

1.2 DESCRIPTION OF SUBAREA

The City of San Diego subarea encompasses 206,124 acres within the MSCP study area. The subarea is characterized by urban land uses with approximately three-quarters either built out or retained as open space/park system. The 1997 population within the subarea was approximately 1.3 million. The City of San Diego MHPA represents a “hard line” preserve, in which boundaries have been specifically determined. It is considered an urban preserve which is constrained by existing or approved development, and is comprised of linkages connecting several large areas of habitat.

The City's MHPA is approximately 56,831 acres and includes approximately 47,910 acres within City jurisdiction, and additional City-owned lands (8,921 acres) in the unincorporated areas around San Vicente Reservoir, Otay Lakes and Marron Valley (**Table 1**). The City's MHPA comprises 29 percent of the regional MHPA and 58 percent of all habitat and vacant lands. The conserved lands within the City's MHPA total 53 percent of the vacant land in the City (61 percent of total habitat land in City). The City's MHPA preserves 77 percent of the core biological resource areas and 77 percent of the habitat linkages within its subarea. Lands which are outside of the biological core or linkage areas but are currently dedicated or designated as open space and provide some long term conservation value are included in the City's MHPA. In addition, a few small holdings of military properties within the City of San Diego have been included in the MHPA. While these lands are shown pictorially in the MHPA, nothing in the Subarea Plan or implementing ordinances will apply to federally-owned military property.

Approximately 90 percent of the MHPA lands (52,012 acres) within the City's subarea will be preserved for biological purposes. This is an overall average and in some cases 100 percent of an area will be preserved as a result of negotiations conducted during the Subarea planning process. Most of the following listed projects are approved with a certified EIR (See Section 9.17 and Exhibit H of the San Diego Implementing Agreement).

- Dennery Ranch
- Remington Hills
- Bougainvillea
- Hidden Trails
- Baldwin Otay Business Park
- Carmel Valley Neighborhood 10 Precise Plan
- NCFUA Subarea 5
- Montana Mirador
- Otay Corporate Center North and South
- Spring Canyon Planned Residential Development
- Black Mountain Ranch
- NCFUA Subarea 4
- Robinhood Ridge
- California Terraces

The majority (roughly 94 percent) of public lands would be preserved, except as noted in **Section 1.2.6**. Development impacts on private lands within the remainder of the MHPA will be restricted to no more than 25 percent of the parcel (75 percent preservation). Development within the MHPA will be directed to areas of lower quality habitat and/or areas considered less important to the long-term viability of the MHPA. Documented populations of covered species within the City's portion of the MHPA will be protected to the extent feasible. **Figure 1** identifies the City's MHPA

TABLE 1
VEGETATION COMMUNITY ACRES CONSERVED IN CITY OF SAN DIEGO AREAS;
CORNERSTONE LANDS, AND SAN PASQUAL VALLEY

Vegetation Community	Southern Area	Eastern Area	Urban Area	Northern Area	Hodges/San Pasqual	Otay Lakes¹	San Vicente¹	Marron Valley¹	TOTAL
Beach	1	0	55	60	0	0	0	0	115
Saltpan	127	0	9	0	0	0	0	0	136
Southern Foredunes	0	0	9	0	0	0	0	0	9
Southern Coastal Bluff Scrub	0	0	9	126	0	0	0	0	135
Coastal Sage Scrub	1257	3759	2901	3739	3443	1228	940	1685	18951
Maritime Succulent Scrub	236	0	78	367	0	0	0	0	681
Chaparral	0	1449	729	4225	2474	153	1159	236	10424
Southern Maritime Chaparral	0	0	20	1082	0	0	0	0	1102
Coastal Sage/Chaparral	0	11	1	65	9	1	6	3	95
Grassland	201	819	951	2649	176	121	23	1	4942
Southern Coastal Salt Marsh	237	0	120	579	0	0	0	0	936
Freshwater Marsh	10	2	5	94	69	52	1	0	232
Riparian Forest	62	75	73	152	137	38	1	77	614
Oak Riparian Forest	0	41	93	22	172	0	36	105	469
Riparian Woodland	0	24	261	283	1	0	0	0	567
Riparian Scrub	1172	197	424	421	389	23	15	106	2749
Oak Woodland	1	25	46	48	129	0	51	29	329
Torrey Pine Forest	0	0	0	144	0	0	0	0	144
Tecate Cypress	0	0	0	0	0	2	0	0	2
Eucalyptus Woodland	2	0	41	118	4	1	6	0	170
Open Water	689	35	322	222	623	929	787	0	3699
Disturbed Wetlands	110	3	11	80	218	2	148	10	583
Natural Flood Channel	4	24	9	1	229	3	3	23	295
Shallow Bays	91	0	134	0	0	0	0	0	225
Other Habitat ²	104	0	47	1	4	0	0	0	157
Habitat Subtotal	(5084)	(6463)	(6346)	(14477)	(8076)	(2552)	(3266)	(2278)	(47762)
Disturbed	86	227	155	438	585	56	21	100	2447
Agriculture	745	0	0	682	375	1	0	0	1803
TOTAL	5915	6690	6501	15597	9036	2609	3287	2378	52012

Note: Numbers may not sum to total as shown due to rounding. Acreage figures do not reflect exclusions of areas from the MHPA (see **Section 1.2.6**). The above acreages reflect the estimated conservation for each vegetation community based upon the application of various targeted percent conservation factors (e.g., 75%, 94%, 100%). All wetlands are assumed to be 100 percent conserved. The acreage figures are approximate and do not reflect minor MHPA boundary modifications made during the public hearing process.

1. Cornerstone lands outside City of San Diego jurisdiction.

2. Developed areas with habitat value.

1.2.1 Southern Area

The City proposes to preserve about three-quarters of the Otay Lakes/River Valley core area within its subarea (see also **Section 1.2.5** for a discussion of Otay Lakes).

Otay Mesa

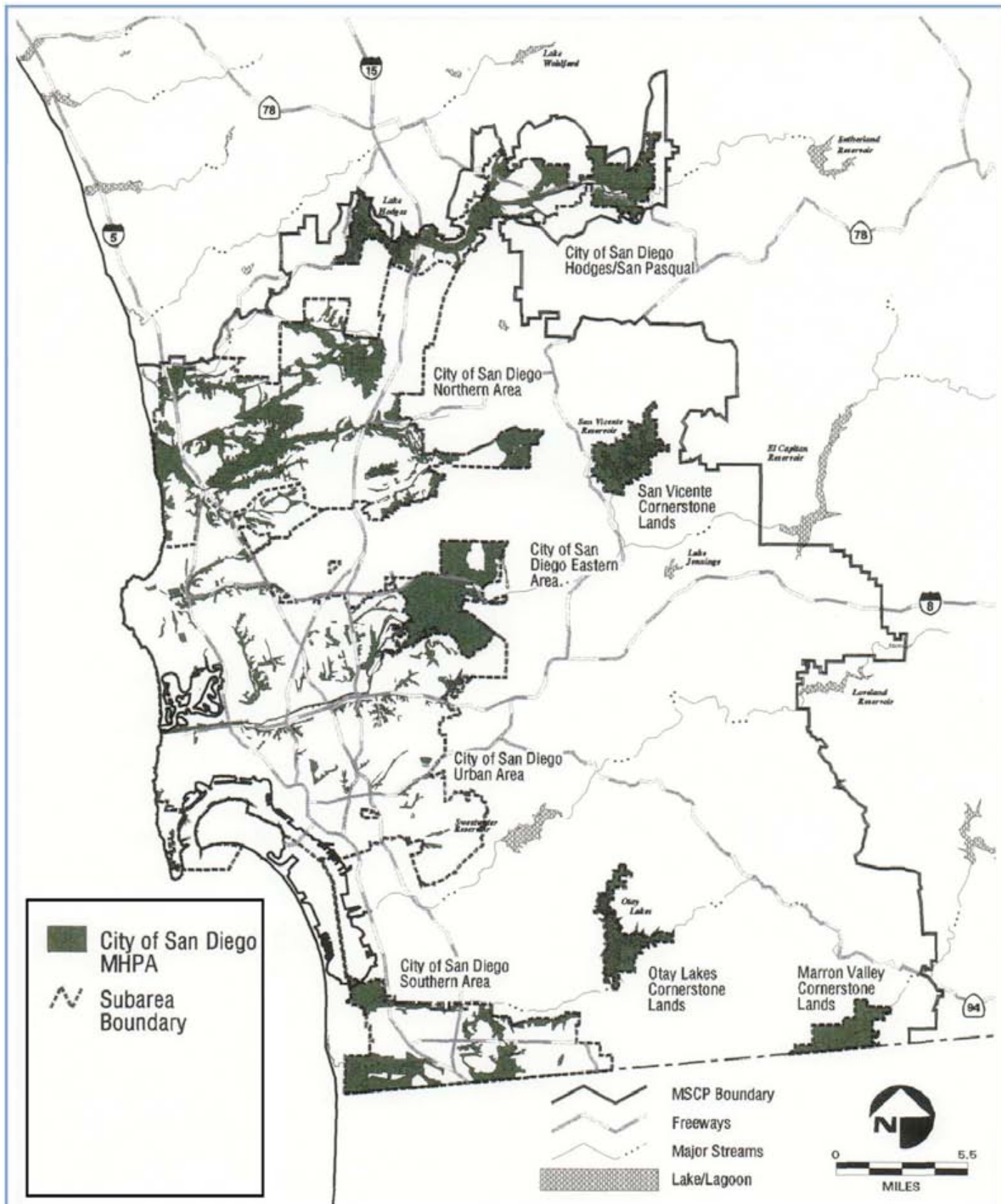
The Otay Mesa areas of the MHPA consists primarily of slopes and wide, deep canyons draining the vast mesas into the Otay River Valley or towards Mexico, with one linkage connecting south to north across Otay Mesa Road (see **Figure 2**). The optimum future condition envisioned for the Otay Mesa area is a network of open and relatively undisturbed canyons containing a full ensemble of native species and providing functional wildlife habitat and movement capability. Integrated into the canyon network will be recreational trails and border patrol access roads.

The Otay Mesa area is located generally east of Interstate 805 (I-805) and south of the Otay River Valley. It runs south to the international border and east to the edge of Johnson Canyon at the eastern edge of the City of San Diego. Mesa top land included in this area of the MHPA comprises several areas supporting grasslands and vernal pools directly north and northeast of Brown Field, as well as limited areas adjacent to Spring Canyon south of Otay Mesa Road and west of Cactus Road. The canyon areas of the MHPA contain primarily maritime succulent scrub and coastal sage scrub vegetation communities which include components unique to the border area.

The northwestern half of the Otay Mesa area consists predominately of Dennery Canyon and its tributaries, and is highly constrained by planned and approved development that completely surrounds and in some areas encroaches into the canyon areas. Virtually no mesas are included in the MHPA system here, which results in some constraints on the ecosystem function and natural processes in this area. This portion of the MHPA contains populations of sensitive plants and very high quality maritime succulent scrub, along with areas disturbed by historic grazing, off-road vehicle use, and a former bentonite mine.

The northeastern portion of the MHPA, north and east of Brown Field, includes mesa top lands containing tilled land, non-native grasslands high in native components, and vernal pools, along with coastal sage and succulent scrub on the north facing slopes adjacent to the Otay River Valley.

South of Otay Mesa Road, the MHPA incorporates most of Spring Canyon and its tributaries, as well as some areas of adjoining mesa top with vernal pools, grasslands, and coastal sage scrub. This portion connects to the MHPA lands on the west, which contain cactus wrens, through a narrow linkage across relatively flat lands in the southwest corner. The Spring Canyon area contains a mixture of pristine succulent scrub, regenerating



City of San Diego MHPA

MSCP Subarea Plan

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FIGURE

coastal sage scrub and severely eroded and disturbed lands. One of the primary causes of disturbance has been off-road vehicle use, including the border patrol in its pursuit of illegal immigrants crossing the international border. It is acknowledged that the border patrol will continue its activities in this area; therefore, management strategies have been identified in the management section of this Subarea Plan. The federal government has installed a fence and night lights along the international border with Mexico in an attempt to control illegal crossings.

This area supports prime examples of sensitive habitats of the coastal lowlands, such as high quality coastal sage scrub, maritime succulent scrub, wetlands, vernal pools and significant populations of MSCP covered species. These include San Diego thorn-mint, Orcutt's bird's-beak, Orcutt's brodiaea, variegated dudleya, San Diego button-celery, coast barrel cactus, Otay tarplant, prostrate navarretia, snake cholla, California orcutt grass, Otay Mesa mint, San Diego goldenstar, small-leaved rose, Riverside fairy shrimp, San Diego horned lizard, orange-throated whiptail, Wright's checkerspot butterfly, northern harrier, Cooper's hawk, golden eagle, peregrine falcon, burrowing owl, cactus wren and California gnatcatcher.

Otay River Valley

The City of San Diego's portion of the Otay River Valley generally consists of a moderately narrow and well-defined floodplain bounded on both sides by urban development. The area extends from I-805 to the Western Salt Ponds at the south end of the San Diego Bay (see **Figure 2**). The valley is currently a mixture of mining and processing activities, riparian scrub and forest, coastal sage scrub, disturbed habitats, several ponds and wetland mitigation areas, areas disturbed by trash dumping, off-road vehicle activities, salt extraction ponds and tilled land. The proposed South San Diego Bay National Wildlife Refuge boundary extends over the salt ponds area at the western end of the river valley, west of Interstate 5 (I-5).

