3 "CDFG" means the California Department of Fish and Game, a subdivision of the California Resources Agency.

2.4 "CEQA" means the California Environmental Quality Act (Cal. Public Resources Code §§ 21000 et seq.), including all regulations promulgated pursuant to that Act.

2.5 "CESA" means the California Endangered Species Act (California Fish and Game Code §§ 2050 et seq.), including all regulations promulgated pursuant to that Act.

2.6 "CESA/NCCP Authorization" means any authorization issued in accordance with this agreement by CDFG under CESA (including but not limited to, California Fish and Game Code § 2081) or the NCCP Act (including but not limited to, California Fish and Game Code §§ 2825(c) or 2835), or by the California Fish and Game Commission under the NCCP Act (including but not limited to California Fish and Game Code § 2830), to permit the Take of a species listed under CESA as threatened or endangered, or of a species which is a candidate for such a listing, or of a species identified pursuant to § 2835. These legal authorities are wholly independent of each other.

2.7 "Covered Species" means those species within the MSCP Area which will be adequately conserved by the MSCP when the MSCP is implemented through the subarea plans or which will be adequately conserved through the permitting process pursuant to Section 404 of the Clean Water Act, 33 U.S.C. § 1344. These species are listed in Exhibit C.

2.8 "Covered Species Subject to Incidental Take" means those Covered Species which are adequately conserved by the Subarea Plan, and which are therefore subject to Incidental Take under the Take Authorizations issued in conjunction

with this Agreement. These species are listed in Exhibit D. As indicated in Section 23.2, additional Covered Species (from Exhibit C) may be added to the list of Covered Species Subject to Incidental Take (Exhibit D) after the Effective Date. Adequate conservation for certain Covered Species Subject to Incidental Take shall include the measures contained in the "findings" for those species in Table 3-5 of the MSCP Plan.

2.9 "Dependent upon" a particular vegetation community means that vegetation community provides the primary space for individuals of the species to feed, grow, reproduce, and/or undertake essential behavior patterns. A species is likely dependent upon a vegetation community if that vegetation community provides its primary sources of food, nutrition, substrate, cover and/or shelter, including sites for breeding, reproduction, pollination, and rearing of offspring on a continual or seasonal basis. If a species is considered dependent upon a sufficiently or significantly conserved vegetation community, then that vegetation community would provide the primary biological physical elements essential for the conservation of the species.

2.10 "Effective Date" means the date when all of the parties to this Agreement have signed this Agreement.

2.11 "ESA" means the federal Endangered Species Act (16 U.S.C. §§ 1531 et seq.), including all regulations promulgated pursuant to that Act.

2.12 "Extraordinary Circumstances" is defined in Section 9.6 of this Agreement.

2.13 "Habitat Conservation Plan" and "HCP" mean the Multiple Species Conservation Program ("MSCP") prepared by the [**LOCAL JURISDICTION**] for the MSCP Area pursuant to Section 10(a)(1)(B) of the ESA (16 U.S.C. § 1539(a)(1)(B)), and dated August, 1996, and each Subarea Plan.

2.14 "Incidental Take" means both the Take of a Covered Species incidental to and not the purpose of the carrying out of an otherwise lawful activity, and the Take of a Covered Species pursuant to a CESA/NCCP Authorization.

2.15 "MBTA" means the federal Migratory Bird Treaty Act (16 U.S.C. §§ 701 et seq.), including all regulations promulgated pursuant to that Act.

2.16 "Multi-Habitat Planning Area" or "MHPA" means the area within the MSCP Area within which preserve planning is focused and within which permanent conservation of habitat lands will be accomplished through implementation of the Subarea Plan. The MHPA is defined by mapped boundaries and/or by quantitative targets for habitat conservation and other criteria as specified in the Subarea Plan.

2.17 "MSCP" means the Multiple Species Conservation Program, a comprehensive habitat conservation planning program which addresses multiple species

habitat needs and the preservation of native vegetation for a 900-square mile area in southwestern San Diego County, California.

2.18 "MSCP Area" consists of approximately 900 square miles in southwestern San Diego County, referred to in the MSCP as the "MSCP Study Area." The MSCP Area is depicted on Exhibit A.

2.19 "MSCP Plan" means the plan, dated August, 1996, which describes the MSCP.

2.20 "NCCP Act" means the California Natural Communities Conservation Planning Act of 1991, enacted by Chapter 765 of the California statutes of 1991 (A.B. 2172) (codified in part at California Fish and Game Code §§ 2800, et seq.), including all regulations promulgated pursuant to that Act.

2.21 "NCCP Plan" means a plan developed in accordance with the NCCP Act which provides comprehensive management and conservation of multiple wildlife species, and which identifies and provides for the regional or area-wide protection and perpetuation of natural wildlife diversity while allowing compatible and appropriate development and growth.

2.22 "Participating Local Jurisdiction" means any of the local governments identified in Exhibit B which prepares and receives USFWS and CDFG approval of a Subarea Plan, and which enters into an Implementing Agreement with the USFWS and CDFG. It is anticipated that such Implementing Agreement will be substantially similar in form to this Agreement.

2.23 "Participating Special Entity" means any regional public facility provider (such as a utility company) or special district which operates and/or owns land within the MSCP Area and which enters into an Implementing Agreement with the USFWS and CDFG pursuant to and consistent with the MSCP and which is substantially similar in form to this Agreement.

2.24 "Party" and "Parties" mean the signatories to this Agreement, namely the United States Fish and Wildlife Service, the California Department of Fish and Game, and the **[**LOCAL JURISDICTION**]**.

2.25 "Section 4(d) Special Rule" means the regulation concerning the coastal California gnatcatcher, published by the USFWS on December 10, 1993 (58 Federal Register 65088) and codified at 50 C.F.R. § 17.41(b), which defines the conditions under which the Incidental Take of the coastal California gnatcatcher in the course of certain land use activities is lawful.

2.26 "Section 10(a) Permit" means the permit issued in accordance with this Agreement by the USFWS to the **[**LOCAL JURISDICTION**]** under section

10(a)(1)(B) of the ESA (16 U.S.C. § 1539(a)(1)(B)) to allow the Incidental Take of Covered Species Subject to Incidental Take.

2.27 "Significantly Conserved Vegetation Communities" means those vegetation communities listed in Exhibit G and described in Section 4.2.4 of the MSCP Plan which will be significantly conserved through implementation of the MSCP and the approved Subarea Plans, as set forth in Section 9.7C of this Agreement and Section 3.4 of the MSCP Plan.

2.28 "Subarea" means the area encompassed by the Subarea Plan, as depicted in Exhibit E, in which the Incidental Take of Covered Species Subject to Incidental Take is allowed by virtue of the Section 10(a) Permit and/or CESA/NCCP Authorization issued in accordance with this Agreement.

2.29 "Subarea Plan" means the plan prepared by the [**LOCAL JURISDICTION**], and reviewed and approved by the USFWS and CDFG, to implement the MSCP within its jurisdictional boundaries, pursuant to this Agreement.

2.30 "Sufficiently Conserved Vegetation Communities" means those vegetation communities listed in Exhibit G and described in Section 4.2.4 of the MSCP Plan which will be sufficiently conserved through implementation of the MSCP and the approved Subarea Plans, as set forth in Section 9.7C of this Agreement and Section 3.4 of the MSCP Plan.

2.31 "Take" and "Taking" shall have the meanings provided by the ESA, CESA and the NCCP Act.

2.32 "Take Authorization" means the Section 10(a) Permit and/or the CESA/NCCP Authorization.

2.33 "Third Party Beneficiary" means any landowner or other public or private entity that obtains and maintains Third Party Beneficiary status in compliance with Sections 10 and 17 of this Agreement.

2.34 "USFWS" means the United States Fish and Wildlife Service, an agency of the United States Department of the Interior.

3.0 HABITAT CONSERVATION PLAN/NCCP PLAN

3.1 Pursuant to Section 10(a)(1)(B) of the ESA (16 U.S.C. § 1539(a)(1)(B)), the [**LOCAL JURISDICTION**] has prepared a Habitat Conservation Plan known as the "Multiple Species Conservation Program" or "MSCP." The MSCP Plan, in conjunction with the [**LOCAL JURISDICTION**]'s Subarea Plan which implements it, qualifies as an NCCP Plan under the NCCP Act. The MSCP proposes a program of conservation for the Covered Species and protection of their habitat in perpetuity through land use regulation, acquisition and management. The

[**LOCAL JURISDICTION**] has submitted the MSCP and the Subarea Plan to the USFWS and the CDFG, and the [**LOCAL JURISDICTION**] has requested that the USFWS issue a Section 10(a) Permit and that the CDFG issue a CESA/NCCP Authorization, each of which actions will allow the Incidental Take within the Subarea of those Covered Species determined by USFWS and CDFG to be adequately conserved by the MSCP and the Subarea Plan in accordance with this Agreement (such species are designated as Covered Species Subject to Incidental Take, and are listed in Exhibit D). The [**LOCAL JURISDICTION**] has also requested that the USFWS acknowledge that the MSCP and the Subarea Plan satisfy the conditions under the Section 4(d) Special Rule to allow the Incidental Take of the coastal California gnatcatcher within the Subarea.

3.2 The MSCP and Subarea Plan and each of their provisions are intended to be and by this reference are incorporated herein. This Agreement is intended to specify, in contract language, the obligations of the Parties under the MSCP and Subarea Plan, recognizing that the MSCP and Subarea Plans set forth in planning documents the components of a conservation plan and were not drafted as contract documents. In the event of any direct contradiction, conflict or inconsistency between the MSCP Plan and the Subarea Plan, the Subarea Plan shall control. In the event of any direct contradiction, conflict or inconsistency between the MSCP Plan or the Subarea Plan on the one hand, and this Agreement on the other, the terms of this Agreement shall control. In all other cases, the terms of this Agreement and the terms of the MSCP and Subarea Plan shall be interpreted to be consistent with and complementary to each other. The three-volume MSCP Resource Document, and all MSCP-related drafts, position papers, working documents and other documents, are specifically not incorporated into this Agreement.

4.0 PHASED IMPLEMENTATION

The MSCP Area includes land within the jurisdictional boundaries of twelve local jurisdictions listed in Exhibit B. The USFWS and CDFG recognize and agree that the entire MSCP will not be implemented simultaneously. Some local jurisdictions may be prepared to implement the MSCP before others. Implementation of the MSCP as a whole can and may be phased, with some local jurisdictions joining as Participating Local Jurisdictions (and some regional public facility providers and special districts joining as Participating Special Entities) earlier than others. Nevertheless, those local jurisdictions which become Participating Local Jurisdictions will receive Take Authorizations, and will obtain the benefits of and incur the obligations imposed by the Implementing Agreement which they sign, irrespective of whether other local jurisdictions have also joined as and/or currently serve as a Participating Local Jurisdiction. The Take Authorization will cover only those Covered Species determined by USFWS and CDFG to be adequately covered by the Subarea Plan and other approved Subarea Plans, and such species will be referred to as Covered Species Subject to Incidental Take and will be specifically identified in each Implementing Agreement. The USFWS and CDFG also recognize and agree that the implementation of each

Participating Local Jurisdiction's Subarea Plan will likewise be phased in over time in accordance with the schedule provided in each Implementing Agreement.

