

**Draft Environmental Assessment**  
**for**  
**Integrated Natural Resources Management Plan**  
**Naval Medical Center San Diego, California**



**July 2010**



# 1 **Acronyms**

2	7 USC 2801	Federal Noxious Weed Act of 1974, as amended
3	10 USC 2671	Military Construction Authorization Act—Military Reservation
4		and Facilities-Hunting, Fishing and Trapping
5	10 USC 2667	Military Construction Authorization Act—Leases; Non-excess
6		property
7	16 USC 431	Antiquities Act of 1906
8	16 USC 460(L) et seq.	Outdoor Recreation- Federal/State Program Act
9	16 USC 470	National Historic Preservation Act
10	16 USC 470aa-470mm	Archaeological Resources Protection Act of 1979
11	16 USC 590A	Soil Conservation Act
12	16 USC 661-666c	Fish and Wildlife Coordination Act
13	16 USC 668-668d	Bald and Golden Eagle Protection Acts
14	16 USC 670a, et seq.	Sikes Act Improvement Act
15	16 USC 703-711	Migratory Bird Treaty Act of 1919
16	16 USC 1271	National Trails Systems Act of 1968
17	16 USC 1531	Endangered Species Act of 1973, as amended
18	31 USC 1341, et seq.	Anti-Deficiency Act
19	16 USC 2901 et seq.	Fish and Wildlife Conservation Act of 1980
20	25 USC 3001-3013 et seq.	Native American Graves Protection and Repatriation Act of
21		1990
22	32 CFR 775	Department of the Navy Procedures for Implementing NEPA
23	33 USC 1251 et seq.	Federal Water Pollution Control Act Amendments of 1972
24	33 CFR 320-330	U.S. Army Corps of Engineers Regulatory Program
25		Regulations
26	33 USC 1344	Clean Water Act

1	36 CFR 800	Protection of Historic Properties
2	40 CFR 1500-1508	Council on Environmental Quality Regulations for
3		Implementing the Procedural Provisions of the National
4		Environmental Policy Act, July 1, 1986
5	42 USC 300f	Safe Drinking Water Act
6	42 USC 692 et seq.	Resource Conservation and Recovery Act
7	42 USC 1996	American Indian Religious Freedom Act of 1978
8	42 USC 4321	The National Environmental Policy Act of 1969, as amended
9	42 USC 7401	Clean Air Act, as amended, including 1990 General
10		Conformity Rule
11	42 USC 11001 et seq	Emergency Planning and Community Right-to-Know Act
12	43 USC 1241	Noxious Plant Control Act
13	APE	Area of Potential Effect
14	BEAP	Base Exterior Architecture Plan
15	BEQ	Bachelors Enlisted Quarters
16	BMP	Best Management Practice
17	BRAC	Base Realignment and Closure
18	BUMED	Bureau of Medicine and Surgery
19	CA	California
20	CDFG	California Department of Fish and Game
21	CEQ	Council on Environmental Quality
22	CFR	Code of Federal Regulations
23	CNRSW	Commander Navy Region Southwest
24	CNEL	Community Noise Equivalent Level
25	CO	Carbon Monoxide

1	dB	Decibels
2	DoD	United States Department of Defense
3	DoN	United States Department of the Navy
4	EA	Environmental Assessment
5	EO	Executive Order
6	EO 11514	Executive Order 11514: Protection and Enhancement of
7		Environmental Quality
8	EO 11593	Executive Order 11593: Protection and Enhancement of the
9		Cultural Environment, May 13, 1971
10	EO	Executive Order 11988: Floodplain Management, May 24,
11		1977
12	EO 11989	Executive Order 11989: Off-Road Vehicles on Public Lands
13	EO 11990	Executive Order 11990: Protection of Wetlands, May 24,
14		1977
15	EO 12898	Executive Order 12898, Environmental Justice, February 11,
16		1994
17	EO 13045	Executive Order 13045, Protection of Children, April 23,
18		1997
19	EO 13112	Executive Order 13112: Invasive Species
20	EO 13123	Executive Order 13123: Greening the Government through
21		Efficient Energy Management
22	EO 13148	Executive Order 13148: Greening the Government through
23		Leadership in Environmental Management
24	EO 13186	Executive Order 13186: Responsibility of Federal Agencies
25		to Protect Migratory Birds, January 11, 2001
26	EPA	United States Environmental Protection Agency
27	FY	Fiscal Year
28	GIS	Geographic Information System

1	INRMP	Integrated Natural Resource Management Plan
2	Ldn	Day–Night Average Sound Level
3	MCAS	Marine Corps Air Station
4	MBTA	Migratory Bird Treaty Act
5	MHPA	Multiple Habitat Planning Area
6	MSCP	Multiple Species Conservation Program
7	NAAQS	National Ambient Air Quality Standards
8	NAB	Naval Air Base
9	NAVFAC	Naval Facilities Engineering Command
10	NEPA	National Environmental Policy Act
11	NHL	National Historic Landmark
12	NHPA	National Historic Preservation Act
13	NLR	Noise Level Reduction
14	NMC	Naval Medical Center
15	NMCSD	Naval Medical Center San Diego
16	NO <sub>x</sub>	Oxides of Nitrogen
17	O <sub>3</sub>	Ozone
18	OPNAVINST	Chief of Naval Operations Instructions
19	PA	Programmatic Agreement
20	PEB	Pre-Engineered Building
21	PM <sub>10</sub>	Particulate Matter (less than 10 microns)
22	PM <sub>2.5</sub>	Particulate Matter (less than 2.5 microns)
23	PWC	Public Works Center
24	QAE	Quality Assurance Evaluator