The City of San Diego's boundaries with Chula Vista cut the floodplain in two and in a few areas jog back and forth in square patterns bearing no relationship to the natural processes or the floodplain. The MHPA follows these unnatural boundaries on its north side. Otherwise, the MHPA follows the boundaries of the areas designated for natural open space, riparian corridor, passive recreation, ponds, salt marsh and salt ponds by the proposed draft Otay Valley Regional Park in its "Progress Plan." A Joint Exercise of Powers Agreement between the Cities of San Diego and Chula Vista, and the County of San Diego has allowed conceptual planning to occur for the proposed Otay Valley Regional Park. This joint effort has developed an updated "Concept Plan."

The MHPA boundaries within the City of San Diego generally incorporate the river corridor and floodway areas, with some upland slopes on the south

side of the river that are currently in coastal sage scrub and disturbed habitats. Some of these slopes are separated from the river corridor by active recreational areas, creating disjunctive habitat areas. At the western end, where the river delta mouth opens into the San Diego Bay at its southern end, the area is diked into salt ponds. These ponds support several threatened and endangered species. The Otay River flows on a circuitous path around the salt ponds levees, encountering saltmarsh habitat and eventually drains into the San Diego Bay.

The Otay River Valley area supports a number of sensitive and target species while providing an important linkage from the Otay Mountain and Lakes area and beyond, to the San Diego Bay. Covered species include Otay tarplant, Orcutt's bird's-beak, variegated dudleya, San Diego barrel cactus, western snowy plover, long-billed curlew, Belding's savannah sparrow, large-billed savannah sparrow, light-footed clapper rail, California least tern, least Bell's vireo, and California gnatcatcher. In addition, various raptors, including the northern harrier, use the valley for foraging and nesting.

MHPA Guidelines

The City has developed the following general guidelines for the Otay Mesa and Otay River Valley areas of the MHPA. The notes under "MHPA Guidelines" include features that have been incorporated into the MHPA and thus were considered in the evaluation for species coverage. The guidelines are required to be implemented for take authorization, except if noted with an asterisk (*). As appropriate, the MHPA guidelines noted with an asterisk should be considered during preserve assembly. The notes are keyed to the extent possible to specific locations on the accompanying figure for the area. The notes include: 1) approved project requirements (e.g., Note #C1); 2) guidelines to be incorporated into the design of future projects within or adjacent to the MHPA (e.g., Note #D11); 3) clarifications of the MHPA design in a particular area (e.g., Note #A8); or 4) locations of existing and future uses within or adjacent to the MHPA (e.g., Note #B8). Responsibility for implementation will be determined at the time of discretionary approvals for individual projects. Except if noted, the MHPA guidelines do not apply to existing approved site-specific project entitlements, unless a modification, revision, or amendment to the entitlement is requested by the property owner.

1. Maintain and/or provide trail access for border patrol use around the rim of canyons, where feasible.* Motorized off-road vehicle use in the MHPA should be prohibited except by border patrol, MHPA (Preserve) managers or emergency vehicles.
2. In the area south of proposed State Route 905 (SR-905), minimize road crossings of Spring Canyon. Where road crossings must occur, use bridges or culverts (see #3 below). Manufactured slopes adjacent to roadways should be revegetated with appropriate native vegetation.

3. Unless noted otherwise, culvert dimensions should be at least 30 feet wide by 15 feet high and, where feasible, have a maximum 2:1 length-to-width ratio. The floor of the culvert must be natural/soft bottom, and the ceiling constructed using skylights where possible to provide adequate visibility for wildlife.
4. Vernal pool areas should be preserved per adopted regulations. Where development is considered, the vernal pools should be assessed for transplantation of sensitive plants and soils containing the propagule (i.e., seeds, eggs, cysts) of sensitive flora and fauna. Any wetland impacts will be mitigated for losses to meet the state and federal goal of “no net loss of wetland function and value.” Mitigation should occur in accordance with requirements to be determined through the 404 and 1601 permitting process for individual projects.

The following specific guidelines for the Otay Mesa and Otay River Valley areas are shown as locations A1 through A14 on **Figure 2**:

- A1. Improve the wildlife/pedestrian corridor in Dennery Canyon by incorporating two culverts in Dennery Canyon Road. Revegetate the disturbed portions of Dennery Canyon with coastal sage scrub species.
- A2. Modify street alignments to retain additional natural areas. Reduce street classifications and roadbed width where possible to reflect reduced development.*
- A3. The Robinhood Ridge project has a legal right to develop under an existing approved Tentative Map. In the event that the approved map expires, future development proposals would be required to conform to the MHPA boundaries as depicted by the Subarea Plan and associated land use regulations.
- A4. Provide a culvert under Otay Mesa Road to facilitate wildlife crossing. Ideally, the culvert would provide both limited pedestrian and wildlife access from the Otay River Valley Regional Park through Dennery Canyon to areas to the south in Spring Canyon. However, if this dimension is not possible due to engineering constraints, the culvert must be large enough to allow mid-size mammal and predator undercrossing.
- A5. Enhance/restore disturbed areas within the wildlife crossing. This will entail revegetation with coastal sage scrub species and if necessary possible experimental restoration of graded vernal pools immediately north of Otay Mesa Road. The revegetation effort should not use medium to tall shrubs and trees, to address border patrol concerns. Provide fencing to direct animals into the undercrossing.

- A6. The SR-905 design shall include a bridge-type structure over the wildlife corridor south of Otay Mesa Road. This crossing shall be enhanced with grading and revegetation.
- A7. Prior to any development impacts in this area, mitigation must include collecting and reseeding vernal pool species into other preserved Otay Mesa pools.
- A8. Final configuration of this area is subject to redesign of approved maps.
- A9. The MHPA designation on the Baldwin property at the far northeastern end of the Otay Mesa area will need to be fenced at the time of development. Depending on the future use of adjacent areas outside the MHPA, the frequency and monitoring for disturbance, fence repairs, and other maintenance will be determined at the time of development. Due to the sensitivity of the vernal pools and other sensitive species in this area, public access should be carefully directed.
- A10. Upon completion of aggregate extraction activities, revegetate extraction areas within and adjacent to the MHPA with native vegetation.
- A11. The existing Western Salt Company salt extraction use is expected to continue for an undetermined period. The sensitive animal and plant species should continue to be managed to ensure protection. If the extraction use is terminated, the site should be converted to a use compatible with the resource goals and objectives of the MHPA and other regulations and policies applicable to the site, or enhanced/restored.
- A12. Work with SANDAG, South Bay jurisdictions, and the Bayshore Bikeway Committee to develop a bike path in or adjacent to the MHPA in the South San Diego Bay area. Design of the bikeway should minimize disturbance to natural areas.*
- A13. If Hollister Street is widened or improved, a bridge facility should be used to elevate the road above the floodplain at least 12 feet (bottom of bridge to existing grade). The bridge should be designed to allow for maximum flood flows, provide for riparian woodland to regenerate and for sediments to build over time, and provide for wildlife, pedestrian, and equestrian movement.
- A14. The MHPA boundaries within the proposed Special Study Areas of the Otay-Nestor Community Plan may be modified to reflect future changes to land use designations and may require an amendment to the Subarea Plan. Any such modifications shall include a wildlife corridor approximately 1,000 feet in width, preserving connections between the Otay River and San Diego Bay.

Tijuana Estuary and Tijuana River Valley

The Tijuana Estuary and adjacent Tijuana River Valley comprise one of the largest and most important wetland systems in San Diego County. The estuary supports the most extensive saltmarsh and saltpan habitat within the MSCP area, and small areas of southern foredunes occur adjacent to this system at Monument Beach. The City proposes to preserve approximately 94 percent of the Tijuana Estuary/Tijuana River Valley core area within its subarea (see **Figure 2**).

The Tijuana River Valley area generally consists of a broad floodplain with high natural mesas to the south, bounded on three sides by urban development, and on the fourth by the Pacific Ocean. The valley floodplain is a mixture of agricultural fields, equestrian facilities, rural housing, riparian woodland and disturbed habitats, several ponds and a lake created by sand mining, the riverbed and pilot channel, and areas disturbed by dumping, off-road activities, grading and recontouring (berming), and the effects of flooding. The mesas and canyon areas contain healthy coastal sage and maritime succulent scrub communities, some chaparral and disturbed riparian scrub, agricultural fields on Spooner's Mesa, and additional disturbed areas in the Border Highlands area and in the canyons.

The southern boundary of the area is the international border, with the urbanized city of Tijuana, Mexico lying immediately to the south on the other side. To the east lies the community of San Ysidro; to the north, Otay Mesa Nestor and Imperial Beach; and to the west lies a National Estuarine Research Reserve on the edge of the City's jurisdiction to the Pacific Ocean.

The MHPA incorporates the 25-year floodplain within the City's jurisdiction and much of the 100-year floodplain in the valley. The MHPA also includes the mesa and canyon areas on the south side of the floodplain and the Dairy Mart Ponds, some of which are in the San Ysidro Community Plan.

The county of San Diego is developing a Regional Park in the Tijuana River Valley that will include a mixture of recreational opportunities, sustainable agriculture, and native habitats. The entire park area and the management framework governing its development are considered to be generally compatible with the MHPA even though many of the proposed uses are not specifically habitat related. Portions of the valley not included in the MHPA will remain in an open space designation that allows for more active open space uses (e.g., agriculture, recreation), giving the County flexibility to plan the regional park. Areas within the 25-year floodplain, currently leased for agriculture are expected to remain in these uses for up to 10-20 years, depending on flooding and other considerations. However, in the long term these areas will be evaluated for restoration and widening of the riparian corridor consistent with the County's Framework Management Plan and the

MSCP. The area is unique in its relationships with local, state, federal, and international agencies and citizen groups, and in its issues, including a proposal to consider the valley a United Nations designated Biosphere Reserve which incorporates a sustainable, multiple use, and conservation concept.

Covered species in this area include Shaw's agave, Orcutt's bird's-beak, wart-stemmed ceanothus, San Diego barrel cactus, least Bell's vireo, light-footed clapper rail, Belding's savannah sparrow, California least tern, Western snowy plover, northern harrier, Cooper's hawk, and California gnatcatcher.

MHPA Guidelines

The following specific guidelines for the Tijuana River Valley area are shown as locations A15 through A19 on **Figure 2**. The notes under "MHPA Guidelines" include features that have been incorporated into the MHPA and thus were considered in the evaluation for species coverage. The guidelines are required to be implemented for take authorization, except if noted with an asterisk (*). As appropriate, the MHPA guidelines noted with an asterisk should be considered during preserve assembly. The notes are keyed to the extent possible to specific locations on the accompanying figure for the area. The notes include: 1) approved project requirements (e.g., Note #C1); 2) guidelines to be incorporated into the design of future projects within or adjacent to the MHPA (e.g., Note #D11); 3) clarifications of the MHPA design in a particular area (e.g., Note #A8); or 4) locations of existing and future uses within or adjacent to the MHPA (e.g., Note #B8). Responsibility for implementation will be determined at the time of discretionary approvals for individual projects. Except if noted, the MHPA guidelines do not apply to existing approved site-specific project entitlements, unless a modification, revision, or amendment to the entitlement is requested by the property owner.