5.0 SEVERABILITY

The USFWS and CDFG recognize and agree that the Take Authorizations received by the **[**LOCAL JURISDICTION**]** pursuant to this Agreement are independent and severable from the other Take Authorizations which have been or will be issued to other Participating Local Jurisdictions or Participating Special Entities. The **[**LOCAL JURISDICTION**]**'s Take Authorization will remain effective so long as the **[**LOCAL JURISDICTION**]** fulfills its obligations under this Agreement to implement the MSCP through the Subarea Plan, including its obligation under Section 9.19 to enforce the terms of this Agreement as to itself and to all Third Party Beneficiaries, who will receive Incidental Take authorization through the **[**LOCAL JURISDICTION**]**'s Take Authorization. The **[**LOCAL JURISDICTION**]**'s Take Authorization may not be suspended, revoked or terminated against its will due solely to the actions or inactions of any other person or entity, including the other local jurisdictions identified in Exhibit B (whether or not they have become Participating Local Jurisdictions). However, if the inclusion of species on the list of Covered Species Subject to Incidental Take is dependent on the implementation of multiple MSCP Subarea Plans, and one or more Participating Local Jurisdictions terminates its participation in the MSCP or fails to implement its Subarea Plan, then adjustments to the list of Covered Species Subject to Incidental Take may be required.

6.0 LEGAL AUTHORITY OF THE USFWS

The USFWS enters into this Agreement pursuant to the ESA, the Fish and Wildlife Coordination Act (16 U.S.C. § § 661 - 666c), and the Fish and Wildlife Act of 1956 (16 U.S.C. §§ 742(f) et seq.). Section 10(a)(1)(B) of the ESA, 16 U.S.C. § 1539(a)(1)(B), expressly authorizes the USFWS to issue a Section 10(a) Permit to allow the Incidental Take of species listed as threatened or endangered under the ESA. The legislative history of Section 10(a)(1)(B) clearly indicates that Congress also contemplated that the USFWS would approve Habitat Conservation Plans that protect unlisted species as if they were listed under the ESA, and that in doing so the USFWS would provide Section 10(a)(1)(B) assurances for such unlisted species. The relevant excerpt from such legislative history states as follows:

The Committee intends that the Secretary [of the Interior] may utilize this provision [on habitat conservation plans] to approve conservation plans which provide long-term commitments regarding the conservation of listed as well as unlisted species and long-term assurances to the proponent of the conservation plan that the terms of the plan will be adhered to and that further mitigation requirements will only be imposed in accordance with the terms of the plan.

In the event that an unlisted species addressed in an approved conservation plan is subsequently listed pursuant to the Act, no further mitigation requirements should be imposed if the conservation plan addressed the conservation of the species and its habitat as if the species were listed pursuant to the Act.

It is also recognized that circumstances and information may change over time and that the original plan might need to be revised. To address this situation the Committee expects that any plan approved for a long-term permit will contain a procedure by which the parties will deal with unforeseen circumstances.

H.R. Rep. No. 97-835, 97th Cong., 2d Sess. 30-31 (1982) (Conference Report on 1982 Amendments to the ESA). The USFWS routinely approves Habitat Conservation Plans that address both listed and unlisted species.

7.0 LEGAL AUTHORITY OF THE CDFG

The CDFG enters into this Agreement pursuant to its separate and independent authorities under both the CESA and NCCP Act. CDFG may authorize the Take of Covered Species pursuant to either Fish and Game Code section 2081 or section 2835, and the California Fish and Game Commission may authorize the Take of Covered Species under Fish and Game Code section 2830. These legal authorities are wholly independent of each other.

8.0 SATISFACTION OF LEGAL REQUIREMENTS

In order to fulfill the legal requirements that will allow the USFWS to issue the Section 10(a) Permit, an HCP must provide measures that are intended to ensure that any Take occurring within the Subarea will be incidental; that the impacts of such Incidental Take will, to the maximum extent practicable, be minimized and mitigated; that adequate funding to implement the HCP will be provided; and that the Incidental Take will not appreciably reduce the likelihood of the survival and recovery of the Covered Species in the wild. The USFWS finds that the MSCP and the Subarea Plan as implemented pursuant to this Agreement do provide such measures, and do satisfy the legal requirements necessary for the USFWS to issue a Section 10(a) Permit authorizing the Incidental Take of Covered Species Subject to Incidental Take, and to provide certainty in the form of specific assurances contained in this Agreement. Likewise, the CDFG finds that the Subarea Plan as implemented pursuant to this Agreement satisfies the legal requirements necessary for the CDFG to issue a CESA/NCCP Authorization authorizing the Incidental Take of Covered Species Subject to Incidental Take, and to provide certainty in the form of specific assurances contained in this Agreement.

9.0 MUTUAL ASSURANCES

9.1 Purpose. The primary purpose of this Agreement is to provide for the long-term reconciliation of new land development within the MSCP Area with the conservation and protection of the Covered Species. Based on and in consideration of this Agreement, the MSCP, and the Subarea Plan, the parties hereby agree on and the USFWS and CDFG hereby provide assurances to the [**LOCAL JURISDICTION**], other Participating Local Jurisdictions, Participating Special Entities, and Third Party Beneficiaries with regards to the following provisions contained in this Section 9.0.

9.2. Compliance with Applicable Laws. Compliance with the terms of this Agreement, the MSCP and the Subarea Plan, and compliance with the land use regulation, mitigation, compensation and habitat management obligations contained in this Agreement and/or imposed by the [**LOCAL JURISDICTION**] on proponents of land development projects within the Subarea in accordance with the MSCP, the Subarea Plan and this Agreement, constitute compliance with the Incidental Take and related provisions of the ESA, the CESA, the NCCP Act, and the California Native Plant Protection Act (California Fish and Game Code § 1900, et seq.).

9.3. Conservation of Covered Species. Implementation of the MSCP through the Subarea Plan in accordance with this Agreement will adequately provide for the conservation and protection of the Covered Species Subject to Incidental Take and their habitat in the Subarea in perpetuity. This conclusion is based on the biological analyses performed by the USFWS and the CDFG of the species evaluated by the MSCP Plan, and their resulting determination of which of those species are adequately protected so as to qualify as Covered Species and Covered Species Subject to Incidental Take.

9.4. No Additional Land or Money Required. The USFWS and CDFG shall not require the [**LOCAL JURISDICTION**] or Third Party Beneficiaries to commit additional land, additional land restrictions, or additional financial compensation for the Covered Species Subject to Incidental Take beyond that provided pursuant to this Agreement, provided that the [**LOCAL JURISDICTION**] is in compliance with its obligations under this Agreement. If the USFWS and/or the CDFG subsequently determine that additional land, additional land restrictions, or additional financial compensation beyond that required pursuant to the MSCP and this Agreement are necessary to provide for the conservation of a Covered Species Subject to Incidental Take, the obligation for such additional measures shall not rest with the [**LOCAL JURISDICTION**] or the Third Party Beneficiaries.

9.5. Additional Conservation Measures. Moreover, the USFWS and the CDFG shall not seek "Additional Conservation Measures," from the [**LOCAL JURISDICTION**] or the Third Party Beneficiaries for Covered Species Subject to Incidental Take except in the event of Extraordinary Circumstances as defined in Section 9.6 of this Agreement, and in compliance with the Extraordinary Circumstances procedures contained in Section 9.6.

9.6. Extraordinary Circumstances.

A. Definition. For the purposes of this Agreement, the term "Extraordinary Circumstances" shall mean either (I) a significant, unanticipated adverse change in the population of any Covered Species or their habitat within the MSCP Area; or (II) any significant new or additional information relevant to the MSCP that was not anticipated by the Parties at the time the MSCP was approved and that would likely result in a significant adverse change in the population of any Covered Species or their habitat within the MSCP Area. The term "Extraordinary Circumstances" as used in this Agreement shall have the same meaning as "Unforeseen Circumstances" under 50 C.F.R. §§ 17.22 and 17.32. The occurrence of one or more of the events identified under Section 5 of this Agreement shall not be considered an Extraordinary Circumstance.

B. Relevant Factors. In deciding whether Extraordinary Circumstances exist which might warrant requiring Additional Conservation Measures, the USFWS and CDFG shall consider, but not be limited to, the following factors: (1) the size of the current range of the affected species, (2) the percentage of range adversely affected by the MSCP, (3) the percentage of range conserved by the MSCP, (4) the ecological significance of that portion of the range affected by the MSCP, (5) the level of knowledge about the affected species and the degree of specificity of the species' conservation program under the MSCP, and (6) whether failure to adopt additional conservation measures would appreciably reduce the likelihood of survival and recovery of the affected species in the wild.

C. Burden and Documentation. The USFWS and CDFG shall have the burden of demonstrating that Extraordinary Circumstances exist, using the best scientific and commercial data available that is clear and convincing. Any findings of Extraordinary Circumstances must be clearly documented and based upon reliable technical information regarding the biological status and habitat requirements of the affected species. Any finding of Extraordinary Circumstances must be made by the Director or Regional Director of the USFWS, or the Director of the CDFG, after consideration of all information submitted by the [**LOCAL JURISDICTION**] in accordance with paragraph D, below.

D. Advance Notice. Except where there is a substantial threat of imminent, significant adverse impacts to a Covered Species, the USFWS and CDFG shall provide the [**LOCAL JURISDICTION**] with at least sixty (60) days advance written notice of a proposed finding of Extraordinary Circumstances, the specific facts that may constitute Extraordinary Circumstances, and the evaluation of the factors described in Section 9.6.B of this Agreement, during which time the USFWS and CDFG shall meet with the [**LOCAL JURISDICTION**] to discuss the proposed finding and to provide the [**LOCAL JURISDICTION**] with an opportunity to submit information to rebut the proposed finding. Only where the USFWS or CDFG concludes, following consultation with the [**LOCAL JURISDICTION**], that existing measures available under the MSCP and Subarea Plan cannot adequately address the situation and that

Additional Conservation Measures are necessary shall the USFWS or CDFG proceed to finalize a finding of Extraordinary Circumstances. Where advance notice need not be given in accordance with this paragraph, the USFWS or CDFG shall consider any additional information submitted by the [**LOCAL JURISDICTION**] after a finding of Extraordinary Circumstances and shall be required to issue a written response to this information within 120 days of its receipt.

E. Limits on Additional Conservation Measures. If the USFWS or CDFG makes a finding of Extraordinary Circumstances in accordance with the procedures described above, and determines that Additional Conservation Measures are warranted, such Additional Conservation Measures shall conform to the maximum extent possible to the original terms of the MSCP and Subarea Plan. Additional Conservation Measures shall be limited to modifications of the [**LOCAL JURISDICTION**]'s preserve management program or habitat acquisition program as set forth in the Subarea Plan and this Agreement, and shall not involve the commitment of additional land or additional land restrictions or additional financial compensation on the part of the [**LOCAL JURISDICTION**], or Third Party Beneficiaries without their consent.