1	RCRA	Resource Conservation and Recovery Act
2	RONA	Record of Non-applicability
3	SAIA	Sikes Act Improvement Act
4	SANDAG	San Diego Association of Governments
5	SC	Station Contact
6	SDAB	San Diego Air Basin
7	SDAPCD	San Diego Air Pollution Control District
8	Section 106	Section 106 of the NHPA
9	SHPO	State Historic Preservation Officer
10	SIP	State Implementation Plan
11	SO <sub>x</sub>	Oxides of Sulfur
12	TM	Training Manual
13	USACE	U.S. Army Corps of Engineers
14	USC	United States Code
15	USFWS	United States Fish and Wildlife Service
16	VOC	Volatile Organic Compound





1                                   Draft Environmental Assessment for  
2                                   the Integrated Natural Resources Management Plan  
3                                   Naval Medical Center San Diego, California  
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5     The Department of the Navy has prepared this Environmental Assessment (EA) to  
6     address potential environmental impact associated with proposed implementation of an  
7     updated Integrated Natural Resources Management Plan (INRMP) for the Naval Medical  
8     Center San Diego California (NMCSA) per the statutory requirements of the Sikes Act  
9     Improvement Act (SAIA) (16 United States Code [USC] 670a *et seq*), as amended  
10    through 2003. This EA provides a programmatic analysis of the potential environmental  
11    and human resource impact associated with implementation of the actions  
12    recommended in the INRMP. The EA has been prepared in compliance with the National  
13    Environmental Policy Act (NEPA) of 1969 (42 USC 4321, *et seq.*); the Council on  
14    Environmental Quality Regulations for Implementing the Procedural Provisions of NEPA  
15    (40 Code of Federal Regulations [CFR] Parts 1500-1508, 1 July 1986); and Department  
16    of the Navy Procedures for Implementing NEPA (32 CFR 775), and Chief of Naval  
17    Operations Instructions (OPNAVIST) 5090.1C.

18   The Proposed Action (updating the 2001 INRMP) and No-Action Alternative  
19   (continuation of the 2001 INRMP) are evaluated in this EA. The Proposed Action  
20   provides an ecosystem-based program for the conservation and rehabilitation of natural  
21   resources in a manner consistent with the military mission and SAIA, while providing for  
22   sustainable multipurpose uses of natural resources subject to safety and military security  
23   considerations. There is no significant impact associated with implementation of the  
24   Proposed Action.

25   The No-Action Alternative would also provide for an ecosystem-based program for the  
26   conservation and rehabilitation of natural resources, but new Navy guidance, resources,  
27   and management strategies have been identified since the publication of the 2001  
28   INRMP, and the 2001 INRMP no longer meets current OPNAVINST 5090.1C guidelines.  
29   Significant impact to erosion, jurisdictional waters, and cultural resources is expected to  
30   result from implementation of the No-Action Alternative.

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# Executive Summary

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## 2 Introduction

3 This Environmental Assessment (EA) provides a programmatic analysis of the potential  
4 environmental and human resource impact associated with implementation of the  
5 actions recommended in the Integrated Natural Resources Management Plan (INRMP)  
6 for the Naval Medical Center San Diego (NMCS D), California. The EA has been  
7 prepared in compliance with the National Environmental Policy Act (NEPA) of 1969 (42  
8 United States Code [USC] 4321, *et seq.*); the Council on Environmental Quality  
9 Regulations for Implementing the Procedural Provisions of NEPA (40 Code of Federal  
10 Regulations [CFR] Parts 1500-1508, 1 July 1986); and Department of the Navy  
11 Procedures for Implementing NEPA (32 CFR 775).

## 12 Purpose and Need for the Proposed Action

13 The purpose of the Proposed Action, implementation of the 2010 INRMP, is to update  
14 the INRMP prepared for the NMCS D in 2001. Section 101(b)(2) of the Sikes Act (SAIA)  
15 [16 USC 670a(b)(2)] states that each INRMP “must be reviewed as to operation and  
16 effect by the parties thereto on a regular basis, but not less often than every 5 years.”  
17 The requirement to “review” the INRMPs “on a regular basis, but not less often than  
18 every 5 years” does not mean that every INRMP necessarily needs to be revised. The  
19 Sikes Act specifically directs that the INRMPs be reviewed “as to operation and effect,”  
20 emphasizing that the review is intended to determine whether existing INRMPs are  
21 being implemented to meet the requirements of the Sikes Act and contribute to the  
22 conservation and rehabilitation of natural resources on military installations.