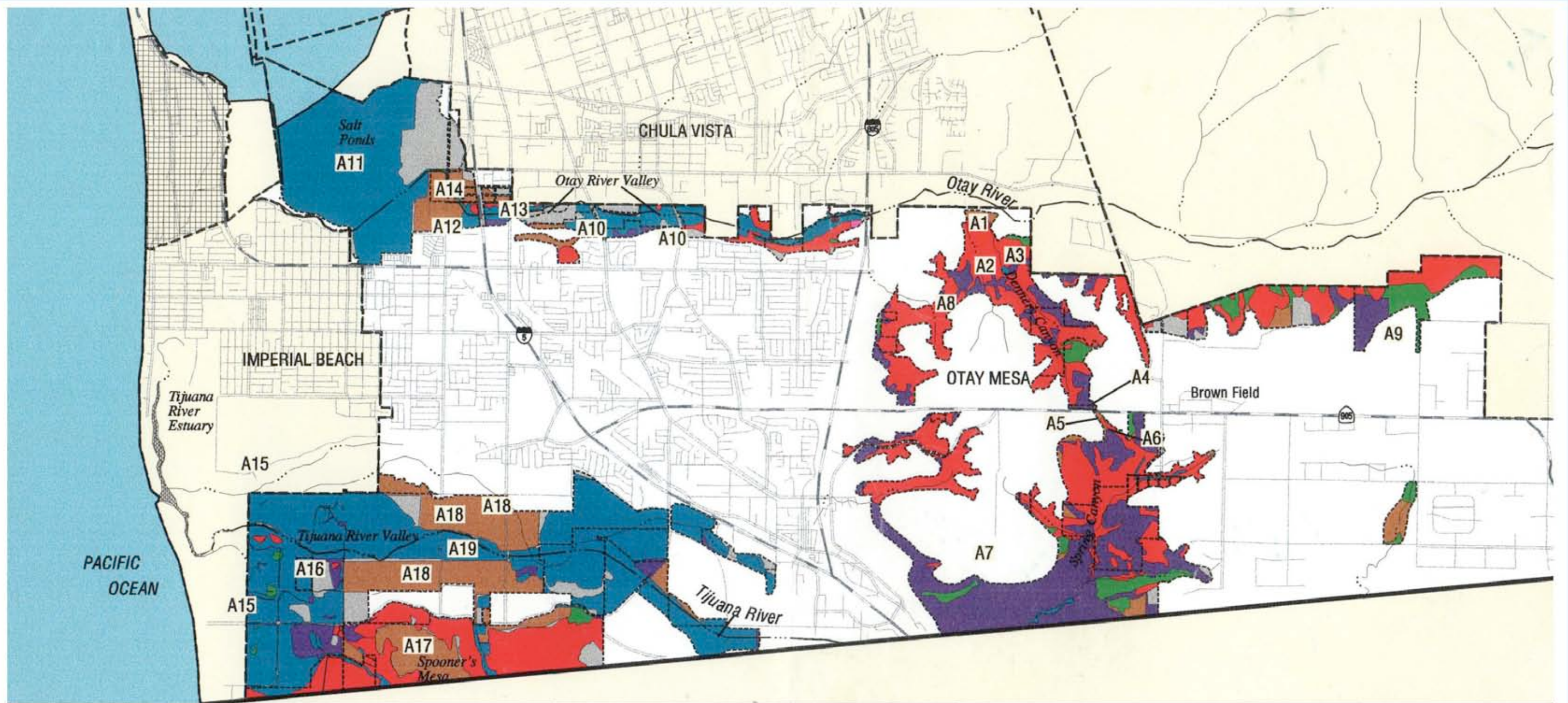
A15. Maintain existing reserve (estuary) and park uses.*

A16. Maintain a buffer around all wetland areas.

A17. Maintain existing agricultural uses on Spooner's Mesa, with a long-term goal of phased restoration to coastal sage scrub, maritime succulent scrub or native grasslands.

A18. Maintain agricultural use on County-owned lands, with a long-term goal of restoration to native vegetation where possible, consistent with the County's Framework Management Plan.

A19. Retain and enhance, where possible, existing riparian habitat along the Tijuana River.



Vegetation Communities

Coastal Sage Scrub	Oak Woodland
Chaparral	Coniferous Forest
Coastal Sage Scrub/Chaparral	Beach/Foredunes
Grassland	Eucalyptus Woodland
Riparian/Wetlands	Disturbed Habitat
	Shallow Bay

Letter/number indicates MHPA Guideline. See text.

Developed
Agriculture

Subarea Boundary
MHPA Boundary
Water District
Subarea
Military Lands

Base Map Features

MSCP Boundary	Major Stream
U.S. - Mexico Border	Minor Stream
Freeway	Lake/Lagoon
Major Road	
Minor Road	



Conserved Vegetation Communities in Southern Area

MSCP Subarea Plan

2

FIGURE

1.2.2 Eastern Area

The Eastern area includes the remaining undeveloped lands in the eastern portion of the City of San Diego including the area known as East Elliott (approximately 2,300 acres), and Mission Trails Regional Park (approximately 5,700 acres (see **Figure 3**). The eastern edge of this area forms the San Diego border with the City of Santee.

NAS Miramar

A conservation plan for NAS Miramar has not been completed at this time. The City's MHPA design will not preclude corridor options on Miramar and assumes there will be a connection between East Elliott and the General Dynamics property/Beeler Canyon area to the north through Miramar (**Figure 3**, B1*). Miramar is in the process of transferring operational control from the Navy to the Marine Corps as part of the base realignment and closure program. The Navy and Marine Corps are currently in the planning process to determine the facilities needed to meet Miramar's new mission requirements as a Marine Corps Air Station (MCAS). The Department of the Navy is preparing a habitat conservation plan that will identify Habitat Management Zones at Miramar. Miramar has prepared a Comprehensive Natural Resources Management Plan which provides the basis and criteria for the management and decisions regarding natural and cultural resources. Coastal sage scrub and vernal pools are two key resources to be addressed by the Miramar plan. Habitat linkages to the regional habitat preserve network also will be addressed.

East Elliott and Mission Trails Regional Park

The City proposes to preserve about 80 percent of the Mission Trails/East Elliott/Santee core area within its subarea (excluding Miramar). Important resources in this area include coastal sage scrub, riparian scrub, and vernal pools. Significant populations of willowy monardella, San Diego thorn-mint, Orcutt's brodiaea, variegated dudleya, San Diego goldenstar, San Diego ambrosia, least Bell's vireo, and California gnatcatchers are a few of the covered species that occur in this area.

The majority of Mission Trails Regional Park is owned and maintained by the City of San Diego, with minor portions both jointly and separately owned by the County of San Diego, and the state of California. Most of the East Elliott community is privately owned with the central portion (approximately 500 acres) owned and operated as the County of San Diego Sycamore Landfill. State Route 52 (SR-52) generally divides Mission Trails Regional Park from East Elliott, though bridges span Spring and Oak Canyons and provide wildlife movement through both areas and further north to Miramar.

MHPA Guidelines

The following specific guidelines for the Eastern area are shown as locations B2 through B14 on **Figure 3**. The notes under “MHPA Guidelines” include features that have been incorporated into the MHPA and thus were considered in the evaluation for species coverage. The guidelines are required to be implemented for take authorization, except if noted with an asterisk (*). As appropriate, the MHPA guidelines noted with an asterisk should be considered during preserve assembly. The notes are keyed to the extent possible to specific locations on the accompanying figure for the area. The notes include: 1) approved project requirements (e.g., Note #C1); 2) guidelines to be incorporated into the design of future projects within or adjacent to the MHPA (e.g., Note #D11); 3) clarifications of the MHPA design in a particular area (e.g., Note #A8); or 4) locations of existing and future uses within or adjacent to the MHPA (e.g., Note #B8). Responsibility for implementation will be determined at the time of discretionary approvals for individual projects. Except if noted, the MHPA guidelines do not apply to existing approved site-specific project entitlements unless a modification, revision, or amendment to the entitlement is requested by the property owner.

B2. Maintain the existing County landfill with eventual restoration and use as a passive park/open space preserve.* An adequate buffer (1,000 feet) should be maintained around the landfill. Development of a future closure plan for the landfill shall incorporate measures to transition from the future use to the MHPA. If the landfill site is redeveloped as an active park, consideration of adjacency issues such as lighting and noise will be required.

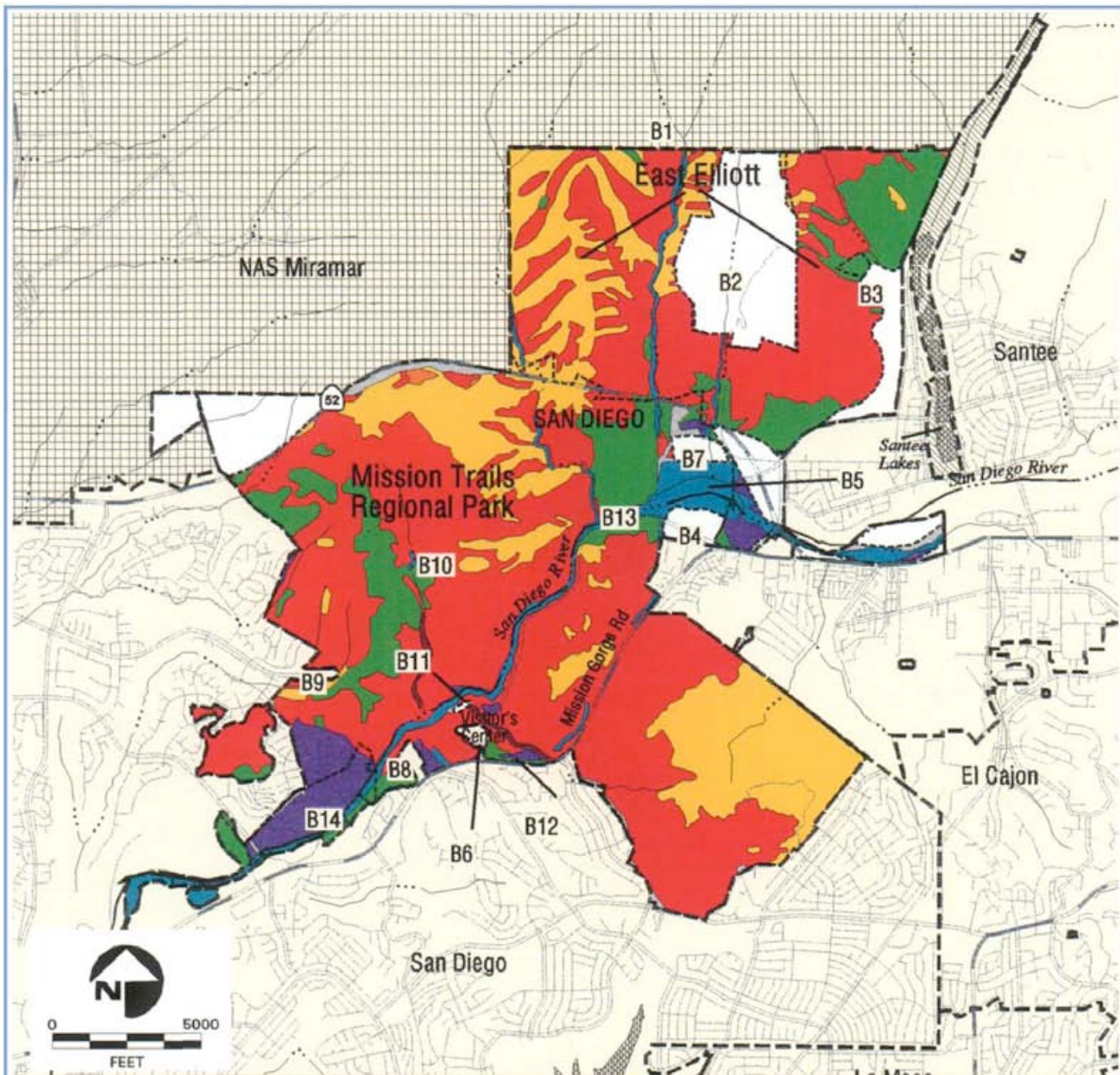
B3. In the event that a future landfill is located in East Elliott, the area shown for development will revert to open space and the landfill development footprint and ancillary uses will be outside of the MHPA. Development of a landfill would not require an amendment to the Subarea Plan if the extent of impacts associated with the landfill are essentially equivalent to the eastern development. The determination of equivalency shall be based on the following:

- The landfill development footprint and all ancillary uses (roads, recycling centers, etc.) shall not exceed 25 percent of the MHPA area in East Elliott (including the area that reverts to open space).
- Active landfill operations including ancillary uses and all other areas of native habitat modification shall not exceed 280 acres.
- Areas that are no longer receiving waste shall be restored with native species that will not adversely affect the function of the closed landfill, while fulfilling maintenance measures required by law. Areas will be considered part of the active landfill operations until a habitat restoration program is initiated.

- Development of the landfill shall not preclude wildlife movement through more than one of the three wildlife corridors in East Elliott (i.e., Spring, Oak or Quail Canyon).

All mitigation for landfill impacts, including ancillary uses, should occur in the East Elliott area. Evaluation of any impacts to covered species shall occur at such time that a landfill footprint is determined. Avoidance, translocation, or other mitigation measures will be determined at that time.

- B4. A condition of coverage for San Diego ambrosia requires 90 percent preservation of the population at the Mission Trails Regional Park site.
- B5. Pursue an active cowbird management program, where deemed necessary, in areas adjacent to the San Diego River.
- B6. Active park uses in Mission Trails Regional Park are located outside of and adjacent to the MHPA. Uses include campgrounds, visitors center, interpretive centers, and archery range.*
- B7. Potential location of a future 30-40 acre equestrian center and buffer. This is a conceptual location only and may be adjusted in order to minimize disturbance to adjacent land uses and biological resources.*
- B8. Location of a future day use area, water pump station and associated parking lot.*
- B9. Location of a future western staging area.*
- B10. Passive uses identified in the Mission Trails Regional Park Master Development Plan are considered compatible within the MHPA, unless otherwise noted.*
- B11. Potential future site for an archery range.*
- B12. Location of future picnic areas. Access will be provided along existing trails or unpaved roads.*
- B13. Location of the existing Old Mission Dam parking lot and future restrooms.*
- B14. Upon cessation of extractive uses, this site should be reclaimed/restored for open space.



Vegetation Communities

	Coastal Sage Scrub		Coniferous Forest
	Chaparral		Beach/Foredunes
	Coastal Sage Scrub/Chaparral		Eucalyptus Woodland
	Grassland		Disturbed Habitat
	Riparian/Wetlands		Shallow Bay
	Oak Woodland		Developed
			Agriculture

Letter/number indicates MHPA Guideline. See text.