F. Effects on Take Authorization. A finding of Extraordinary Circumstances shall not be grounds to terminate, suspend or otherwise revoke the Take Authorizations issued pursuant to this Agreement provided that the [**LOCAL JURISDICTION**] cooperates with the USFWS and CDFG in identifying and implementing fair, reasonable and necessary modifications to the preserve management and habitat acquisition program, as specified in subsection E, above. The USFWS retains the right, as authorized under Section 5 of the ESA, 16 U.S.C. § 1534, and the CDFG retains the right as authorized by the CESA and/or NCCP Act, to purchase habitat within the MSCP Area to conserve Covered Species or any other species of concern.

G. The USFWS and CDFG may take any of the actions described in this Section 9.6 either jointly, or separately and independently of each other.

9.7 Future Listings.

A. Consideration of the MSCP and Similar Plans. To the extent required and permitted by the ESA, the CESA and the NCCP Act, the USFWS and CDFG shall take into account the species and habitat conservation provided under the MSCP, the Subarea Plan, this Agreement, and the species and habitat conservation provided through all other existing conservation efforts (including, but not limited to, other plans approved under the ESA, CESA, or NCCP Act, and any relevant Conservation Agreements), as well as all information and data developed in the course of these efforts which is made available to them, in any future determinations, and in any future recommendations from the CDFG to the California Fish and Game Commission, concerning the potential listing as threatened or endangered of any Covered Species or any other species which is not so listed as of the Effective Date.

B. Covered Species. If a Covered Species Subject to Incidental Take is not listed as threatened or endangered under the ESA as of the Effective Date, and becomes so listed during the term of this Agreement, then the Section 10(a) Permit shall become effective with respect to such species concurrent with its listing as threatened or endangered. If a Covered Species Subject to Incidental Take is not listed as threatened or endangered under the CESA as of the Effective Date, and becomes so listed during the term of this Agreement or becomes accepted by the California Fish and Game Commission as a candidate for such listing, then the CESA/NCCP Authorization shall become effective with respect to such species concurrent with its listing as threatened or endangered or its acceptance by the California Fish and Game Commission as a candidate for such listing. CDFG shall take all necessary steps within its legal authority to make the CESA/NCCP Authorization effective promptly as to Covered Species Subject to Incidental Take accepted by the Commission as a Candidate for listing.

C. Non-Covered Species. If a species which is not a Covered Species is subsequently proposed for listing as threatened or endangered under the ESA or CESA or is accepted by the California Fish and Game Commission as a candidate for listing after the Effective Date, and it is determined by the USFWS or CDFG based on reliable scientific evidence that such species occupies the MSCP Area, the USFWS and CDFG will (1) identify the conservation measures, if any, which are necessary to adequately protect the species, and (2) determine whether such conservation measures are beyond those prescribed by the MSCP. Although such conservation measures may be identified after such species is proposed for listing, the [**LOCAL JURISDICTION**] may choose not to approve and implement such measures until the species is actually listed. Upon application by a Participating Local Jurisdiction which meets the requirements of the ESA and CESA, and following compliance with applicable procedures, Incidental Take of a non-covered, listed species shall be authorized.

1. Adequate Conservation Measures Already in MSCP. If the conservation measures already contained in the MSCP, as implemented through this Subarea Plan and other approved Subarea Plans, are adequate to fulfill the conservation measures identified pursuant to subsection C above, then upon application by the [**LOCAL JURISDICTION**] for Take Authorization for such species and following satisfaction of applicable review procedures as required by the ESA and CESA, the Parties will amend this Agreement to add such species to the list of Covered Species and the list of Covered Species Subject to Incidental Take, and the USFWS and CDFG shall issue Take Authorizations for such species, effective for the remaining term of this Agreement.

2. Inadequate Conservation Measures in the MSCP.

a. Additional Conservation Measure Priorities.

If the conservation measures already contained in the MSCP, the Subarea Plan and this Agreement do not adequately fulfill the conservation measures identified pursuant to

subsection C above, then the USFWS and CDFG will work with the [**LOCAL JURISDICTION**] and other Participating Local Jurisdictions to identify and jointly implement the Additional Conservation Measures necessary to add such species to the list of Covered Species and the list of Covered Species Subject to Incidental Take. In developing a set of Additional Conservation Measures, the parties will look to the following, in order of preference:

i. Habitat management practices and enhancement opportunities within the MHPA using existing management resources, provided the redirection of such resources does not adversely affect any Covered Species.

ii. Habitat acquisition through the reallocation of Federal, State and/or regional funds identified for MSCP implementation, provided such reallocation does not adversely affect any Covered Species.

b. Developing Additional Conservation Measures. If the foregoing options are not adequate to fulfill the conservation measures identified pursuant to subsection C above, then the USFWS and CDFG will determine, consistent with the ESA and/or CESA, the Additional Conservation Measures necessary to add such species to the list of Covered Species and the list of Covered Species Subject to Incidental Take, including measures beyond those required by the MSCP. Preference will be given by the USFWS and CDFG to Additional Conservation Measures that do not require additional mitigation or dedications of land. Although the Additional Conservation Measures necessary to add such species to the list of Covered Species may be identified at or after the species is proposed for listing, the [**LOCAL JURISDICTION**] will not be required to approve or implement these Additional Conservation Measures until such time as the species is actually listed.

c. Significantly Conserved Vegetation Communities. If any species described in subsection C.2.a, above, is dependent upon a Significantly Conserved Vegetation Community, and if the USFWS and CDFG approve subarea plans for the [**LOCAL JURISDICTION**] and the County of San Diego, then the USFWS and CDFG will, subject to the availability of appropriated funds, contribute in partnership, to the same extent committed within the MSCP for Covered Species, with the [**LOCAL JURISDICTION**] toward the land acquisition, management, and monitoring required to achieve the level of conservation necessary, within the Significantly Conserved Vegetation Communities, for such species to be added to the list of Covered Species and the list of Covered Species Subject to Incidental Take once such species becomes listed under the ESA and/or CESA. The commitment of the USFWS and CDFG to contribute their proportionate share(s) to the conservation of the species shall be contingent on the [**LOCAL JURISDICTION**]'s commitment of its

proportionate share. In addition, if the USFWS or CDFG fail to provide their proportionate contributory share(s), neither the **[**LOCAL JURISDICTION**]** nor Third Party Beneficiaries will be obligated to provide the USFWS and/or CDFG share(s), in which case the species would not be added to the list of Covered Species or the list of Covered Species Subject to Incidental Take.

d. Sufficiently Conserved Vegetation Communities. If any species described in subsection C.2.a, above, is dependent upon a Sufficiently Conserved Vegetation Community, and if the USFWS and CDFG approve subarea plans for the **[**LOCAL JURISDICTION**]**, City of Chula Vista, City of Poway and the County of San Diego, then the USFWS and CDFG will use all of their legal authorities to provide for the conservation and management, maintenance and monitoring of the habitat of such species, within the Sufficiently Conserved Vegetation Communities, sufficient to enable the addition of such species to the list of Covered Species and the list of Covered Species Subject to Incidental Take, and to enable the issuance of Take Authorizations for such species in the event they become listed under the ESA or CESA. For purposes of this paragraph, steps within the legal authority of USFWS include, but are not limited to, USFWS-funded habitat acquisition, USFWS-funded species relocation, and land exchanges to secure necessary habitat. For purposes of this paragraph, steps within the legal authority of CDFG include, but are not limited to, CDFG-funded acquisition, CDFG-funded species management and CDFG-funded species relocation. Consequently, the **[**LOCAL JURISDICTION**]** shall not be required, without its consent, to provide any conservation or management, maintenance and monitoring for such species beyond that provided in the MSCP and the Subarea Plan.

e. Application for Take Authorization. The **[**LOCAL JURISDICTION**]** makes no representation or commitment to pursue a Section 10(a) Permit from the USFWS or a CESA/NCCP Authorization from the CDFG for such non-covered species, and in the absence of any such Take Authorization, the Take of such species will be governed by applicable state and federal law. The USFWS and CDFG shall process any applications which may be submitted for Take Authorization for such species in accordance with the requirements of the ESA and CESA.

f. Applicability of Significantly and Sufficiently Conserved Vegetation Communities Assurances. The assurances provided under subsections c and d, above, are not applicable to the Pacific pocket mouse as a currently listed species, and shall not apply to evaluated species identified in Table 3-5 of the MSCP Plan which are not Covered Species and which are not dependent on Significantly or Sufficiently Conserved Vegetation Communities. Those species are:

Dean's milk vetch	<i>Astragalus deanei</i>
Orcutt's spineflower	<i>Chorizanthe orcuttiana</i>
Mexican flannelbush	<i>Fremontodendron mexicanum</i>
Mission Canyon bluecup	<i>Githopsis diffusa</i> ssp. <i>filicaulis</i>

Tecate tarplant	<i>Hemizonia floribunda</i>
Little mousetail	<i>Myosurus minimus ssp. apus</i>
Quino checkerspot butterfly	<i>Euphydryas editha quino</i>
Hermes copper butterfly	<i>Lycaena thornei</i>
Grasshopper sparrow	<i>Ammodramus savannarum</i>

The following evaluated species identified in Table 3-5 of the MSCP Plan are covered by the assurances in subsection c, above (Significantly Conserved Vegetation Communities), and are not covered by the assurances in subsection d, above (Sufficiently Conserved Vegetation Communities):

Harbison's dun skipper	<i>Euphyes vestris harbisoni</i>
Townsend's western big-eared bat	<i>Corynorhinus townsendii pallescens</i>
California mastiff bat	<i>Eumops perotis californicus</i>

9.8 Other Regulatory Permitting.

A. Other Permits. The Parties acknowledge that proponents of land development projects in the Subarea may be subject to permit requirements of agencies not parties to this Agreement, and to separate permit requirements which may be imposed by the USFWS or the CDFG, such as under Fish and Game Code sections 1601 and 1603. Except as provided in Section 9.6 ("Extraordinary Circumstances"), Section 15.3 ("Failure to Provide State or Federal Contribution"), and this paragraph, compliance with the terms of this Agreement, the MSCP and the Subarea Plan, the federal policy of "no net loss" of wetland functions and values, and the U.S. Environmental Protection Agency's Section 404(b)(1) guidelines (40 C.F.R. Part 230) shall constitute the full extent of mitigation measures directed specifically at the Incidental Take of Covered Species Subject to Incidental Take required or recommended by the USFWS pursuant to the ESA and NEPA, and by the CDFG pursuant to CESA, the NCCP Act, and CEQA, in conjunction with other federal and state permits within the Subarea. Furthermore, the USFWS and CDFG will coordinate with the [****LOCAL JURISDICTION****], the U.S. Army Corps of Engineers, and the U.S. Environmental Protection Agency to further streamline the process for issuance of permits pursuant to Section 404 of the Clean Water Act (33 U.S.C. § 1344) for those projects that are in conformance with the MSCP, the Subarea Plan and this Agreement. The Parties intend to begin work on creating this streamlined process within six months of the Effective Date, with the goal of being able to implement this streamlined process within two years of the Effective Date. The public and affected stakeholders will be invited to participate in this effort.