Base Map Features

	Subarea Boundary		MSCP Boundary
	MHPA Boundary		U.S. - Mexico Border
	Water District		Freeway
	Subarea		Major Road
	Military Lands		Minor Road
			Major Stream
			Minor Stream
			Lake/Lagoon



Conserved Vegetation Communities in Eastern Area

MSCP Subarea Plan

3

FIGURE

1.2.3 Urban Areas

Point Loma

The City proposes to preserve approximately three quarters of the habitat within its subarea in the Point Loma core area (excluding the Point Loma Naval Complex) (**Figure 4**). Important resources in this area include coastal bluff scrub, maritime succulent scrub, southern foredunes, Shaw's agave, wart-stemmed ceanothus, snake cholla, roosting seabirds, and migratory birds.

A Natural Resources Management Plan (NRMP) for Point Loma has been prepared by the Navy in cooperation with the USFWS, National Park Service, Veterans Administration, U.S. Coast Guard, and the City of San Diego, in accordance with executive orders and Navy guidelines mandating a balanced program for the management of natural resources on naval installations. The NRMP primarily covers the Point Loma Naval Complex (five naval commands) and Cabrillo National Monument (**Figure 4, E1**). The NRMP includes long-term, in-place mitigation that will allow the Navy to proceed with planned development and continue to achieve its military mission and mandate, while providing good stewardship of the sensitive and unique natural resources under its jurisdiction. The NRMP document was finalized in July 1994. The Navy currently is developing a draft Memorandum of Understanding (MOU) with the USFWS, and is pursuing the formal Navy Ecological Reserve Area (ERA) designation from the Chief of Naval Operations. The Point Loma NRMP proposes to set aside approximately 614 acres of native habitat or other vegetation with habitat value (e.g., eucalyptus woodland) in an ERA. Lands within the ERA will constitute approximately 77 percent of the habitat available on Point Loma. The NRMP ensures relatively high preservation of most of the sensitive associations onsite, including southern foredunes, coastal bluff scrub, maritime succulent scrub, Diegan coastal sage scrub, intertidal habitat, and cultivated Torrey pine forest.

Preservation of southern maritime chaparral (62 percent) is expected to be increased through revegetation/habitat enhancement measures. The ERA will protect at least 15 of the 18 NRMP target plant species (including all six MSCP target plant species found on Point Loma) and all of the target animal species. In addition to the high percentage of sensitive habitats and species included within the ERA, the final ERA design will provide a high degree of connectivity between reserved habitats and will include the majority of lands designated as Very High and High biological value in the NRMP Habitat Evaluation Model.

Other Urban Habitat Areas

Urban habitat areas within the City of San Diego included in the MHPA are primarily concentrated in existing urbanized locations, and include areas not

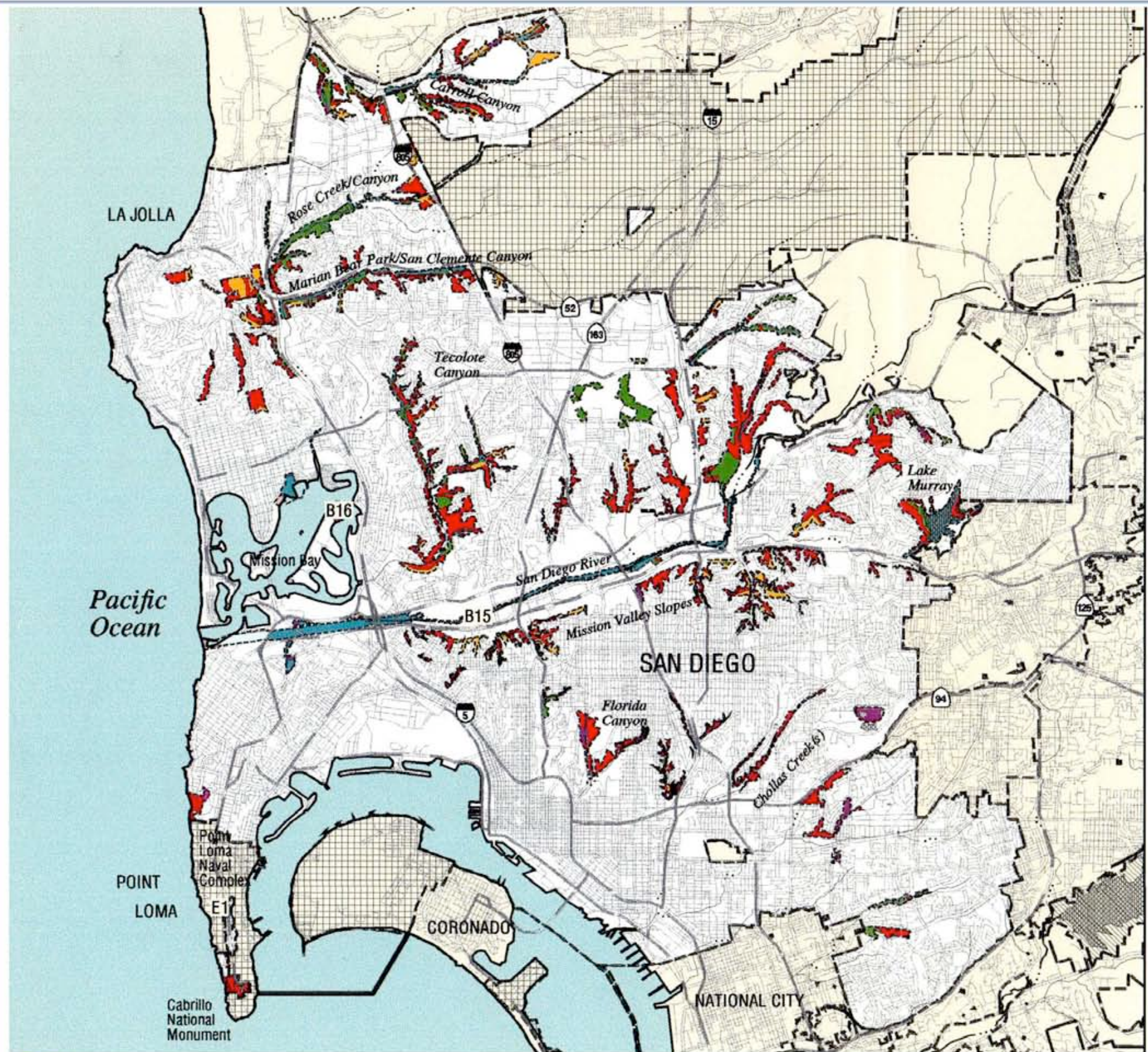
incorporated in the major planned areas of the MHPA (see **Figure 4**). The majority of these lands consist of canyons with native habitats in relative proximity to other MHPA areas providing habitat. These areas contribute in some form to the MHPA, either by providing habitat for native species to continue to reproduce and find new territories, or by providing necessary shelter and forage for migrating species (mostly birds).

The urban habitat areas within the City's MHPA include existing designated open space such as Mission Bay, Tecolote Canyon, Marian Bear Memorial Park, Rose Canyon, San Diego River, the southern slopes along Mission Valley, Carroll and Rattlesnake Canyons, Florida Canyon, Chollas Creek and a variety of smaller canyon systems dispersed throughout the more urban areas of the City. These areas contain a mix of habitats including coastal sage scrub, grasslands, riparian/wetlands, chaparral, and oak woodland. The lands are managed pursuant to existing Natural Resource Management Plans, Landscape Maintenance Districts, as conditions of permit approval, or are currently unmanaged. The areas also contribute to the public's experience of nature and the local native environment.

Covered species found in these areas include Orcutt's brodiaea, wart-stemmed ceanothus, short-leaved dudleya, San Diego button-celery, San Diego barrel cactus, willow monardella, San Diego goldenstar, snake cholla, California gnatcatcher, least Bell's vireo, California least tern, Belding's savannah sparrow, coastal cactus wren, western snowy plover, light-footed clapper rail, mule deer, and orange-throated whiptail.

MHPA Guidelines

The following specific guidelines for the urban area are shown as locations B15 and B16 on **Figure 4**. The notes under "MHPA Guidelines" include features that have been incorporated into the MHPA and thus were considered in the evaluation for species coverage. The guidelines are required to be implemented for take authorization, except if noted with an asterisk (*). As appropriate, the MHPA guidelines noted with an asterisk should be considered during preserve assembly. The notes are keyed to the extent possible to specific locations on the accompanying figure for the area. The notes include: 1) approved project requirements (e.g., Note #C1); 2) guidelines to be incorporated into the design of future projects within or adjacent to the MHPA (e.g., Note #D11); 3) clarifications of the MHPA design in a particular area (e.g., Note #A8); or 4) locations of existing and future uses within or adjacent to the MHPA (e.g., Note #B8). Responsibility for implementation will be determined at the time of discretionary approvals for individual projects. Except if noted, the MHPA guidelines do not apply to existing approved site-specific project entitlements, unless a modification, revision, or amendment to the entitlement is requested by the property owner.



Vegetation Communities

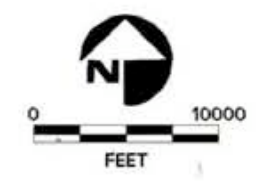
- Coastal Sage Scrub
- Chaparral
- Coastal Sage Scrub/Chaparral
- Grassland
- Riparian/Wetlands
- Oak Woodland
- Coniferous Forest
- Beach/Foredunes
- Eucalyptus Woodland
- Disturbed Habitat
- Shallow Bay
- Developed
- Agriculture

- Subarea Boundary
- MHPA Boundary
- Water District Subarea
- Military Lands

Base Map Features

- MSCP Boundary
- U.S. - Mexico Border
- Freeway
- Major Road
- Minor Road
- Major Stream
- Minor Stream
- Lake/Lagoon

Letter/number indicates MHPA Guideline. See text.



Conserved Vegetation Communities in Urban Area

MSCP Subarea Plan

B15. Native vegetation shall be restored as a condition of future development proposals along this portion of the San Diego River corridor.

B16. Management of the least tern area shall be pursuant to the adopted Mission Bay Master Plan and associated Natural Resources Management Plan (1990).

1.2.4 Northern Area

The City proposes to include about two-thirds of the Los Peñasquitos Lagoon/Canyon Del Mar Mesa core area within its subarea (see **Figure 5**). This core resource area encompasses one of the few intact natural open space areas in coastal San Diego County that is still linked to larger expanses of habitat to the east. Los Peñasquitos Canyon is a regional corridor linking coastal habitats to inland habitats on Black Mountain and in Poway. Important resources in this area include saltmarsh, coastal sage scrub and southern maritime chaparral. Covered species include San Diego thorn-mint, Shaw's agave, Del Mar manzanita, Encinitas baccharis, Orcutt's brodiaea, wart-stemmed ceanothus, short-leaved dudleya, variegated dudleya, San Diego button-celery, San Diego barrel cactus, willow monardella, San Diego goldenstar, Torrey pine, San Diego mesa mint, Riverside fairy shrimp, southwestern pond turtle, San Diego horned lizard, orange-throated whiptail, California brown pelican, white-faced ibis, Canada goose, northern harrier, Cooper's hawk, golden eagle, western snowy plover, California least tern, burrowing owl, coastal cactus wren, California gnatcatcher, California rufous-crowned sparrow, Belding's savannah sparrow, grasshopper sparrow, mountain lion and mule deer.

The northern area encompasses a large amount of developed and undeveloped land stretching from the Black Mountain Ranch area of the North City Future Urbanizing Area (NCFUA) south to Lopez Canyon in Los Peñasquitos Canyon Preserve in Mira Mesa, and from the coast to Interstate 15 (I-15). The area encompasses the communities of Carmel Valley, Sorrento Hills, Torrey Pines, Rancho Penasquitos, a portion of Mira Mesa, the Via de la Valle Specific Plan area, and the entire 12,000-acre NCFUA. In addition, the area also includes Torrey Pines State Preserve, the Los Peñasquitos Lagoon, and Los Peñasquitos Canyon Preserve. The majority of the undeveloped private land is disturbed habitat, much of it having been farmed or grazed for decades or longer.

The MHPA in this area is largely comprised of regional linkages leading to biological core areas within existing reserves and parks. In the north lies the area surrounding Black Mountain Park, much of which serves as core area immediately in and surrounding the park, with the remainder of the lands allowing connections to the San Dieguito River Valley to the north and west, and providing one end of a lengthy regional corridor to the south. The core area contains valuable native habitats: mixed and chamise chaparral, coastal

sage scrub, and native grassland. The corridor/linkage areas currently contain much non-native and disturbed habitat, including invasive exotic species, and are in need of enhancement/restoration. The corridors also contain areas with non-native grasslands that are considered important raptor foraging habitats.

The central portion of the northern area is comprised of the heart of the City's North City Future Urbanizing Area, known as NCFUA Subareas 2, 3, 4 and 5. These encompass the San Dieguito Lagoon area, Gonzales Canyon, and most of the area lying between the communities of Carmel Valley and Rancho Peñasquitos. NCFUA Subareas 3 and 4 contain only extended regional corridors, linking to the north, west and south. These corridors primarily lie in canyons or drainages (e.g., La Zanja Canyon, McGonigle Canyon and Gonzales Canyon), and the majority require restoration to enhance their long-term habitat value, as they are currently in agriculture and disturbed lands. The NCFUA Subarea 5 contains core habitat area on the Del Mar Mesa north of Los Peñasquitos Canyon Preserve as well as linkages containing disturbed lands and habitat leading toward Carmel Valley and Carmel Creek. NCFUA Subarea 2 contains a portion of the San Dieguito Lagoon enhancement area east of the I-5 freeway. The proposed MHPA boundary in this area is consistent with the open space configuration of the NCFUA Framework Plan, and contains wetlands including the San Dieguito River, limited coastal sage, chaparral, grasslands, and agriculturally disturbed lands.

The southwestern portion of this area contains Torrey Pines State Park, Crest Canyon, Los Peñasquitos Lagoon, and Los Peñasquitos Canyon Preserve which are core biological resource areas with high to moderate habitat values. Los Peñasquitos Canyon Preserve contains large expanses of non-native grassland, and contains some restoration opportunities within its boundaries. This portion of the MHPA also contains linkages and habitat within the southern Carmel Valley neighborhoods (e.g., 8, 8A and 10) and the Carmel Valley Restoration and Enhancement Project (CVREP), which is intended to serve as a wildlife linkage to the Los Peñasquitos Lagoon and Torrey Pines State Park. Carmel Valley Neighborhood 10 contains two major wildlife corridors that converge at CVREP, where they link to adjacent core habitat on and north of Neighborhood 8A. Neighborhood 8, where CVREP is located, also contains existing houses, ranches, and rural-oriented businesses. These are incorporated within the MHPA boundary as low-density areas conditionally compatible with the MHPA.

The linkages to Torrey Pines State Reserve and Los Peñasquitos Lagoon from the east are tentative at best. In the south, a rip-rap channel winds west from Los Peñasquitos Canyon, underneath freeways, local roads and railroad tracks to gain access to the lagoon and state park. The northern connection to the lagoon is located at the western terminus of CVREP, with six to eight feet of clearance under the I-5 freeway to allow for Carmel Creek to drain into the lagoon. This wildlife connection is constrained as well.

The eastern portion of the northern area includes linkages and open space within the Rancho Peñasquitos, Mira Mesa, Sabre Springs, Scripps Ranch and Miramar Ranch communities, Miramar Lake and the General Dynamics property/Beeler Canyon area. This area includes core habitat in the Miramar-Poway areas as well as linkages that extend from Los Peñasquitos Canyon Preserve east through Sabre Springs into the Miramar Lake area, MCAS Miramar and Sycamore Canyon Regional Park. The proposed MHPA in this area is consistent with the open space of the existing communities and includes a large block of habitat in the easternmost portion. This block of habitat is a mixture of chaparral and coastal sage scrub and is located immediately west of Sycamore Canyon Regional Park and north of MCAS Miramar.

MHPA Guidelines

Carmel Valley

The following specific guidelines for the northern area are shown as locations C1 through C8 on **Figure 5**. The notes under “MHPA Guidelines” include features that have been incorporated into the MHPA and thus were considered in the evaluation for species coverage. The guidelines are required to be implemented for take authorization, except if noted with an asterisk (*). As appropriate, the MHPA guidelines noted with an asterisk should be considered during preserve assembly. The notes are keyed to the extent possible to specific locations on the accompanying figure for the area. The notes include: 1) approved project requirements (e.g., Note C1); 2) guidelines to be incorporated into the design of future projects within or adjacent to the MHPA (e.g., Note D11); 3) clarifications of the MHPA design in a particular area (e.g., Note A8); or 4) locations of existing and future uses within or adjacent to the MHPA (e.g., Note B8).

Responsibility for implementation will be determined at the time of discretionary approvals for individual projects. Except if noted, the MHPA guidelines do not apply to existing approved site-specific project entitlements, unless a modification, revision, or amendment to the entitlement is requested by the property owner.

Unless otherwise noted, culvert dimensions shall be at least 30 feet wide by 15 feet high with a maximum 2:1 length-to-width ratio, where feasible. The floor of the culvert must be natural/soft bottom, with skylights where possible to provide adequate visibility for wildlife.

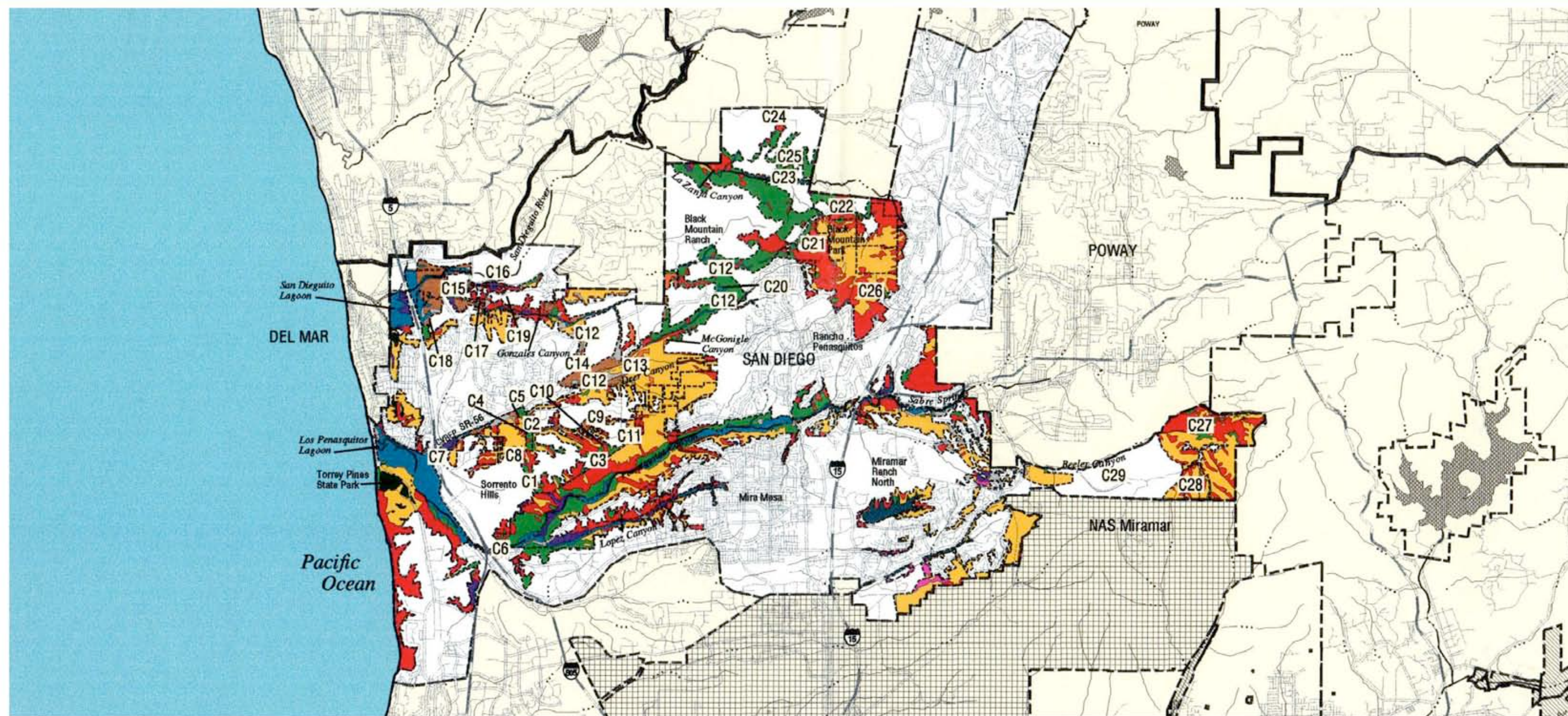
- C1. In Neighborhood 10, a 90-foot span bridge is required where Carmel Mountain Road crosses the western canyon connection to facilitate wildlife crossing. The wildlife corridor must be at least 400 feet wide at its narrowest point. Elsewhere, the corridor maintains a 500-foot width for 500 feet through the canyon. The topography in this area provides additional protection for this corridor.

- C2. Two culverts (or a bridge if funding becomes available) are required to facilitate wildlife crossing at this major link to Carmel Valley, Los Peñasquitos Lagoon and north to the San Dieguito River Valley.
- C3. An arch pipe style culvert is required to facilitate wildlife crossing. The culvert will be 30 feet wide by 15 feet high and will extend for a length of 100-150 feet. Modifying the existing grade (saddle) is required to allow wildlife crossing below the proposed adjacent road grade.
- C4. Ensure continued wildlife movement through this significant corridor.
- C5. When funding becomes available, redesign or relocate the existing sedimentation basin to minimize obstruction of wildlife movement. If the basin is relocated it should be revegetated with native plant species.*
- C6. When funds become available in the future, enhance the channel and provide noise barriers along I-805 to encourage wildlife movement (Los Peñasquitos Canyon to Torrey Pines link).
- C7. Caltrans will provide a bridge over Carmel Creek in association with the widening of I-5. Incorporate an enlarged culvert (or bridge if funding becomes available) to facilitate wildlife movement under Sorrento Valley Boulevard on the west side of I-5 (Carmel Valley to Los Peñasquitos Lagoon link).
- C8. The MHPA boundaries are unresolved and may be modified by City Council action on the Carmel Valley Neighborhood 8A Precise Plan.

Future Urbanizing Area (FUA)

The following specific guidelines for the FUA area are shown as locations C9 through C23 on **Figure 5**:

- C9. The MHPA excludes golf course greens and fairways, although these areas may provide for some wildlife movement. The precise layout and configuration of the golf course greens and fairways has been established by the approval of the bougainvillea project by the City of San Diego. Adjustments to the MHPA in this location will require an amendment to the Subarea Plan.
- C10. Within this approximately 70-acre area, residential and accessory uses shall be limited to up to 25 percent of the area and clustered on the flatter portions, with no disturbance on slopes or the remainder of the lots. Development in this area may be ten-acre lots. No development except brush management Zone 2 should occur within 100 feet of the MHPA.



Vegetation Communities

- | | |
|---|--|
| Coastal Sage Scrub | Oak Woodland |
| Chaparral | Coniferous Forest |
| Coastal Sage Scrub/Chaparral | Beach/Foredunes |
| Grassland | Eucalyptus Woodland |
| Riparian/Wetlands | Disturbed Habitat |
| | Shallow Bay |

Letter/number indicates MHPA Guideline. See text.

- | |
|--|
| Developed |
| Agriculture |

- | |
|---|
| Subarea Boundary |
| MHPA Boundary |
| Water District |
| Subarea |
| Military Lands |

Base Map Features

- | | |
|---|---|
| MSCP Boundary | Major Stream |
| U.S. - Mexico Border | Minor Stream |
| Freeway | Lake/Lagoon |
| Major Road | |
| Minor Road | |



Conserved Vegetation Communities in Northern Area

MSCP Subarea Plan

5

FIGURE

- C11. For the Shaw Texas property (Area No. 61 on Figure 21 of the Subarea V Specific Plan) and Areas 70, 59 and 44 abutting the MHPA to the east, and extending to the border of the A-1-1 zoned areas to the north, all brush management shall occur within the defined development area for lots contiguous to the MHPA. This requirement also applies to Area Nos. 9, 23, 32 and 33, abutting the A-1-1 zoned areas to the east and the MHPA to the north. Deviations from brush management standards shall be considered consistent with the alternative compliance provision of the Landscape Technical Manual.
- C12. Incorporate bridges to facilitate wildlife crossing.
- C13. Due to its relatively pristine condition and the sensitivity of habitats within it, Deer Canyon should remain free of utilities, facilities and roads.
- C14. Provide fences or barriers along the edges of the shallow north-south trending canyon that connects Carmel Valley to Gonzales Canyon to direct public access to appropriate locations.
- C15. When funds become available, place a large culvert or bridge undercrossing for wildlife movement where El Camino Real crosses the outlet of Gonzales Canyon into the San Dieguito River.*
- C16. Enhance and restore a riparian corridor/wildlife connection through the golf course at Fairbanks Country Club and from the FUA boundary at El Camino Real to the county line.*
- C17. If this area develops or redevelops, the MHPA boundary should be accommodated with the majority of the floodplain to be placed in open space and restored where possible to natural habitats.
- C18. A minimum 200-foot-wide wetland buffer is recommended adjacent to the wetlands in this area. The buffer may include detention/ sedimentation basins to reduce impacts associated with water quality and sedimentation.*
- C19. In the event that the MHPA configuration is not implemented pursuant to the "Pardee Settlement Agreement," then the MHPA configuration shall be per the NCFUA Framework Plan. Provide an undercrossing of San Dieguito River Road for wildlife movement from Gonzales Canyon of the San Dieguito River.
- C20. If an at-grade crossing is approved for this area, the crossing should remain unlit at night and provide adequate cover (native plantings) on both sides of the road and leading up to the crossing to facilitate wildlife movement.

- C21. If purchased by the City's Water Utilities Department for water facility uses, the development areas shown may expand slightly.*
- C22. Study the need for a future grade-separated wildlife crossing.*
- C23. The La Jolla Valley area (Lusardi Creek) will be enhanced and restored into a fully-functional native riparian corridor and maintained at an average 400-500-foot width along its entire length as part of the Black Mountain Ranch project.
- C24. Provide a 400-foot-wide corridor at this location as part of the Black Mountain Ranch project.
- C25. Development in this area should provide barriers such as fencing to prevent encroachment into the MHPA. Other adjacency planning guidelines such as plantings, lighting and drainage should also be incorporated into any future development proposal.