B. Migratory Bird Treaty Act.

1. Migratory Birds other than Bald Eagle. The Section 10(a) Permit issued pursuant to this Agreement also constitutes a Special Purpose Permit under 50 C.F.R. § 21.27 for the Take of those Covered Species Subject to Incidental Take

which are listed as threatened or endangered under the ESA and which are also protected by the Migratory Bird Treaty Act, except for the Bald Eagle. The Take of such species in conjunction with any public or private land development project authorized and approved by the [**LOCAL JURISDICTION**] in accordance with this Agreement will not constitute a violation of the MBTA. Such Special Purpose Permit shall be valid for a period of three years from the Effective Date, provided the Section 10(a) Permit remains in effect for such period. Such Special Purpose Permit shall be renewed, provided that the [**LOCAL JURISDICTION**] continues to fulfill its obligations under this Agreement. Each such renewal shall be valid for the maximum period of time allowed by 50 C.F.R. § 21.27 or its successor at the time of renewal.

2. Bald Eagle. Should the Take of the Bald Eagle occur incidental to any public or private land development project authorized and approved by the [**LOCAL JURISDICTION**] in accordance with this Agreement, the USFWS agrees not to refer such Take for prosecution under either the MBTA or the Bald Eagle Protection Act of 1940, as amended (16 U.S.C. §§ 668 - 668d).

C. Future Environmental Documentation. In issuing any permits or other approvals pertaining to land development activities within the [**LOCAL JURISDICTION**] for any Covered Species Subject to Incidental Take, and absent a finding of Extraordinary Circumstances under Section 9.6 of this Agreement, and subject to any requirements of NEPA, the USFWS shall rely on and shall utilize the EIR/EIS prepared in conjunction with the MSCP and Subarea Plan as the NEPA environmental document for such permits and approvals and for any other approval process subject to its jurisdiction or involvement with regard to potential impacts on Covered Species Subject to Incidental Take. CDFG shall rely on and shall utilize the EIR/EIS prepared in conjunction with the MSCP and Subarea Plan as appropriate CEQA documentation for any future approvals regarding potential impacts to Covered Species Subject to Incidental Take related to land development approvals within the Subarea.

D. Use of EIR/EIS as "Program EIR/EIS". The Parties understand and intend that the EIR/EIS prepared in conjunction with the MSCP and Subarea Plan will operate as a "program" EIR and EIS pursuant to applicable provisions of the Council on Environmental Quality's NEPA regulations (40 C.F.R. § 1500, et seq.), the CEQA Guidelines (14 C.C.R. § 15000 et seq.), and the NCCP Act. Accordingly, the [**LOCAL JURISDICTION**] shall, consistent with the provisions of CEQA, rely on and utilize the EIR prepared in conjunction with the MSCP and Subarea Plan in evaluating future land use decisions, and in issuing any permits or other approvals within the Subarea. Subsequent activities will be examined in light of the program EIR/EIS to determine if additional environmental documentation is required.

9.9 Federal and State Contributions. The USFWS and CDFG shall apply their best efforts to contribute public lands and funds to the acquisition and management, maintenance and monitoring of habitat lands within the MHPA, and habitat land acquired within the MHPA through such means shall not be counted as mitigation

for any public or private project. To the maximum extent appropriate after considering the location of the impacts, the USFWS and CDFG shall direct that the acquisition of land acquired for offsite mitigation of federal and state projects within the MSCP Area, and lands banked for such projects, be located within the MHPA.

9.10 Public Facility Provider and Special Districts. The Parties shall cooperate to encourage regional public facility providers, and local special districts such as water districts and sewer districts, to become Participating Special Entities. However, the Parties acknowledge that regional public facility providers and special districts may apply for Take Authorizations from the USFWS and CDFG separate and apart from the MSCP.

9.11 Special Rules Under Section 4(d). In the event that the USFWS promulgates a new special rule for a Covered Species pursuant to Section 4(d) of the ESA (16 U.S.C. § 1533(d), as implemented by 50 C.F.R. § 17.31(c)), the USFWS shall consider the MSCP in developing the special rule, and shall ensure that the special rule will not affect the validity or alter the terms of any Take Authorization for Covered Species issued in accordance with an approved Subarea Plan.

9.12 Mitigation Guidelines. **[**LOCAL JURISDICTION**]** may establish and agree to implement mitigation guidelines to be applied to all new land development within the Subarea. These mitigation guidelines may group habitat types into qualitative tiers based upon rarity of the habitat in the MSCP Area. Provided that the annual accounting and reporting requirements set forth in Section 14.0 demonstrate that conservation of particular habitat types is occurring in the anticipated proportion to the loss of those habitat types, the USFWS and CDFG agree that **[**LOCAL JURISDICTION**]** may allow the losses within one tiered habitat to be compensated for with mitigation from a different tiered habitat in accordance with policies set forth in the Subarea Plan and procedures set forth in Section 10 of this Agreement.

9.13 Contribution and Banking of Excess Mitigation. Lands contributed to the MHPA preserve system by public or private owners in excess of the mitigation requirements imposed by the **[**LOCAL JURISDICTION**]** in accordance with Section 10 of the Agreement may either be used by such owner as mitigation for that owner's subsequent development project(s), or it may be "banked" by those owners in accordance with Sections 9.14 and 10 of this Agreement. Such banked lands can later be used to provide mitigation for future development projects of other owners within the MSCP Area consistent with applicable USFWS and CDFG conservation banking policies. Lands required to be avoided or which are outside of allowable development areas pursuant to the **[**LOCAL JURISDICTION**]**'s zoning requirements are not excess mitigation lands and are generally ineligible for inclusion in a conservation bank.

9.14 Conservation Banks. The USFWS and CDFG agree that the **[**LOCAL JURISDICTION**]** is authorized to enter into agreements to establish and implement Conservation Banks for land contributed in perpetuity to the MHPA in excess

of any mitigation requirement imposed by the [**LOCAL JURISDICTION**] in accordance with Section 10 of this Agreement. These Conservation Banks shall comply with the "Official Policy on Conservation Banks" issued by the California Resources Agency (April 7, 1995) and the "Supplemental Policy Regarding Conservation Banks Within the NCCP Area of Southern California" issued by the USFWS and CDFG (January 24, 1996), as they may be modified. The Parties agree that existing Conservation Bank agreements approved by the USFWS and CDFG prior to the Effective Date shall remain in full force and effect and be honored by the Parties after execution of this Agreement. This Section 9.14 shall apply to any public lands banked as mitigation for future development by the [**LOCAL JURISDICTION**], in accordance with Section 10 of this Agreement.

9.15 Habitat Conservation Measures. Habitat conservation measures provided for in the Subarea Plan, including habitat management within the MHPA, shall be consistent with the MSCP and shall be implemented through the policies and local regulations established by the [**LOCAL JURISDICTION**] pursuant to Section 10.0 of this Agreement. Such policies and local regulations may differ as between the [**LOCAL JURISDICTION**] and other Participating Local Jurisdictions, and as between different MHPA habitat types within the Subarea.

9.16 Growth Inducing Impacts. Once mitigation has been imposed upon the [**LOCAL JURISDICTION**] or a Third Party Beneficiary for a proposed land development project in conformance with Section 10 and 17.1.A of this Agreement, the [**LOCAL JURISDICTION**] or a Third Party Beneficiary shall not be required to provide any additional mitigation for any growth inducing impacts such project may have on a Covered Species Subject to Incidental Take and its habitat within that portion of the MSCP Area covered by approved Subarea Plans.

9.17 Projects in the Approval Process. Prior to the Effective Date, the Parties have considered proposals or applications for those land development projects identified in Exhibit H. For those projects in Category 1 of Exhibit H, the Parties have determined that the design of such projects conforms to the MSCP Plan and the Subarea Plan preserve design specifications. Mitigation related to Covered Species has not yet been determined, and will be determined consistent with the MSCP, the Subarea Plan and this Agreement. For those projects in Category 2 of Exhibit H, the Parties have determined that both the design of such projects and the mitigation related to Covered Species conforms to the MSCP Plan and the Subarea Plan, and consequently those projects will not require any further approvals from the Parties for purposes of Incidental Take of Covered Species Subject to Incidental Take, and the Parties shall not seek further mitigation related to Covered Species. For those projects in Category 3 of Exhibit H, the proponents of such projects have received all necessary approvals from the [**LOCAL JURISDICTION**] and are considered vested under California law, and no additional mitigation related to Covered Species will be sought by the Parties except to the extent required by the ESA, CESA or other applicable federal and state laws; such additional mitigation, if so required, may at the proponent's option be identified and enforced by the

[**LOCAL JURISDICTION**] consistent with the Subarea Plan and this Agreement, or may be identified and enforced independently by the USFWS and CDFG through their respective procedures under the ESA and CESA.

9.18 Critical Habitat. The USFWS agrees that it will consider the MSCP and Subarea Plan in its preparation of any proposed designation of critical habitat concerning any Covered Species, and further agrees that consistent with 50 C.F.R. § 424.12, the MSCP as implemented through approved subarea plans incorporates special management considerations necessary to manage the Covered Species in a manner that will provide for the conservation of the species involved within the MSCP Area. Except as otherwise provided in this Agreement, and consistent with the assurances provided under Section 9 of this Agreement, USFWS agrees that if critical habitat is designated for any Covered Species Subject to Incidental Take, and if the Subarea Plan (and any other subarea plans the approval of which enabled the Take Authorizations to apply to such species) is properly functioning then the USFWS shall not require through the ESA Section 7 (16 U.S.C. § 1536) consultation process that the [**LOCAL JURISDICTION**] or Third Party Beneficiaries commit additional land, additional land restrictions, or additional financial compensation beyond that provided pursuant to this Agreement.

9.19 Duty to Enforce. The [**LOCAL JURISDICTION**] agrees to take appropriate actions to enforce the terms of the Take Authorizations, the Subarea Plan, and this Agreement as to itself and to all persons or entities subject to the requirements established by this Agreement, specifically including the land development permitting and approval requirements set forth in Section 10 of this Agreement. Furthermore, consistent with Section 9.3 of this Agreement the [**LOCAL JURISDICTION**] shall exercise the full extent of its legal authority to ensure that its local share of lands identified for preservation under the Subarea Plan are conserved in perpetuity. Notwithstanding the term of this Agreement, if at any time following the end of the term of this Agreement the [**LOCAL JURISDICTION**] proposes to exercise its discretionary authority to modify the regulatory protections or legal encumbrances provided for such lands under the Subarea Plan, the proposed modifications must be accomplished through a public process in which the public, the USFWS and CDFG receive advance notice and the opportunity to comment, and must be consistent with the MSCP Plan and the Subarea Plan such that there is no net loss of habitat value or acreage for the Covered Species. The [**LOCAL JURISDICTION**] must promptly notify USFWS and CDFG or their respective successor agencies of such proposed modifications in advance, and explain how they achieve such consistency.

9.20 Annexation of Lands. Upon an annexation of lands, the [**LOCAL JURISDICTION**] shall amend its Subarea Plan to insure that any development of the annexed lands proceeds in accordance with the conservation goals of the MSCP and Subarea Plan. Amendment of the [**LOCAL JURISDICTION**]'s Take Authorization may also be required in certain instances involving an annexation of lands.