Rancho Peñasquitos and Beeler Canyon Area

- C26. The Montana Mirador project has a legal right to develop under an existing approved Tentative Map. In the event that the approved map expires, future development proposals would be required to conform to the MHPA boundaries, as depicted by the Subarea Plan and associated land development regulations.
- C27. This area will be a permanent open space subject to an agreement between the City and landowners. Existing use areas, including all existing cleared areas and all existing firebreaks, are excluded from the MHPA and will remain subject to existing zoning designations. The landowners will dedicate a conservation easement to the City of San Diego or other acceptable entity. The limits of the dedication, subject to the foregoing exclusions, will follow the MHPA boundaries north to the existing access road and will follow the existing ridgetop firebreak immediately south of Site "J," south of the existing access road. Existing firebreaks may continue to be cleared by mechanical means in accordance with existing practice. New firebreaks shall not be created within the MHPA.
- C28. Parcels containing areas of the MHPA outside of the conservation easement will be subject to potential rezones as OR-1-2 Zone. Seventy-five percent of this area will be preserved as permanent open space while the remaining 25 percent may be developed subject to all applicable sections of the Land Development Code. Any potential development associated with the areas of the MHPA outside of the conservation easement will be required to avoid all impacts to willow monardella (*Monardella lioides* ssp. *viminea*) and must assure continued wildlife movement through West Sycamore Canyon.

C29. This area is not included within the MHPA and will not be subject to rezoning as OR-1-2. Development may occur as permitted in accordance with applicable zoning regulations or potential rezoning.

1.2.5 Cornerstone Lands and San Pasqual Valley

The following Cornerstone Lands and San Pasqual Valley will be protected as habitat lands, as described in this section, as part of the City's MHPA (see **Table 1**):

- Watershed management lands around Hodges Reservoir include that portion of San Pasqual Valley from Hodges Reservoir east to the area referred to as the "narrows;"
- Lands surrounding portions of Upper and Lower Otay Lakes;
- Lands surrounding San Vicente Reservoir;
- Lands owned by the City of San Diego in Marron Valley; and
- Portions of San Pasqual Valley from the "narrows" east to Boden Canyon; this area of San Pasqual Valley is not part of the Cornerstone Lands.

The majority of these areas were ranked very high biological value on the Habitat Evaluation Map, and each has been identified as a core biological resource area.

Cornerstone Lands

The City Water Department owns four large contiguous areas of land in the study area containing valuable biological resources (Figure 6). These lands total 10,400 acres and are commonly referred to as the Cornerstone Lands because they are considered essential building blocks for creating a viable habitat preserve system. The Cornerstone Lands have been largely maintained by the Water Department in an undisturbed natural condition to serve as watershed for Lake Hodges, San Vicente and Otay Reservoir. A 2,600-acre area of the Cornerstone Lands in the southeastern portion of the study area, known as Marron Valley, was purchased by the Water Department many years ago as a potential dam site. However, today Marron Valley is not considered suitable for that purpose and some of this surplus land is currently leased by the City of San Diego for cattle grazing.

The San Diego City Charter restricts the use and disposition of water utility assets. The Water Department must be compensated for any title restrictions placed on the Cornerstone Lands and for any financial burdens which do not directly benefit the City's water utility rate payers. Therefore, to meet the policy objectives of the MSCP and comply with the City Charter, the City of San Diego intends to enter into a Conservation Land Bank Agreement with the wildlife agencies for the Cornerstone Lands.

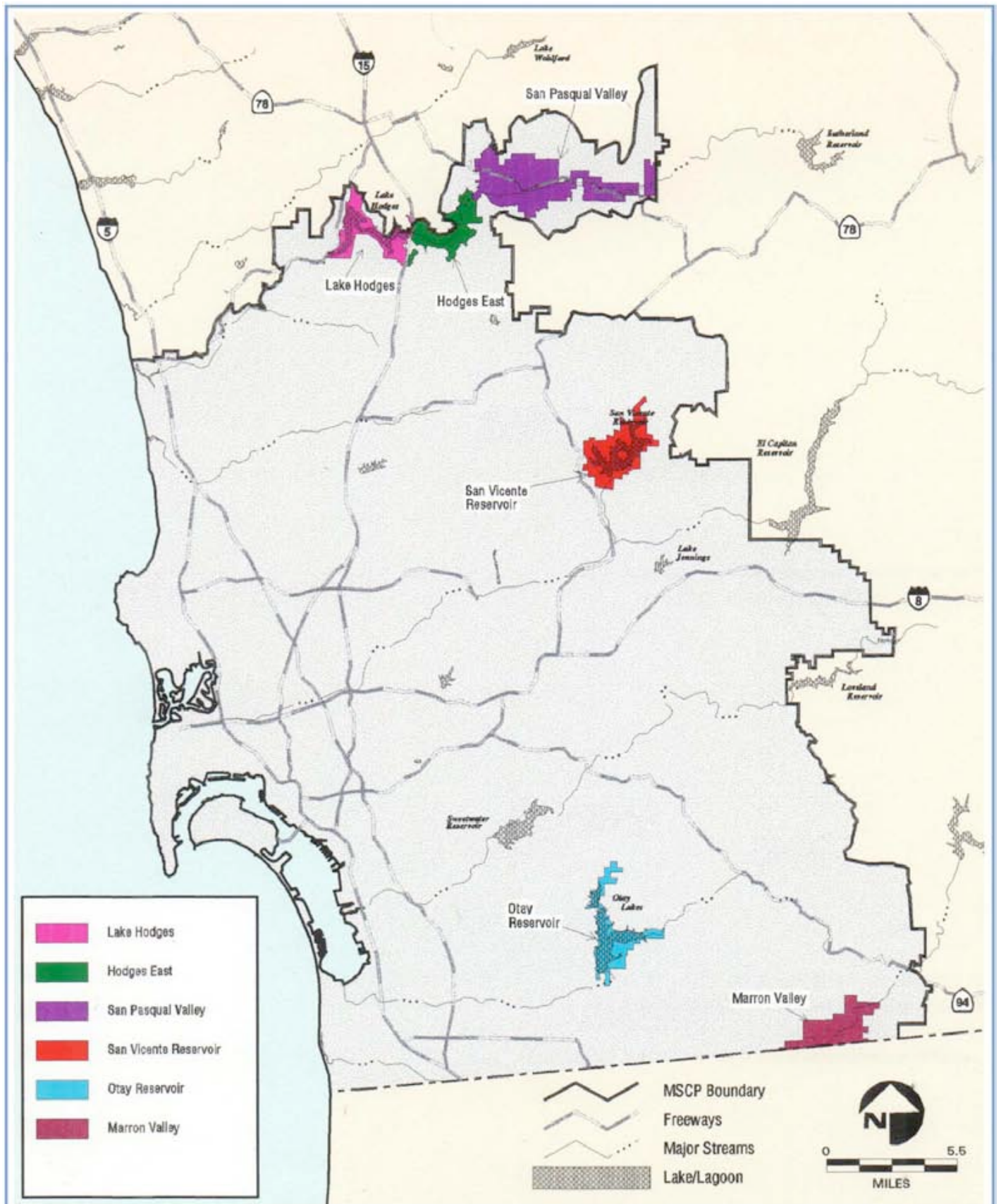
As part of this agreement, the City will commit to phasing in conservation easements over all 10,400 acres of the Cornerstone Lands. The conservation easements will allow the Water Department to continue to use the Cornerstone Lands as watershed and for water utilities facilities for the benefit of water utility rate payers, but will restrict those lands from being used for other purposes inconsistent with habitat preservation. In turn, the wildlife agencies will permit the Water Department to establish a mitigation bank to sell 3,900 mitigation credits at fair market value to public entities, public utility/service providers and private property owners doing projects in San Diego County and needing mitigation. For consumers purchasing the credits, each mitigation credit will be treated by the wildlife agencies as the functional equivalent of purchasing one acre of high quality offsite mitigation land. The easements will be phased in over time by the City in correlation with threshold sales of mitigation credits.

Hodges Reservoir/San Pasqual Valley

The Hodges Reservoir/San Pasqual Valley core area represents one of the largest continuous blocks of habitat in the MSCP study area and serves as a major east-west corridor. This area includes core gnatcatcher and cactus wren populations, one of the two “centers of distribution” for Encinitas baccharis in the MSCP study area, large expanses of grassland that provide valuable raptor foraging habitat and valuable wetland habitat in San Pasqual Valley which supports several MSCP target species dependent on riparian habitats. The western portion of the valley, east of I-15 and above the drawdown area of the lake, is currently an intensively farmed agricultural preserve which has been cultivated since before this century.

The most important areas for conservation are those natural areas around Hodges Reservoir, the riparian habitat along the San Dieguito River and its tributaries through San Pasqual Valley, and the naturally vegetated slopes above the river valley. The majority of the riparian habitats in the river valley provide excellent opportunities for restoration and enhancement of the wildlife corridor through the valley. Conserved lands in the Hodges Reservoir/San Pasqual Valley area will be the cornerstone for a natural east/west open space corridor within the San Dieguito River Valley and San Pasqual Valley. Vegetation communities in these areas are depicted in **Figure 7**.

Conservation and management of Cornerstone Lands around Hodges Reservoir and native habitats in San Pasqual Valley will be guided by the 1995 City of San Diego San Pasqual Valley Plan. Many of the goals, policies, and specific proposals of the San Pasqual Valley Plan address sensitive resources and open space and are compatible with the MSCP conservation goals.



City of San Diego Cornerstone Lands and San Pasqual Valley

MSCP Subarea Plan

6

FIGURE

The San Pasqual Valley Plan designates a riparian corridor along the San Dieguito River and its tributaries and the remaining coastal sage scrub, oak woodland and chaparral as open space. Only land designated for agriculture in the land use plan is recommended to be leased for agricultural purposes in the future. However, agricultural uses, consistent with the San Pasqual Valley Plan, shall not be precluded by the implementation of the MSCP.

The San Pasqual Valley Plan recommends restoration of some agricultural and dairy farm lands to riparian vegetation. The plan also recommends maintenance of the riparian vegetation and wildlife corridor, and maintenance of a 40-foot wide flood control pilot channel bottom to maintain flood carrying capacity. The plan recommends that the City study environmentally and economically sound approaches to providing minimum necessary flood control to support agriculture within the San Pasqual Valley. The vegetation around Hodges Reservoir is recommended to be retained as well. A 24-foot-wide multi-use trail corridor (right-of-way), forming the San Pasqual Valley segment of the “Coast to Crest Trail,” shall be aligned to minimize impacts to sensitive resource areas and to agriculture. The San Pasqual Valley Plan also states that any future sand mining activities are to be located outside of the riparian corridor on land designated for agriculture. Periodic sand removal in the riparian open space corridor beyond maintenance of the 40-foot-wide pilot channel can be considered only if determined to be beneficial to the riparian corridor as part of the implementation of an approved restoration plan.

MHPA Exclusions and Guidelines

The following areas are excluded from the MHPA in order to provide for current and future requirements of the City of San Diego Water Department (the property owner) and the County Water Authority (CWA). These requirements relate to either the City’s known Capital Improvement Program projects, the City’s proposed reservoir management program, or the CWA’s Emergency Storage Project. The notes under “MHPA Guidelines” include features that have been incorporated into the MHPA and thus were considered in the evaluation for species coverage. The guidelines are required to be implemented for take authorization, except if noted with an asterisk (*). As appropriate, the MHPA guidelines noted with an asterisk should be considered during preserve assembly. The notes are keyed to the extent possible to specific locations on the accompanying figure for the area. The notes include: 1) approved project requirements (e.g., Note #C1); 2) guidelines to be incorporated into the design of future projects within or adjacent to the MHPA (e.g., Note #D11); 3) clarifications of the MHPA design in a particular area (e.g., Note #A8); or 4) locations of existing and future uses within or adjacent to the MHPA (e.g., Note #B8). Responsibility for implementation will be determined at the time of discretionary approvals for individual projects. Except if noted, the MHPA guidelines do not apply to existing approved site-specific project entitlements, unless a modification,

revision, or amendment to the entitlement is requested by the property owner. The following notes are MHPA Guidelines rather than exclusions: Note #13 under Hodges Reservoir/Hodges East and Note #'s 3-6 under San Pasqual Valley.

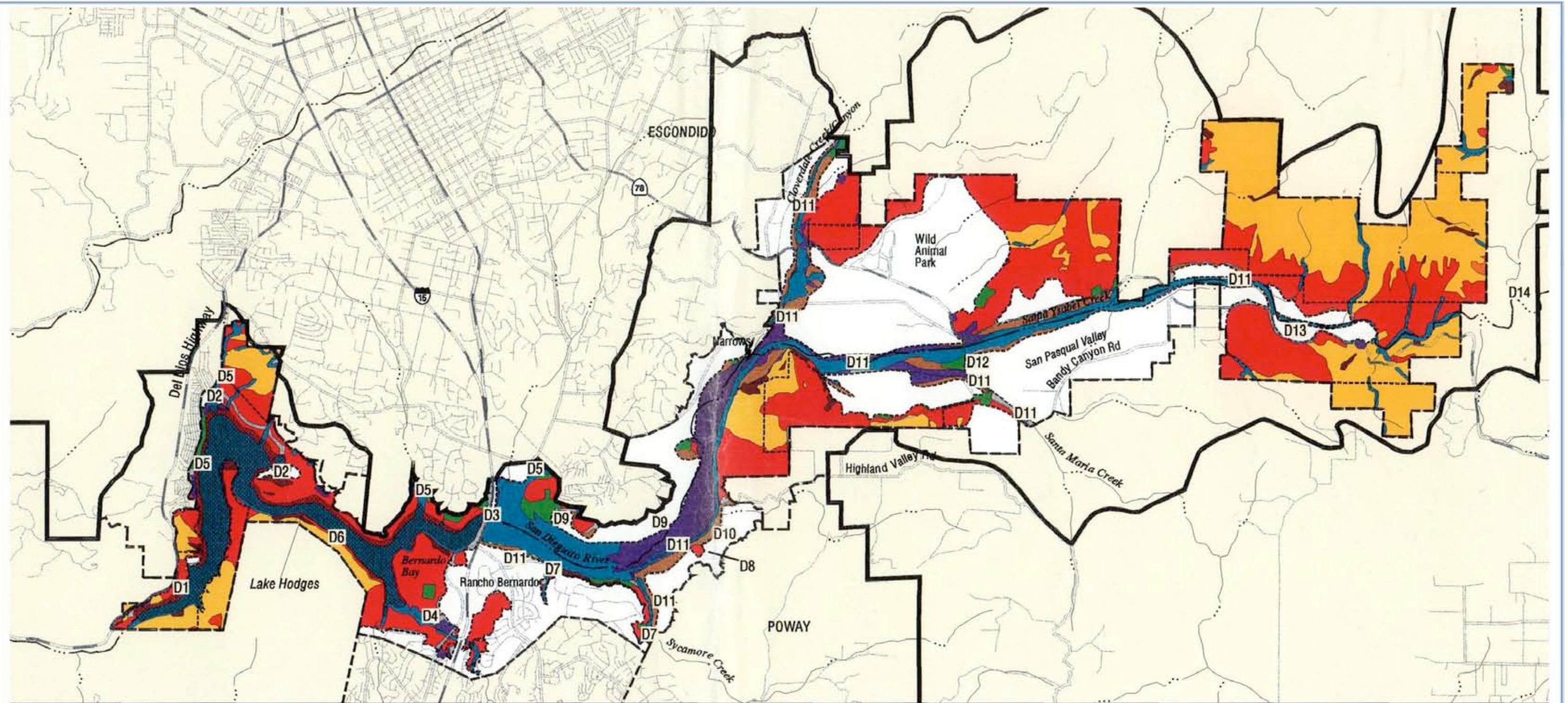
Hodges Reservoir/Hodges East

1. The areas not designated as open space in the San Pasqual Valley Plan;
2. Where owned by the City of San Diego, the area of the existing Hodges Reservoir and dam, including the shoreline area within 300 feet horizontally from the high water level for water elevation of spillway (315 feet msl), for water quality protection;
3. Existing employee residences (D1 on **Figure 7**);
4. Existing boating and recreation facilities (located within active park use areas, D2 on **Figure 7**);
5. Area for the proposed pump station and pipeline to the CWA's Second Aqueduct (approximately 5 acres, site not yet identified). This City project would not be pursued if the alternative CWA project, as identified in item #16 below, is implemented;
6. Area for the proposed I-15 bridge widening (approximately 6 acres, D3 on **Figure 7**);
7. Area for the existing pump station #77 and related pipelines and facilities (D4 on **Figure 7**);
8. Area for the existing CWA aqueduct crossing;
9. Approximately 70 acres for urban runoff diversion and water quality protection along Green Valley, Del Dios, Felicita, and Kit Carson creeks (approximate general location on the north side of the lake at six major drainages, D5 on **Figure 7**);
10. Area for the proposed North City Water Treatment Plant (approximately 40 acres to be located somewhere on the south side of the lake, D6 on **Figure 7**);
11. Approximately 35 acres for urban runoff diversion and water quality protection in areas where existing Rancho Bernardo developments encroach near Hodges Reservoir (approximate general location on the south side of the lake at four major drainages, D7 on **Figure 7**);
12. Existing and proposed expansion for the Aquaculture III facilities (approximately six acres, D8 on **Figure 7**);

13. Interim agricultural use on City lands in this area. The goal is eventual long-term restoration to native upland habitat (D9 on **Figure 7**);
14. Area for the proposed pumped storage project to the Olivenhain (formerly Mount Israel) Reservoir (approximately eight acres);
15. All existing and proposed access and service roads;
16. All proposed pump stations associated with the CWA Emergency Storage Project including, but not limited to, the North City Pump Station (PS2), the Hodges Re-operation Pump Station (PS6), and the Hodges to Olivenhain Reservoir Pump Station (PS9) (approximately five acres each site); and
17. All permanent impact areas related to the CWA's proposed staging areas, tunnel portals, permanent access roads, and interconnection facilities associated with pipeline and pump station construction (approximately 13 acres).

San Pasqual Valley

1. Areas not designated as open space in the San Pasqual Valley Plan;
2. Existing and proposed water wells and pipelines and future recharge basin (approximately 30 acres near the existing aquaculture plant, D10 on **Figure 7**);
3. Existing leases. As leases come up for renewal, modify existing leases to incorporate the riparian corridor as depicted on the MHPA boundaries (D11 on **Figure 7**) and in the Open Space Element of the San Pasqual Valley Plan. Minimum corridor width should be 300-500 feet. If the land use is changed (i.e., requires a community plan amendment), adjacency guidelines will be incorporated into the project design;
4. Location of future sand mining operations to be outside the riparian corridor and limited to land designated for agriculture (approximately 26 acres, D12 on **Figure 7**). Periodic sand removal in the riparian corridor beyond maintenance of the 40-foot pilot channel can be considered only if determined to be beneficial to the riparian corridor as part of an approved restoration plan;
5. Existing orchards. Any change in agriculture use (i.e., from orchard to any other use) shall trigger an evaluation of widening the existing wildlife corridor, which generally follows Santa Ysabel Creek, to improve its functioning as a regional corridor (D13 on **Figure 7**).
6. A minimum 1,000-foot-wide corridor will be maintained along Santa Ysabel Creek through the Water Department owned property east to the Cleveland National Forest (D14 on **Figure 7**).



Vegetation Communities

- | | |
|------------------------------|---------------------|
| Coastal Sage Scrub | Oak Woodland |
| Chaparral | Coniferous Forest |
| Coastal Sage Scrub/Chaparral | Beach/Foredunes |
| Grassland | Eucalyptus Woodland |
| Riparian/Wetlands | Disturbed Habitat |
| | Shallow Bay |

Letter/number indicates MHPA Guideline. See text.

- | |
|-------------|
| Developed |
| Agriculture |

- | |
|------------------|
| Subarea Boundary |
| MHPA Boundary |
| Water District |
| Subarea |
| Military Lands |

Base Map Features

- | | |
|----------------------|--------------|
| MSCP Boundary | Major Stream |
| U.S. - Mexico Border | Minor Stream |
| Freeway | Lake/Lagoon |
| Major Road | |
| Minor Road | |



Conserved Vegetation Communities in Hodges Cornerstone Lands and San Pasqual Valley

MSCP Subarea Plan

7

FIGURE

Otay Lakes

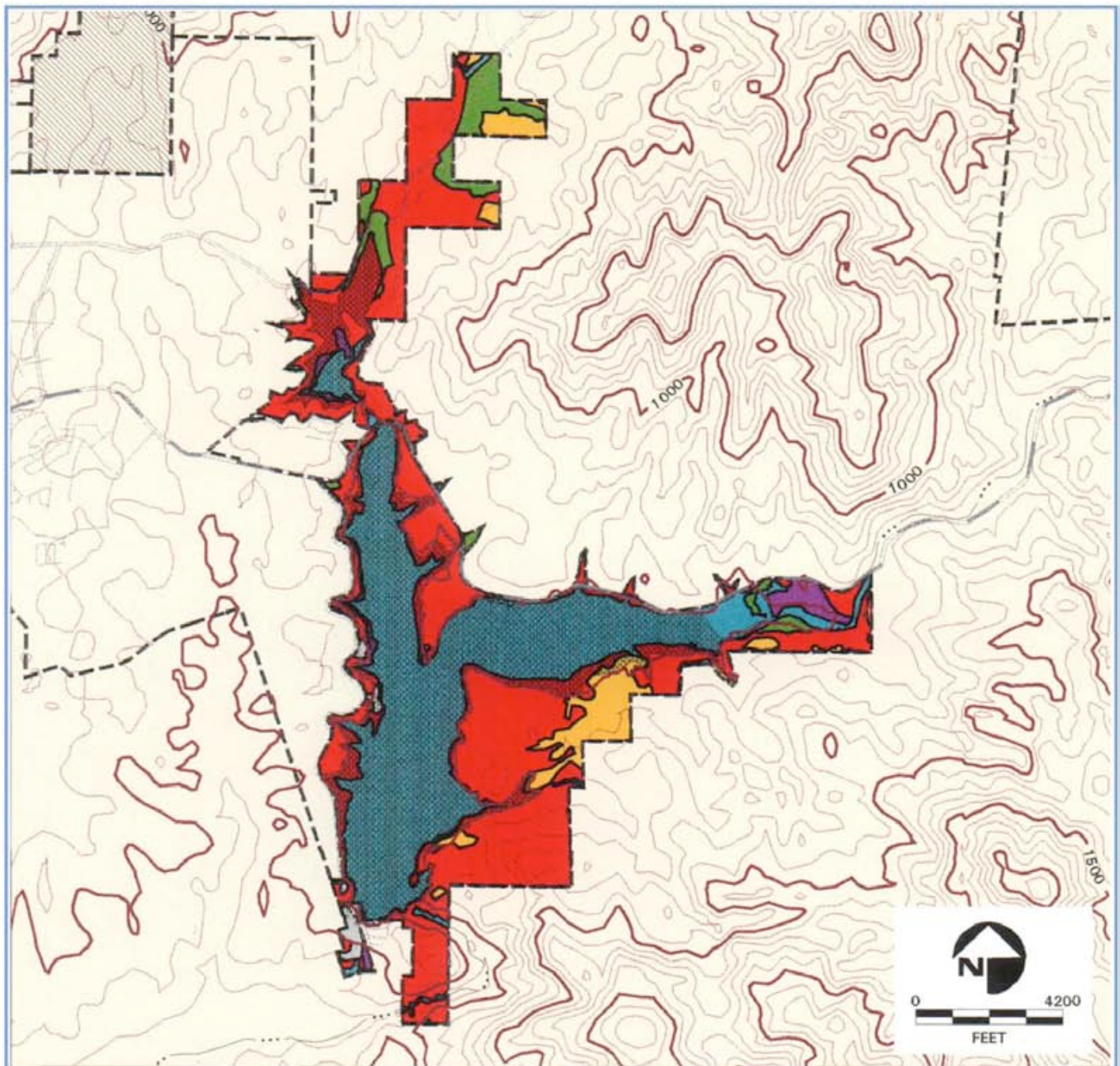
The Water Department-owned lands around the Otay Lakes are known for high quality coastal sage scrub, supporting over 40 pairs of gnatcatchers. A significant riparian forest occurs where Dulzura Creek empties into Lower Otay Lake, and raptors are abundant in the large expanses of grassland and sage scrub around the lakes.

The land around Upper Otay Lake is leased for grazing, and the CDFG has a fish-stocking agreement with the City. The City leases the area east of Lower Otay Lake for an aircraft landing strip and allows public fishing access on Lower Otay Lake. The Olympic Training Center is planned for the west side of Lower Otay Lake. The areas south of the lakes are naturally vegetated lands used for watershed management. Conservation of City of San Diego lands around Otay Lakes will form the Cornerstone Lands for a natural open space corridor in the South Bay area. Vegetation communities around Otay Lakes are depicted in **Figure 8**.

MHPA Exclusions

The following areas are excluded from the MHPA in order to provide for current and future requirements of the City of San Diego Water Utilities Department (the property owner):

1. Existing Otay Water Treatment Plant (WTP) and proposed expansion (approximately five acres);
2. A 50-foot right-of-way (approximately 23 acres) for pipelines within the eastern edge of the Otay Lakes Cornerstone Lands as depicted on **Figure 8**; right-of-way to be aligned approximately along the south and east side of Lower Otay Lake;
3. Existing Lower Otay boat launching facilities and associated recreation facilities;
4. Where owned by the City of San Diego, the area of Lower Otay Lake and dam, including the shoreline area within 300 feet horizontally from the high water level, water elevation of spillway with gates closed at 490.7 feet, for water quality protection;
5. Area of Upper Otay Lake and dam (i.e., the area enclosed by the 550-foot contour) and the shoreline area within 300 feet horizontally from the 550-foot contour;
6. Existing County Park leased from the City;
7. Existing and proposed Olympic Training Center boat facilities;
8. All existing access and service roads and existing lake recreation facilities.