9.21 Agricultural Uses. At the option of the [**LOCAL JURISDICTION**], the Take Authorizations may apply to those lands within the Subarea Plan actively being used for agricultural purposes. For purposes of this paragraph, the phrase “agricultural purposes” includes crop production, animal production, forage production and grazing, and the phrase “actively being used for” means those lands shown on the MSCP vegetation database depicted on Figure 2-1 of the MSCP Plan for so long as they are maintained in active agricultural use. The Take Authorization will become effective as to such lands upon an application by the owner of such lands to the [**LOCAL JURISDICTION**] for a Certificate of Inclusion, and the issuance by the [**LOCAL JURISDICTION**] of a Certificate of Inclusion to such owner. This Certificate shall depict on an attached map the lands (by parcel number, acreage and owner) to which the Take Authorizations apply and shall specify the parcel number(s) and the acreage that the Certification of Inclusion covers. The [**LOCAL JURISDICTION**] commits to enforce the applicable provisions of the MSCP, Subarea Plan, Take Authorizations and this Agreement as to each recipient of a Certificate of Inclusion.

9.22 Existing Mining Operations. The MSCP Plan does not impose any new obligations on owners or operators of mining operations which are active as of the Effective Date. However, if the owner or operator of such an operation should desire to obtain the benefits of the Take Authorizations, that owner or operator may apply to the [**LOCAL JURISDICTION**] for an amendment of any conditional use permit which is in effect as of the Effective Date and, subject to imposition of any necessary mitigation and approval from the USFWS and CDFG, may obtain Third Party Beneficiary status and authorization for Take from the [**LOCAL JURISDICTION**].

9.23 New or Expanded Mining Operations. Mining operations which are newly established or are expanded after the Effective Date shall be approved by the [**LOCAL JURISDICTION**] consistent with Section 6.2.4 of the MSCP Plan and the Subarea Plan.

10.0 IMPLEMENTATION RESPONSIBILITIES OF [LOCAL JURISDICTION**]**

10.1 The MSCP establishes a plan to conserve the Covered Species by ultimately providing permanent protection for Covered Species habitat. The USFWS and CDFG agree to phased implementation of the MSCP based on the agreement of [**LOCAL JURISDICTION**] to take the following specific actions to implement the MSCP.

[Insert the implementation details applicable to the Local Jurisdiction. For example, the insert should discuss: the amount of lands committed to conservation based on the Subarea Plan, the amount of undeveloped MHPA land within the geographic boundaries of the

Local Jurisdiction and the amount of such land which is owned by private and public entities, and the actions that will be taken to manage, conserve, acquire and permanently preserve such acquired lands. This section should also describe the process and deadline for developing a framework management plan which will incorporate species-specific management actions set forth in Table 3-5 of the MSCP Plan and preserve-wide management actions applicable to the Subarea. This plan should also incorporate a requirement for the subsequent preparation and implementation of area-specific management directives. Section 10 must also include a description of any changes which the Local Jurisdiction will make to its General Plan, to other applicable land use plans, and to existing zoning, as appropriate. Please refer to the MSCP Plan for further details.]

11.0 FUNDING RESPONSIBILITIES OF **[LOCAL JURISDICTION**]****

11.1 The MSCP describes the anticipated costs of implementing the MSCP, including the cost of acquiring, managing and permanently preserving habitat within the MHPA. **[**LOCAL JURISDICTION**]** shall take the following specific actions to establish funding sources adequate to cover its share of such anticipated cost.

[Insert the funding details applicable to the Local Jurisdiction. For example, the insert should discuss all anticipated sources of funding (e.g., federal and state contributions, private donations, and local contributions from such sources as property tax assessments, development exactions, sales taxes, etc.), and the steps Local Jurisdiction will take to secure the necessary funding from such sources consistent with Table 7-7 of the MSCP Plan. Please refer to the MSCP Plan for details.]

12.0 ISSUANCE OF THE TAKE AUTHORIZATIONS

12.1 General Purposes. In order to provide predictability and certainty to public facility and private project developments, the Take Authorizations shall cover significant periods of time.

12.2 Findings - USFWS - Covered Species. The USFWS has found, following opportunity for public comment, that (a) the taking of Covered Species within the MSCP Area in accordance with the MSCP Plan as implemented by the subarea plans

will be incidental to the carrying out of otherwise lawful activities; (b) the MSCP as implemented by the subarea plans will, to the maximum extent practicable, minimize and mitigate the impacts of such incidental taking; (c) the funding sources identified and provided for herein will ensure that adequate funding for the MSCP and the subarea plans will be provided; (d) the requested taking of Covered Species will not appreciably reduce the likelihood of the survival and recovery of such species in the wild; and (e) the MSCP as implemented through the subarea plans will satisfy and fulfill all measures required by the USFWS as being necessary or appropriate for the purposes of the MSCP (including procedures determined by the USFWS to be necessary to address Unforeseen Circumstances).

12.3 Findings - USFWS - Covered Species Subject to Incidental Take.

In addition to the findings in Section 12.2 above, the USFWS has found that the Covered Species Subject to Incidental Take will be adequately conserved in the Subarea as the result of the Subarea Plan and this Agreement. Accordingly, concurrent with the Effective Date the USFWS will issue the Section 10(a) Permit to the [**LOCAL JURISDICTION**] authorizing the Incidental Take of the Covered Species Subject to Incidental Take. The Section 10(a) Permit will be effective for 50 years, and will be renewable utilizing the ESA procedures in effect at the time of renewal.

12.4 Section 10(a) Permit and Future Listings. As to any Covered Species Subject to Incidental Take that is not listed as threatened or endangered under the ESA as of the Effective Date, the Section 10(a) Permit shall become effective with respect to such species concurrent with its listing as threatened or endangered under the ESA. As to any other Covered Species, the Section 10(a) Permit shall become effective with respect to that species (and it will be added to the list of Covered Species Subject to Incidental Take) when (1) the USFWS approves the subarea plans that the USFWS determines adequately conserve such species, (2) such species becomes listed as threatened or endangered under the ESA, and (3) the USFWS notifies the [**LOCAL JURISDICTION**] in writing that the Section 10(a) Permit is effective with respect to such species.

12.5 Findings - CDFG. The CDFG has found, following opportunity for public comment, that the MSCP, the Subarea Plan and this Agreement (1) adequately provide for the conservation and management of the Covered Species Subject to Incidental Take and their habitat within the MSCP Area and the Subarea, (2) satisfy all legal requirements under both CESA and the NCCP Act necessary for the CDFG to issue a CESA/NCCP Authorization for the Covered Species Subject to Incidental Take, and (3) are consistent with the NCCP Process and Conservation Guidelines. The CDFG has found that the Subarea Plan, in combination with the MSCP Plan, meets the requirements of the NCCP Act for an NCCP Plan, and has approved the Subarea Plan as an NCCP Plan. The CDFG has found further that the MSCP, the Subarea Plan and this Agreement provide adequately for the mitigation of potential "significant effects on the environment" (as defined in California Public Resources Code § 21068) which may result to Covered

Species Subject to Incidental Take and their habitat (pursuant to California Government Code § 66474) that may result from the land development activities in the Subarea.

12.6 Issuance of CESA/NCCP Authorization. Concurrent with the Effective Date, the CDFG will issue its approval of the Subarea Plan and a CESA/NCCP Authorization which authorizes the Incidental Take of Covered Species Subject to Incidental Take in the Subarea, subject to the terms of the MSCP, the Subarea Plan, this Agreement, and the CESA/NCCP Authorization. As to any Covered Species Subject to Incidental Take that is not listed as threatened or endangered under the CESA as of the Effective Date, the CESA/NCCP Authorization shall automatically become effective with respect to such species concurrently with its listing as threatened or endangered under the CESA or its acceptance by the California Fish and Game Commission as a candidate for such listing. The CESA/NCCP Authorization will be effective for 50 years. The CESA/NCCP Authorization will be renewable utilizing the CESA or NCCP procedures in effect at the time of renewal.

12.7 Findings - Section 4(d) Special Rule. The USFWS finds that the MSCP meets the standards set forth in 50 C.F.R. § 17.32(b)(2). Accordingly, the USFWS finds that the MSCP and the Subarea Plan are consistent with and satisfy the conditions under the Section 4(d) Special Rule, and therefore the Incidental Take of the coastal California gnatcatcher within that portion of the MSCP Area covered by approved Subarea Plans (including the [**LOCAL JURISDICTION**]'s Subarea Plan), is lawful.

13.0 CONSULTATIONS WITH OTHER PUBLIC AGENCIES

13.1 Section 7 Consultations. To the maximum extent appropriate, in any consultation under Section 7 of the ESA (16 U.S.C. § 1536) involving the [**LOCAL JURISDICTION**] and/or an existing or prospective Third Party Beneficiary with regard to Covered Species Subject to Incidental Take, the USFWS shall ensure that the biological opinion issued in connection with the proposed project which is the subject of the consultation is consistent with the biological opinion issued in connection with the MSCP and Subarea Plan, provided that the proposed project is consistent with the MSCP and Subarea Plan. Any biological measures included under the terms and conditions of the Section 7 biological opinion shall, to the maximum extent appropriate, be consistent with the mitigation required by the [**LOCAL JURISDICTION**] for the particular project or activity under the MSCP and Subarea Plan as implemented by this Agreement, provided that the USFWS shall not impose measures in excess of those that have been or will be required by the [**LOCAL JURISDICTION**] pursuant to the MSCP, the Subarea Plan and this Agreement. For Section 7 consultations conducted in connection with the issuance of permits under Section 404 of the Clean Water Act, 33 U.S.C. § 1344, Section 9.8A of this Agreement shall apply in lieu of this paragraph.

13.2 Consultations by CDFG. Except as otherwise required by law, and barring a finding by CDFG of Extraordinary Circumstances, for projects and/or

project impacts subject to the Subarea Plan, CDFG shall not recommend or otherwise seek to impose through consultation with other public agencies any mitigation, compensation or habitat enhancement requirements regarding the Take of Covered Species within the Subarea other than the requirements prescribed in and pursuant to the MSCP, the Subarea Plan and this Agreement.

14.0 REPORTING, BIOLOGICAL MONITORING AND PRESERVE MANAGEMENT

14.1 Continual Habitat Acreage Accounting. So long as this Agreement and the Take Authorizations remain in effect, the [****LOCAL JURISDICTION****] will continually account, by project and cumulatively, for the amount and location of habitat acreage (by habitat type) lost and preserved within the Subarea, including acres conserved within the MHPA and acres committed to land development both within and outside of the MHPA. The results of such accounting will be applied to the Habitat Conservation Accounting Model attached as Exhibit F to this Agreement to assure that adequate progress toward implementation of the MSCP Plan and the Subarea Plan is being achieved and that habitat preservation is proceeding in rough step with development.

14.2 Annual Reporting. In accordance with Section 5.9.1 of the MSCP Plan, the [****LOCAL JURISDICTION****] shall prepare and submit to the USFWS and the CDFG by February 15 of each year a public report containing an annual accounting, by project and cumulatively, of habitat acreage lost and conserved within the Subarea during the previous calendar year. This accounting shall specify acres conserved within the MHPA by habitat type, as well as acres committed to land development both within and outside of the MHPA, and compare these figures with results obtained utilizing the Habitat Conservation Accounting Model attached as Exhibit F to this Agreement. This report shall also describe how habitat preservation is proceeding in rough step with development. The report will be used by the USFWS and CDFG to evaluate whether adequate progress toward implementation of the MSCP and the Subarea Plan is being achieved.