Vegetation Communities

	Coastal Sage Scrub		Coniferous Forest
	Chaparral		Beach/Foredunes
	Coastal Sage Scrub/Chaparral		Eucalyptus Woodland
	Grassland		Disturbed Habitat
	Riparian/Wetlands		Shallow Bay
	Oak Woodland		Developed
			Agriculture

Base Map Features

	Subarea Boundary		MSCP Boundary
	MHPA Boundary		U.S. - Mexico Border
	Water District		Freeway
	Subarea Military Lands		Major Road
			Minor Road
			Major Stream
			Lake/Lagoon



Otay Lakes Cornerstone Lands with Vegetation Communities Identified

MSCP Subarea Plan

8

FIGURE

San Vicente Reservoir

The area around San Vicente Reservoir provides important north-south and east-west connections and supports a rich assemblage of sensitive plant and wildlife species. Important habitats in this area include coastal sage scrub, oak woodland, and oak and riparian forest. The reservoir is used as a year-round water source by wildlife and as a wintering habitat for waterfowl and bald eagles. The lake is used for water recreation on a part-time basis. San Vicente Reservoir has been identified by the CWA as a possible location for increased storage of emergency water supplies. Three of the four primary storage alternatives currently being examined include modifications to San Vicente Reservoir. Alternatives range from changing the way the reservoir is operated to raising the water level by approximately 50-80 ft. Cornerstone Lands would apply only to lands above this future level of expansion. Conservation of these lands around the reservoir will form the cornerstone for an east-west natural open space corridor that eventually will include key lands between San Vicente Reservoir and NAS Miramar and the U.S. Forest Service. Vegetation communities around San Vicente Reservoir are depicted in **Figure 9**.

MHPA Exclusions

The following areas are excluded from the MHPA in order to provide for current and future requirements of the City of San Diego Water Department (the property owner) and the CWA. These requirements relate to either the City's known Capital Improvement Program **Figure 9** projects, the City's proposed reservoir management program, or the CWA's Emergency Storage Project:

1. Area of the existing San Vicente Reservoir and dam, within 300 feet horizontally from the ultimate high water level;
2. All permanent impact areas related to the CWA's proposed staging areas, tunnel portals, permanent access roads, relocated roads, and interconnection facilities associated with reservoir expansion and pipeline and pump station construction (approximately 88 acres);
3. Right-of-way of the existing CWA bypass pipeline;
4. Area for the proposed pump station (approximately 5 acres) at the bottom of the dam;
5. Area for the proposed pump station and pipeline to Miramar Lake (approximately 11 acres);
6. Area for the proposed Boulder Valley Pumped Storage project (approximately 162 acres);

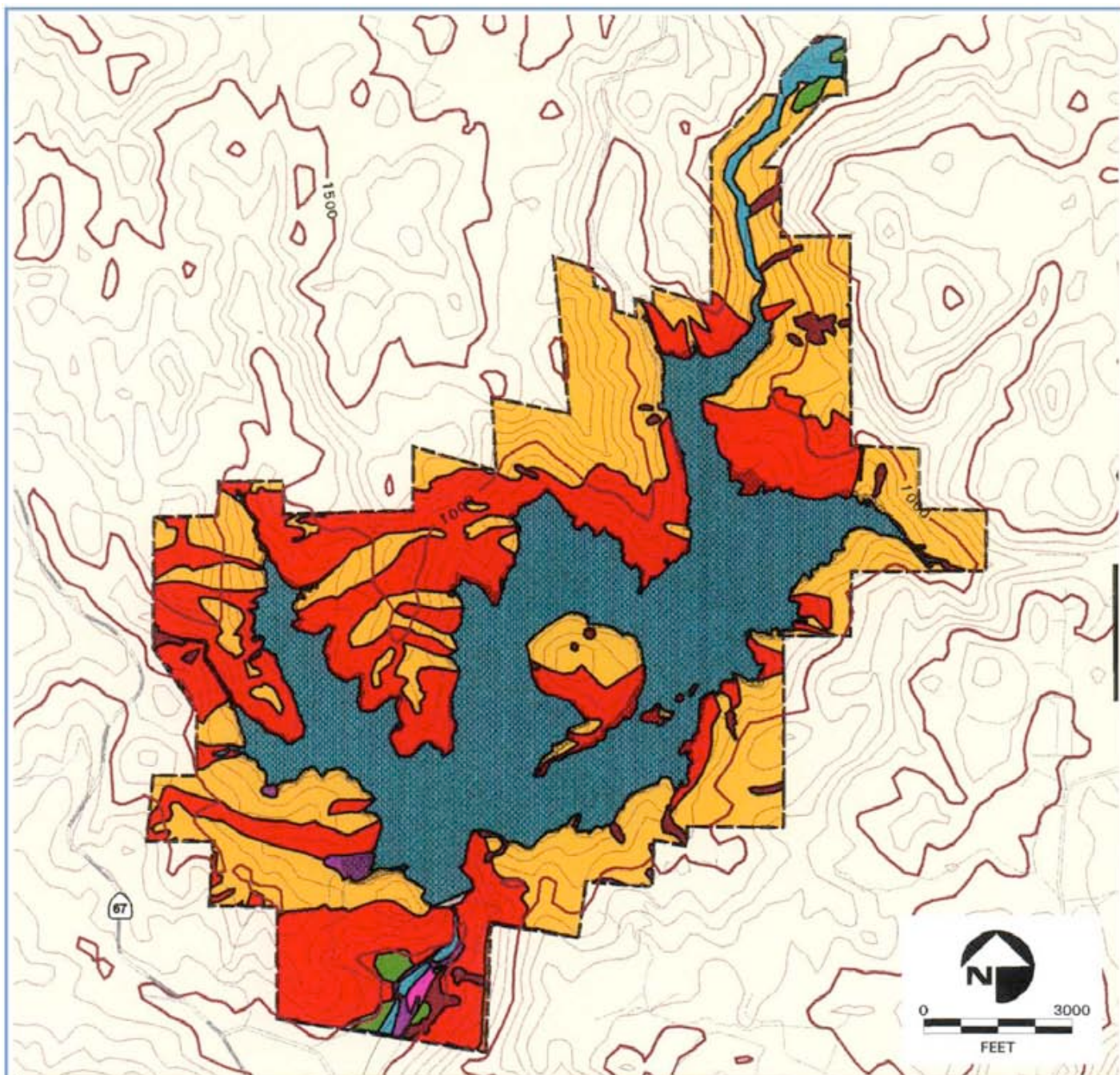
7. Right-of-way for a pipeline from the terminus of the existing Sutherland/San Vicente pipeline to San Vicente Reservoir, aligned along San Vicente Creek (approximately eight acres);
8. Area below the dam for the proposed sand and rock mining operation for aggregate materials for the dam expansion (approximately 33 acres, 5,000 feet wide by 2,800 feet long);
9. Right-of-way for the proposed reclaimed water pipeline from the North City Wastewater Treatment Plant into the reservoir (approximately three acres);
10. Existing employee residences;
11. Area sufficient for new boat launch and recreation facilities (ten acres) and access road from Highway 67 above the high water line of the proposed expanded reservoir (i.e., above elevation 800 feet);
12. All existing access and service roads, lake recreation facilities, and similar or proposed facilities associated with the CWA's Emergency Storage Project.

Marron Valley

Marron Valley occupies approximately 2,600 acres in the southeastern portion of the MSCP study area and supports the greatest concentration of target species and other sensitive species in the study area. The large drainages through this area (e.g., the Tijuana River, Bee Canyon, and Cottonwood Creek) support significant stands of riparian habitat and function as major wildlife corridors. These riparian areas offer excellent opportunities for restoration and enhancement. Much of the area is currently leased for cattle grazing. Portions of the lands are overgrazed, but likely could be restored with removal of grazing or decreased intensity and rotation of grazing. Management of this area for biological resources will pose special problems because of its remoteness and proximity to the Mexican border. Conservation of Marron Valley will provide wildlife habitat, offer opportunities for the creation and enhancement of various habitat types (i.e., riparian, coastal sage scrub), and extend the sphere of protected lands surrounding the San Ysidro Mountains. Vegetation communities in Marron Valley are depicted in **Figure 10**.

MHPA Exclusions

No exclusions required.



Vegetation Communities

	Coastal Sage Scrub		Coniferous Forest
	Chaparral		Beach/Foredunes
	Coastal Sage Scrub/Chaparral		Eucalyptus Woodland
	Grassland		Disturbed Habitat
	Riparian/Wetlands		Shallow Bay
	Oak Woodland		Developed
			Agriculture

Base Map Features

	Subarea Boundary		MSCP Boundary
	MHPA Boundary		U.S. - Mexico Border
	Water District		Freeway
	Subarea Military Lands		Major Road
			Minor Road
			Major Stream
			Lake/Lagoon

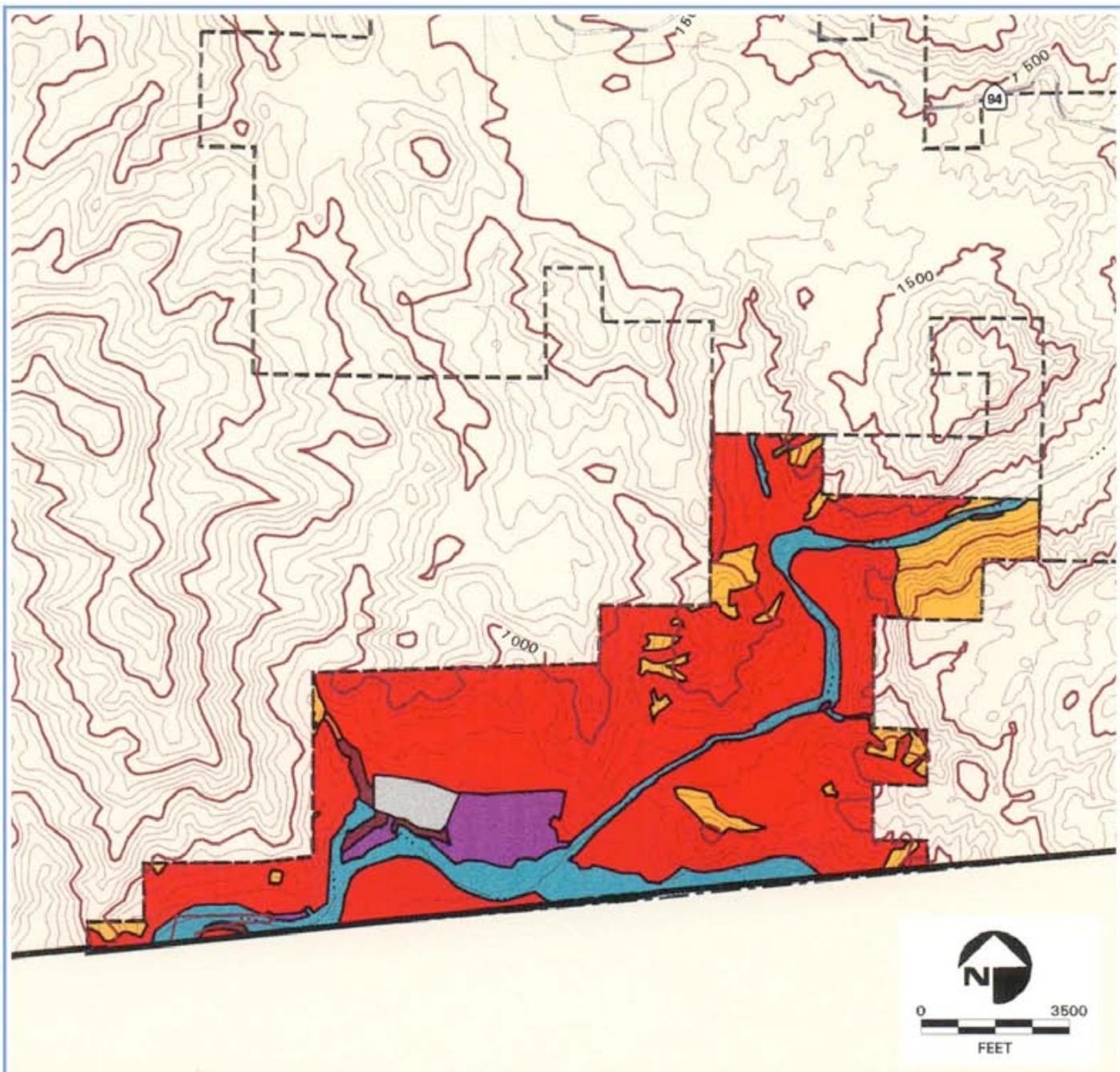


San Vicente Cornerstone Lands with Vegetation Communities Identified

MSCP Subarea Plan

9

FIGURE



Vegetation Communities

	Coastal Sage Scrub		Coniferous Forest
	Chaparral		Beach/Foredunes
	Coastal Sage Scrub/Chaparral		Eucalyptus Woodland
	Grassland		Disturbed Habitat
	Riparian/Wetlands		Shallow Bay
	Oak Woodland		Developed
			Agriculture

Base Map Features

	Subarea Boundary		MSCP Boundary
	MHPA Boundary		U.S. - Mexico Border
	Water District Subarea		Freeway
	Military Lands		Major Road
			Minor Road
			Major Stream
			Lake/Lagoon



Marron Valley Cornerstone Lands with Vegetation Communities Identified
MSCP Subarea Plan

10
FIGURE