14.3 Annual Implementation Meeting. Once each year, the [****LOCAL JURISDICTION****] shall meet with the USFWS and the CDFG to review and coordinate implementation of the Subarea Plan. The parties will review the Annual Report described in Section 14.2 above, for the purposes of evaluating the implementation of the MSCP during the preceding year and the adequacy of the overall progress being made towards reaching the conservation goals of the MSCP and the Subarea Plan, utilizing the Habitat Conservation Accounting Model attached as Exhibit F to this Agreement. Items to be considered in the evaluation include, but are not limited to, all contributions towards the preservation of habitat lands, such as public lands, private mitigation lands, land donations, land acquisitions, and management activities undertaken or proposed on habitat lands. No Participating Local Jurisdiction or Participating Special Entity will be subject to any annual, quantitative habitat preservation requirement, given the

uncertainties created by natural economic and land development fluctuations. Habitat management issues will also be discussed. If the USFWS and the CDFG determine that adequate progress towards implementation of the Subarea Plan is not being achieved, the USFWS, the CDFG, and the [**LOCAL JURISDICTION**] will take the actions specified in the Subarea Plan and this Agreement to remedy that situation. If the USFWS and CDFG determine that adequate progress towards implementation of the Subarea Plan is being achieved, but is nevertheless not providing sufficient protection to Covered Species, then the Parties shall work cooperatively and take appropriate actions consistent with the MSCP and Subarea Plan (such as altering management activities or redirecting mitigation and acquisition) in order to address the situation.

14.4 Public Report/Hearing. Every three years the [**LOCAL JURISDICTION**], in conjunction with the other Participating Local Jurisdictions, shall prepare a public report on the status of the MSCP and shall hold a public hearing in conjunction with the issuance of the report. The report shall incorporate information on the amount of land preserved within the MHPA and otherwise to date, the amount of land added to the MHPA or otherwise preserved within the previous three years, and the total expenditures made toward habitat acquisition to date and over the preceding three years. This report shall also include a subarea by subarea accounting of all funds received and expended during the previous three years to implement the Subarea Plan, including the amounts received and expended on habitat acquisition, management and monitoring.

14.5 Biological Monitoring. The Parties agree that biological monitoring, which involves the collection and analysis of data on specific species and habitats, is necessary to determine whether Covered Species and their habitats are being maintained by the MSCP as expected. Biological monitoring will be jointly funded by the federal and state governments and the Participating Local Jurisdictions and Participating Special Entities through the federal, state and regional funding programs. As described in the Subarea Plan, the [**LOCAL JURISDICTION**] will be responsible for the biological monitoring of its own, specified public lands, as well as mitigation lands obtained by it in fee title or easement, and lands acquired by it for the MSCP using the regional funding program or other local sources. The federal and state agencies will monitor their present identified lands and those acquired for the MSCP with federal and state funds, as described in the MSCP Plan. Proper management of the MHPA will require ongoing and detailed analysis of the data collected through biological monitoring activities. To ensure uniformity in data gathering and analysis, the USFWS and CDFG will assume primary responsibility for coordinating the monitoring program, analyzing data, and providing information and technical assistance to the Participating Local Jurisdictions and Participating Special Entities. Biological monitoring will focus on selected Covered Species and representative habitats. The USFWS and CDFG will prioritize specific monitoring activities based on available budget and specific needs of individual species and habitats, and will produce a summary report on monitoring activities every three years at the same time as the report described in Section 14.4, above.

14.6 Audit. Once every three or more years, as needed, the USFWS and CDFG may conduct an audit of (1) all development approvals and mitigation imposed through land use regulations or otherwise within approved Subareas; (2) all lands acquired by each Participating Local Jurisdiction toward meeting its habitat acquisition obligation under the MSCP; and (3) all monies received, invested and expended on acquisition, management and monitoring activities within approved Subareas during the previous three years or other applicable time period. The [**LOCAL JURISDICTION**] shall cooperate fully with USFWS and CDFG to insure a complete and accurate audit.

14.7 Coordination of Preserve Management.

A. Regional Habitat Management Technical Committee. Within 120 days of the Effective Date, a regional habitat management technical committee or equivalent entity separately agreed upon by the Parties will be formed by the [**LOCAL JURISDICTION**] and all other Participating Local Jurisdictions to serve as a coordination forum for technical issues associated with MHPA management. The USFWS and CDFG will work with this committee to furnish information and advice on habitat management. The committee will have the responsibilities identified in Section 5.8.3 of the MSCP Plan.

B. Federal and State Obligations. Federal and state agencies will manage, maintain and monitor all lands they contribute to the MSCP (whether owned or administered by them as of the Effective Date or later acquired) consistent with the MSCP.

C. Private Owners of Land Within the MHPA. This Agreement, the MSCP and the Subarea Plan do not impose upon private owners of land within the MHPA, who are not Third Party Beneficiaries, any additional obligations for the management or maintenance of their land.

15.0 USFWS AND CDFG OBLIGATIONS

15.1 USFWS. The USFWS shall include in its annual budget requests sufficient funds to fulfill its obligations under the MSCP, this Agreement, and all Section 10(a) Permits it issues pursuant to the MSCP.

15.2 CDFG. The CDFG shall include in its annual budget requests sufficient funds to fulfill its obligations under the MSCP, this Agreement, and all CESA/NCCP Authorizations it issues pursuant to the MSCP.

15.3 Failure to Provide State or Federal Contribution. The USFWS and CDFG acknowledge that the MSCP is long-term in nature, and that the MHPA will be established over a 50-year period. Contributions of the USFWS and CDFG will be made at varying levels throughout the life of the program, with contributions to habitat acquisition to occur within the first 30 years of the program. State and federal

contributions may include, but are not limited to, state and federally funded habitat acquisitions, land exchanges, personnel, and habitat restoration and enhancement. If, following the exercise of all available authority and utilization of all available resources the state and/or federal contribution committed to the MSCP cannot be provided, the MSCP will be reevaluated, with possible adjustments to permit coverage and assurances, in light of the extent of the state and federal contribution. Prior to such reevaluation of the MSCP, the USFWS and CDFG shall first attempt to address the shortfall in the state and/or federal contribution through (1) habitat management practices and enhancement opportunities within the MHPA using existing management resources, provided the redirection of such resources does not adversely affect any Covered Species, and (2) habitat acquisition through the reallocation of existing state, federal and/or regional funds identified for MSCP implementation, provided such reallocation does not adversely affect any Covered Species.

16.0 REMEDIES AND ENFORCEMENT

16.1 Remedies in General. Except as set forth below each Party shall have all of the remedies available in equity (including specific performance and injunctive relief) and at law to enforce the terms of this Agreement and the Section 10(a) Permit and CESA/NCCP Authorization, and to seek remedies and compensation for any breach or violation thereof, consistent with and subject to the following:

A. None of the Parties shall be liable in damages to the other Parties or to any other person or entity for any breach of this Agreement, any performance or failure to perform a mandatory or discretionary obligation imposed by this Agreement, or any other cause of action arising from this Agreement. Notwithstanding the foregoing, each Party shall retain whatever liability it would possess for its present and future acts or failure to act without existence of this Agreement.

B. The Parties acknowledge that the Covered Species are unique and that their loss as species would be irreparable and that therefore injunctive and temporary relief may be appropriate in certain instances involving a breach of this Agreement.

16.2 The Section 10(a) Permit.

A. Permit Suspension. Consistent with 50 C.F.R. §§ 13.27-13.29, in the event of any material violation of the Section 10(a) Permit or material breach of this Agreement by the [**LOCAL JURISDICTION**], the USFWS may suspend the Section 10(a) Permit in whole or in part; provided, however, that it may not suspend the Section 10(a) Permit without first (1) requesting the [**LOCAL JURISDICTION**] take appropriate remedial actions, and (2) providing the [**LOCAL JURISDICTION**] with written notice of the facts or conduct which may warrant the suspension and an adequate and reasonable opportunity for the [**LOCAL

JURISDICTION**] to demonstrate why suspension is not warranted or to take steps necessary to cure the violation or breach.

B. Reinstatement of Suspended Permit. In the event the USFWS suspends the Section 10(a) Permit, in whole or in part, as soon as possible but no later than ten (10) days after such suspension, the USFWS shall confer with the [**LOCAL JURISDICTION**] concerning how the violation or breach that led to the suspension can be remedied. At the conclusion of any such conference, the USFWS shall identify reasonable specific actions necessary to effectively redress the violation or breach. In making this determination the USFWS shall consider the requirements of the ESA, regulations issued thereunder, the conservation needs of the Covered Species, the terms of the Section 10(a) Permit and of this Agreement and any comments or recommendations received during the meet and confer process. As soon as possible, but not later than thirty (30) days after the conference, the USFWS shall send the [**LOCAL JURISDICTION**] written notice of the reasonable actions necessary to effectively redress the violation or breach. Upon performance of such necessary actions, the Service shall immediately reinstate the Section 10(a) Permit, or the suspended portion thereof. It is the intent of the Parties that in the event of any total or partial suspension of the Section 10(a) Permit all Parties shall act expeditiously and cooperatively to reinstate the Section 10(a) Permit.

C. Permit Revocation or Termination.

1. Consistent with 50 C.F.R. §§ 13.27-13.29, the USFWS agrees that it will only revoke or terminate the Section 10(a) Permit for a material violation of the Section 10(a) Permit or material breach of this Agreement by the [**LOCAL JURISDICTION**], and only if (a) the [**LOCAL JURISDICTION**] refuses to cure the violation or breach after receiving actual notice of it from the USFWS and a reasonable opportunity to cure it, or (b) the USFWS determines in writing that such violation or breach cannot be effectively redressed by other remedies or enforcement action.

2. The USFWS agrees that it will not revoke or terminate the Section 10(a) Permit without first (a) requesting the [**LOCAL JURISDICTION**] take appropriate remedial action, and (b) providing the [**LOCAL JURISDICTION**] with notice in writing of the facts or conduct which warrant the revocation or termination and a reasonable opportunity (but not less than sixty (60) days) to demonstrate or achieve compliance with the ESA, the Section 10(a) Permit and this Agreement.

16.3 The CESA/NCCP Authorization.

A. Authorization Suspension. In the event of any material violation of the CESA/NCCP Authorization or material breach of this Agreement by the [**LOCAL JURISDICTION**] the CDFG may suspend the CESA/NCCP Authorization

in whole or in part; provided, however, that it may not suspend the CESA/NCCP Authorization without first (1) requesting the [**LOCAL JURISDICTION**] take appropriate remedial actions, and (2) providing the [**LOCAL JURISDICTION**] with written notice of the facts or conduct which may warrant the suspension and an adequate and reasonable opportunity for the [**LOCAL JURISDICTION**] to demonstrate why suspension is not warranted or to take steps necessary to cure the violation or breach.

B. Reinstatement of Suspended Authorization. In the event the CDFG suspends the CESA/NCCP Authorization, as soon as possible but no later than ten (10) days after such suspension, the CDFG shall confer with the [**LOCAL JURISDICTION**] concerning how the violation or breach that led to the suspension can be remedied. At the conclusion of any such conference, the CDFG shall identify reasonable specific actions necessary to effectively redress the violation or breach. In making this determination the CDFG shall consider the requirements of the CESA and/or NCCP Act, regulations issued thereunder, the conservation needs of the Covered Species, the terms of the CESA/NCCP Authorization and of this Agreement and any comments or recommendations received during the meet and confer process. As soon as possible, but not later than thirty (30) days after the conference, the CDFG shall send the [**LOCAL JURISDICTION**] written notice of the reasonable actions necessary to effectively redress the violation or breach. Upon full or substantial performance of such necessary actions, the CDFG shall immediately reinstate the CESA/NCCP Authorization. It is the intent of the Parties that in the event of any suspension of the CESA/NCCP Authorization all Parties shall act expeditiously and cooperatively to reinstate the CESA/NCCP Authorization.

C. Authorization Revocation or Termination.

1. The CDFG may only revoke or terminate the CESA/NCCP Authorization for a material violation of the CESA/NCCP Authorization or material breach of this Agreement by the [**LOCAL JURISDICTION**], and only if the CDFG determines in writing that (a) such violation or breach cannot be effectively redressed by other remedies or enforcement action, or (b) revocation or termination is required to avoid jeopardizing the continued existence of a Covered Species and to fulfill a legal obligation of the CDFG under the CESA and/or NCCP Act.

2. The CDFG agrees that it will not revoke or terminate the CESA/NCCP Authorization without first (a) requesting the [**LOCAL JURISDICTION**] take appropriate remedial action, and (b) providing the [**LOCAL JURISDICTION**] with notice in writing of the facts or conduct which warrant the revocation or termination and a reasonable opportunity (but not less than sixty (60) days) to demonstrate or achieve compliance with the CESA, the NCCP Act, the CESA/NCCP Authorization and this Agreement.

D. Effect on Third Party Beneficiaries. The effect on Third Party Beneficiaries of Take Authorization revocation or suspension is specified in Section 17.2.

16.4 Circumstances Likely to Constitute Jeopardy to Listed Species. In the event of a material violation of the Take Authorizations or material breach of this Agreement by the [**LOCAL JURISDICTION**] and the existence of circumstances which are likely to jeopardize the continued existence of a Covered Species listed as threatened or endangered under the ESA or CESA, the USFWS and/or CDFG may, as a last resort, and after meeting and conferring with the [**LOCAL JURISDICTION**] and describing those circumstances in writing, suspend or revoke the Take Authorizations without resorting to the procedures specified above.

16.5 The [**LOCAL JURISDICTION**]'s Obligations In The Event of Suspension or Revocation. In the event that the USFWS and/or CDFG suspend or revoke the Take Authorizations issued to the [**LOCAL JURISDICTION**] under this Agreement, the [**LOCAL JURISDICTION**] will remain obligated to fulfill its mitigation, enforcement and management obligations, and its other MSCP and Subarea Plan obligations, in accordance with this Agreement for all land development activities undertaken or approved prior to the breach which led to the suspension or revocation.

17.0 THIRD PARTY BENEFICIARIES

17.1 Authorization. Upon execution of this Agreement by the Parties and the issuance of Take Authorizations by USFWS and CDFG, the [**LOCAL JURISDICTION**] may allow within the Subarea the Incidental Take of Covered Species Subject to Incidental Take by Third Party Beneficiaries under the direct control of the [**LOCAL JURISDICTION**], specifically including landowners and public and private entities undertaking land development activities in conformance with an approval granted by the [**LOCAL JURISDICTION**] in compliance with this Section and Section 10 of this Agreement.

A. Creation of Third Party Beneficiary Status. The creation of Third Party Beneficiary status shall occur during the [**LOCAL JURISDICTION**]'s permitting process at the point in time when (1) review of the project's impacts on biological resources and a determination of necessary mitigation has occurred in compliance with Section 10 of this Agreement (i.e., certification of the CEQA environmental document), (2) the determined mitigation includes an immediately-effective requirement to maintain the biological values of the land committed for mitigation, and (3) the mitigation has been imposed through a condition of development (such as a development agreement or a tentative map condition) that is recorded and runs with the land and is enforceable against and binding upon the Third Party Beneficiary and any successor in interest to the Third Party Beneficiary. Third Party Beneficiary status may be attained for a project as a whole, or for a discrete phase(s) of a project so long as

the mitigation for the discrete phase(s) is not functionally dependent in the context of the MSCP and Subarea Plan upon the mitigation proposed for subsequent phases.

B. Maintenance of Third Party Beneficiary Status. Third Party Beneficiary status will remain in effect unless, prior to the issuance of take authorization in accordance with paragraph D, below, the Third Party Beneficiary alters the project in a manner that increases or substantially alters impacts to biological resources evaluated pursuant to Paragraph A, above, or fails to maintain the biological values of the land committed for mitigation pursuant to Paragraph A, above. In such circumstance, the Third Party Beneficiary status is automatically extinguished, and the subsequent creation of Third Party Beneficiary status will require biological review and imposition of mitigation for the increased or altered impacts, pursuant to Paragraph A above. However, Third Party Beneficiary status shall not be extinguished as a result of impacts to biological values resulting from natural or other causes beyond the Third Party Beneficiary's control, as determined by the USFWS and CDFG, including fire, flood, storm, and earth movement, or from any prudent action taken by the Third Party Beneficiary to prevent, abate, or mitigate significant injury to the land evaluated pursuant to Paragraph A, above, resulting from such causes.

C. Assurances to Third Party Beneficiaries. For a project or portion thereof where Third Party Beneficiary status has been attained and is effective, the Parties shall not alter existing mitigation obligations imposed by the [**LOCAL JURISDICTION**] on the Third Party Beneficiary, except as otherwise specifically allowed under Sections 9.6 and 9.7 of this Agreement, provided that the Third Party Beneficiary satisfies all mitigation obligations imposed by the [**LOCAL JURISDICTION**] in conformance with this Section and Section 10 of this Agreement.

D. Authorization for Take Conferred by Local Jurisdiction to Third Party Beneficiary. The authorization for incidental take issued by the [**LOCAL JURISDICTION**] to the Third Party Beneficiary shall be for the length of time and run concurrent with the specific land development approval granted by the [**LOCAL JURISDICTION**]. However no grading or grubbing activities may be commenced by the Third Party Beneficiary pursuant to the [**LOCAL JURISDICTION**]'s development approval until the mitigation established pursuant to paragraph A above has been fully satisfied (via conservation easement, transfer of fee title, etc.) or is guaranteed (via irrevocable offer of dedication, mitigation bond, letter of credit, pledged savings account or other equivalent mechanism) to occur within a timeframe approved by the [**LOCAL JURISDICTION**], which timeframe shall not under any circumstance exceed one year from the date the permit for grading or grubbing is issued.

17.2 Effect of Take Authorization Revocation, Termination or Suspension. In the event that the USFWS and/or CDFG revoke, terminate or suspend the Take Authorizations issued to the [**LOCAL JURISDICTION**] pursuant to this Agreement, the assurances provided to Third Party Beneficiaries under this Agreement and the right to Take Covered Species Subject to Incidental Take authorized under the

[**LOCAL JURISDICTION**]'s development approvals pursuant to the Take Authorizations, will remain in effect as to every individual Third Party Beneficiary which fulfills the mitigation obligations imposed upon it by the [**LOCAL JURISDICTION**] in compliance with this Section and Section 10 of this Agreement.

17.3 Enforcement. The Parties reserve the right to enforce all applicable federal, state or local laws against persons or entities which engage in unlawful land development activity without obtaining proper permits and approvals from the Parties. Also, the Parties reserve the right to enforce all applicable federal, state or local laws against Third Party Beneficiaries which conduct land development activities in the Subarea which are not in compliance with land development approvals granted by the [**LOCAL JURISDICTION**] in conformance with Section 10 of this Agreement.

17.4 No Right to Sue Under this Agreement. Notwithstanding the use of the term "Third Party Beneficiary" or any other provision of this Agreement, this Agreement shall confer no right upon Third Party Beneficiaries or any other person to sue the USFWS or the CDFG.

18.0 ENVIRONMENTAL REVIEW

18.1 Federal Law - NEPA. Issuance of a Section 10(a) Permit to the [**LOCAL JURISDICTION**] by USFWS is an action subject to NEPA review. USFWS is a lead agency under NEPA. An Environmental Impact Statement has been prepared pursuant to NEPA. Additional environmental review will be required for future subarea plans.

18.2 State Law - CEQA. Implementation of the MSCP is an action subject to CEQA review. The [**LOCAL JURISDICTION**] is a lead agency for the project and has completed an Environmental Impact Report addressing the MSCP in accordance with CEQA requirements. CDFG is a responsible agency under CEQA for purposes of approving the MSCP and the Subarea Plan under the NCCP Act.

19.0 COOPERATIVE EFFORT

In order that each of the legal requirements summarized in Section 8.0 of this Agreement are fulfilled, each of the Parties to this Agreement must perform certain specific tasks. The MSCP thus describes a cooperative program by federal, state and local agencies to conserve the Covered Species.

20.0 TERMS USED

Terms defined and utilized in the MSCP, the ESA, the CESA, and the NCCP Act shall have the same meaning when utilized in this Agreement, except as specifically noted.

21.0 TERM

21.1 50-year Agreement. This Agreement takes effect on the Effective Date, and shall remain in full force and effect for a period of 50 years, or until termination of the Section 10(a) Permit and CESA/NCCP Authorization pursuant to Section 16 or Section 22 of this Agreement, whichever occurs sooner.

21.2 50-year Take Authorizations. The Section 10(a) Permit and the CESA/NCCP Authorization issued to the **[**LOCAL JURISDICTION**]** shall be effective for a period of 50 years from the Effective Date.

21.3 Permanent Preservation. Notwithstanding the stated term as herein set forth, the Parties agree and recognize that once Take of a Covered Species has occurred and/or their habitat modified within the Subarea, such Take and habitat modification will be permanent. The Parties, therefore, agree that the preservation and maintenance of the habitat provided for under this Agreement shall likewise be permanent and extend beyond the term of this Agreement.

22.0 TERMINATION

A. Upon 90 days written notice to USFWS and CDFG and all other Participating Local Jurisdictions, the **[**LOCAL JURISDICTION**]** may unilaterally withdraw from this Agreement provided:

1. The **[**LOCAL JURISDICTION**]** and all Third Party Beneficiaries have complied with all mitigation obligations incurred under the Take Authorizations in full compliance with the Habitat Conservation Accounting Model attached as Exhibit F to this Agreement, the MSCP, Subarea Plan and this Agreement up to the date of withdrawal, and the **[**LOCAL JURISDICTION**]** provides written evidence of such compliance to USFWS and CDFG; and

2. The **[**LOCAL JURISDICTION**]** and Third Party Beneficiaries shall remain obligated to carry out all of their long term management and monitoring obligations assumed under the MSCP, Subarea Plan and this Agreement with respect to habitat conservation lands included in, or required to be included in, the MHPA as a result of land development approved by the **[**LOCAL JURISDICTION**]** prior to withdrawal from the Agreement.

B. The **[**LOCAL JURISDICTION**]**'s withdrawal from this Agreement shall not affect the obligations of the **[**LOCAL JURISDICTION**]** with respect to mitigation lands or other lands owned or controlled by the **[**LOCAL JURISDICTION**]** and included in the MHPA.

C. Any Incidental Take associated with land development projects approved by the **[**LOCAL JURISDICTION**]** for which mitigation has been assured as provided in Section 17, shall continue to be authorized under the terms of the Take

Authorizations provided the [**LOCAL JURISDICTION**] continues to carry out its obligations under this Agreement with respect to such Take as provided in Sections 9.19, 10, 14 and 17 of this Agreement.

D. Withdrawal of the [**LOCAL JURISDICTION**] from this Agreement shall be deemed to constitute a surrender of the [**LOCAL JURISDICTION**]'s Take Authorizations issued pursuant to this Agreement.

23.0 AMENDMENTS

23.1 Amendments to Agreement. Except as otherwise set forth herein, this Agreement may be amended only with the written consent of each of the Parties.

23.2 Amendments to List of Covered Species Subject to Incidental Take. The Parties anticipate and intend that the list of Covered Species Subject to Incidental Take (attached as Exhibit D) will be augmented to include additional Covered Species as additional Participating Local Jurisdictions and Participating Special Entities enter into separate but coordinated agreements in a form substantially similar to this Agreement, and/or if additional information becomes available concerning the population and distribution of such additional Covered Species and the protection afforded such species by the MSCP and/or this Agreement. The Parties agree to work cooperatively to expeditiously augment the list of Covered Species Subject to Incidental Take under such circumstances.

24.0 FORCE MAJEURE

In the event that the [**LOCAL JURISDICTION**] is wholly or partially prevented from performing obligations under this Agreement because of unforeseeable causes beyond the reasonable control of and without the fault or negligence of the [**LOCAL JURISDICTION**] (“force majeure”), including but not limited to acts of God, labor disputes, sudden actions of the elements, or actions of federal or state agencies or other local jurisdictions, the [**LOCAL JURISDICTION**] shall be excused from whatever performance is affected by such unforeseeable cause to the extent so affected, and such failure to perform shall not be considered a material violation or breach, provided that nothing in this Section shall be deemed to authorize any Party to violate ESA or CESA, and provided further that:

(1) The suspension of performance is of no greater scope and no longer duration than is required by the force majeure;

(2) Within two weeks after the occurrence of the force majeure the [**LOCAL JURISDICTION**] gives the USFWS and CDFG written notice describing the particulars of the occurrence;

(3) The [**LOCAL JURISDICTION**] uses its best efforts to remedy its inability to perform (however, this paragraph shall not require the settlement of any

strike, walk-out, lock-out or other labor dispute on terms which in the sole judgment of the [**LOCAL JURISDICTION**] are contrary to its interest); and

(4) When the [**LOCAL JURISDICTION**] is able to resume performance of its obligations, the [**LOCAL JURISDICTION**] shall give USFWS and CDFG written notice to that effect.

25.0 MISCELLANEOUS PROVISIONS

25.1 No Partnership. Except as otherwise expressly set forth herein, neither this Agreement nor the MSCP shall make or be deemed to make any Party to this Agreement the agent for or the partner of any other Party.

25.2 Successors and Assigns. This Agreement and each of its covenants and conditions shall be binding on and shall inure to the benefit of the Parties and their respective successors and assigns. The [**LOCAL JURISDICTION**] may only assign its rights and obligations under this Agreement with the approval of the USFWS and CDFG, which approval shall not be unreasonably withheld. Assignment or other transfer of the Section 10(a) Permit shall be governed by then-current USFWS regulations; under the applicable regulations in place on the Effective Date, a Section 10(a) permit may not be assigned or otherwise transferred.

25.3 Notice. Any notice permitted or required by this Agreement shall be delivered personally to the persons set forth below or shall be deemed given five (5) days after deposit in the United States mail, certified and postage prepaid, return receipt requested and addressed as follows or at such other address as any Party may from time to time specify to the other Parties in writing:

United States Fish and Wildlife Service
Assistant Regional Director
911 Northeast 11th Avenue
Portland, Oregon 97232-4181

United States Fish and Wildlife Service
Field Supervisor, Carlsbad Field Office
2730 Loker Avenue West
Carlsbad, California 92008

Director, California Department of Fish and Game
1416 9th Street, 12th Floor
Sacramento, California 95814

The [**LOCAL JURISDICTION**]

25.4 Entire Agreement. This Agreement supersedes any and all other Agreements, either oral or in writing, among the Parties with respect to the subject matter hereof and contains all of the covenants and agreements among them with respect to said matters, and each Party acknowledges that no representation, inducement, promise or agreement, oral or otherwise, has been made by the other Party or anyone acting on behalf of the other party that is not embodied herein.

25.5 Attorneys' Fees. If any action at law or equity, including any action for declaratory relief, is brought to enforce or interpret the provisions of this Agreement, each Party to the litigation shall bear its own attorneys' fees and costs, provided that attorneys' fees and costs recoverable against the United States shall be governed by applicable Federal law.

25.6 Duplicate Originals. This Agreement may be executed in any number of duplicate originals. A complete original of this Agreement shall be maintained in the official records of each of the Parties.

25.7 Federal Appropriations. The duty of the USFWS to carry out its obligations under the MSCP, the Subarea Plan and this Agreement shall be subject to the availability of appropriated funds.

25.8 Elected Officials. No member of Congress shall be entitled to any share or part of this Agreement, or to any benefit that may arise from it.

25.9 Consistency with Authorizing Statutes. This Agreement is consistent with the statutory authority of the USFWS under the ESA and other applicable federal laws, and of the CDFG under the CESA, the NCCP Act and other applicable state laws. Likewise, nothing in this Agreement is intended to nor shall be construed to limit or compromise the statutory authority of the USFWS or the CDFG under such laws.

IN WITNESS WHEREOF, THE PARTIES HERETO have executed this Implementing Agreement to be in effect as of the date last signed below.

BY _____ Date _____
 Regional Director
 United States Fish and Wildlife Service
 Portland, Oregon

BY _____ Date _____
 Director
 California Department of Fish and Game
 Sacramento, California

BY _____ Date _____
 The [**LOCAL JURISDICTION**]

Attachment B - MSCP Subarea Plan Outline



San Diego Button-celery

ATTACHMENT B MSCP SUBAREA PLAN OUTLINE

The following outline provides a guideline for local jurisdictions, regional public facility providers, and special districts to prepare subarea plans that describe their implementation of the MSCP Plan. Subarea plans prepared based on this outline meet the requirements of the California Natural Community Conservation Planning Act. These plans allow severability of individual implementing agreements entered into by the local governments and the wildlife agencies.

The outline describes sections that are either **REQUIRED** or **CONDITIONALLY REQUIRED**. Each participant should evaluate its individual situation to determine if a subarea plan section identified as **CONDITIONALLY REQUIRED** applies to that entity. This enables use of the same outline by local governments of different sizes and resources, and which may or may not have land within the MHPA. Individual subarea plans may be incorporated in the MSCP Plan or prepared separately.

1.0 Introduction (REQUIRED)

Subarea plans should incorporate an introduction that:

- 1.1 Describes how MSCP goals and guidelines are reflected in the subarea plan, and particularly how the Biological Preserve Design Checklist (MSCP Plan Section 3.6) was used to develop a preserve design.
- 1.2 Describes the process for exchanges and minor modifications to preserve boundaries and adjoining land uses and process for changes to improve conservation of biological core and linkage areas.
- 1.3 Describes the process for initiating and obtaining local jurisdiction and wildlife agency approval for minor changes to the subarea plan.

NOTE: Subarea plans may incorporate these sections by reference, or they may describe situations that apply to a specific jurisdiction.

2.0 Consistency with the MSCP (REQUIRED)

- 2.1 Statement of consistency that attests to subarea plan consistency with the MSCP.

3.0 Description of Subarea (REQUIRED)

- 3.1 Written description of subarea including area, population, general features (urban area, suburban area, rural area, amount of habitat remaining within subarea). The subarea may or may not be the jurisdiction's boundary and should include all land owned by the jurisdiction or local agency.
- 3.2 Written description of MHPA within subarea (size, location, core and linkage areas, habitat types; reference Tables 3-1 and 3-2 of the MSCP Plan).
- 3.3 Map(s) showing MHPA habitats within the subarea.

4.0 Covered Species List (REQUIRED)

The covered species list that applies to the entire MSCP study area (i.e., 85 species) may be incorporated by reference into the subarea plans and any differences described.

5.0 Land Use Considerations (CONDITIONALLY REQUIRED)

5.1 Land uses planned within the MHPA.

- a. Types of new development considered compatible with the preserve.
- b. Proposed compatible activities within preserved portion of MHPA if subarea plan is different from MSCP Plan.
- c. Description and treatment of existing legal nonconforming development or uses.

5.2 Land uses planned adjacent to the MHPA.

- a. Types of new development considered compatible with the preserve.

6.0 Project Design in Transition or Interface Areas Adjacent to the Preserve (CONDITIONALLY REQUIRED)

Use the MSCP Plan as a reference for describing actions to be taken in interface areas. Local jurisdictions should describe a review process to ensure sensitive design in interface areas.

- 6.1 Project design considerations needed to contain impacts of the land use within project boundaries.
- 6.2 Fencing, lighting, and signage requirements needed to confine development impacts to the project site.
- 6.3 Brush management needs on the proposed development property to protect the new development.
- 6.4 Roads proposed through the MHPA.
 - a. Design considerations that reduce impacts.
 - b. Culvert/bridge specifications that maintain habitat linkages within the MHPA.

7.0 Preserve Management (CONDITIONALLY REQUIRED)

- 7.1 A preserve management plan or schedule for preparation of a management plan.
- 7.2 Process for coordination with adjoining jurisdictions, if necessary, and a description of how preserve management for mitigation outside a jurisdiction's boundaries will be accomplished.

8.0 Planning Process for Conservation Areas Shown as Less Than 90% Conservation (CONDITIONALLY REQUIRED)

- 8.1 Local plan review and approval process to ensure that project plans meet requirements of the MSCP.
 - a. How will the Biological Preserve Design Checklist (MSCP Plan Section 3.6) be incorporated in final subarea and project plans?

9.0 Protection of Resources (REQUIRED)

- 9.1 Interim Protection: Description of existing or new local codes, ordinances, or policies to provide interim protection of habitat lands, both inside and outside the MHPA.
- 9.2 Permanent Protection: Description of how permanent protection of preserve lands in the MHPA will be addressed through easements, acquisition, other forms of dedication, or other appropriate methods.
- 9.3 Mitigation Plan: Description of how project plans inside and/or outside the MHPA will mitigate their impacts within the preserve system in an adequate amount. The MSCP Plan contains an estimate of how much land each participant will conserve as a result of mitigation and regulation.

10.0 MSCP Implementation Funding (REQUIRED)

- 10.1 Commitment to participation in regional or subregional funding strategies, planning, development, and implementation.

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