23 Because new Navy guidance, resources, and management strategies have been  
24 identified since the publication of the 2001 INRMP, the 2001 INRMP no longer meets  
25 current Chief of Naval Operations Instructions (OPNAVINST) 5090.1C guidelines and  
26 must be updated. This update would meet the statutory requirements under the Sikes  
27 Act Improvement Act (SAIA) (16 USC 670a *et seq.*), as amended through 2003.

## 28 Proposed Action

29 The INRMP Proposed Action would serve as a planning tool for the Commander, Navy  
30 Region Southwest. The INRMP provides an ecosystem-based program for the  
31 conservation and rehabilitation of natural resources in a manner consistent with the  
32 military mission and SAIA, while providing for sustainable multipurpose uses of natural  
33 resources subject to safety and military security considerations. As opportunities  
34 become available to seek funding for environmental projects or for mitigation for future  
35 activities, the INRMP would serve as a priority list to better enable the Natural  
36 Resources department to practice effective ecosystem management. The INRMP is not

1 meant as a definitive list of projects that will be automatically funded upon enactment. It  
 2 provides strategies to guide resource managers.

3 The Proposed Action would continue implementation of the 2010 INRMP but would also  
 4 update the 2001 INRMP with new survey information and new management strategies  
 5 for certain resources. The Proposed Action has new management strategies for erosion  
 6 control, invasive species removal, conservation of migratory birds, jurisdictional waters,  
 7 water conservation, and cultural resources. The Proposed Action would implement  
 8 vegetation surveys to be conducted every 3 years instead of periodically as needed.  
 9 Also, the Proposed Actions would include the construction of a new landscaping project  
 10 and a new recommended landscape plant list. The new project, the “Golden Eagle  
 11 Native Landscape Tribute,” would benefit all NMCS D personnel, patients, and visitors.

12 Table ES-1 provides a summary of the specific and recommended management actions  
 13 included in the 2010 INRMP, as well as the specific and recommended management  
 14 actions carried over from the 2001 INRMP.

15 **TABLE ES-1**  
 16 **SPECIFIC AND RECOMMENDED MANAGEMENT ACTIONS**  
 17 **OF THE 2001 AND 2010 INRMPs FOR NMCS D**  
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INRMP	Project Description	FY	Date Completed
2001	Coastal Sage Scrub Monitoring Survey	2002	2002–2003 (Vegetation communities mapped)
2001	Baseline Herpetological Survey	2002	2002–2003
2001	Baseline Invertebrate Survey	2002	2003
2001	Baseline Mammal Survey	2002	2003
2001	Baseline Rare Plant Survey	2002	2003
2001	Fence or sign gnatcatcher habitat to restrict access during breeding season.	2002	Dec. 02
2001	Seal openings to buildings with rodent proof materials.	2004	On-going
2001	Non-native Plant Recognition Training	2002	Dec. 05
2001	Healing Garden	2002	Apr. 05
2001	SDCWA Landscaping Audit	2002	2004
2010	Erosion Control	2010	Not Applicable (N/A)
2010	Erosion Control–Drainage Redesign	2010	On-going
2010	Rodent/Pest Control	On-going	N/A
2010	Focused Coastal Sage Scrub Vegetation Survey	2009 and triennially	N/A
2010	Periodic Rare Plant Survey	2009 and triennially	N/A
2010	Focused Exotic/Invasive Plant Survey	2009 and triennially	N/A

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**TABLE ES-1  
SPECIFIC AND RECOMMENDED MANAGEMENT ACTIONS  
OF THE 2001 AND 2010 INRMPs FOR NMCS D (CONT.)**

INRMP	Project Description	FY	Date Completed
2010	Non-native Plant Recognition Training	On-going	N/A
2010	Coordinate with City of San Diego on non-native plant removal on land adjacent to NMCS D	On-going	N/A
2010	Non-native Plant Removal	On-going	N/A
2010	Golden Eagle Native Landscape Tribute	2010	Not Completed
2010	Periodic Wildlife Survey	2009 and every 5 years	N/A
2010	Animal Damage Control education programs and brochure	2010	N/A
2010	Cat-proof fencing, as-needed, around the housing areas.	On-going as-needed	On-going
2010	NMCS D Natural Resources Training Video	2010	Not Completed
2010	NMCS D natural resources brochure	2007	2010
2010	Interpretive Nature Trail	2006	Not Completed
2010	Conservation Outreach	On-going	N/A
2010	Annual Environmental Quality Assessments	On-going	N/A
2010	Long-term Maintenance Plan	2009	Not Completed
2010	NEPA Brochure and Guidance Book for NMCS D	2010	Not Completed
2010	Cultural Resources Survey of 50YR+ buildings	2010	N/A
2010	PIF Coordination for migratory bird counts	2010	N/A

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6 **Regulatory and NEPA Compliance**

7 In preparing this INRMP, as required by the SAIA and in accordance with the  
 8 Interagency and Intergovernmental Coordination Act of 1968 and Executive Order (EO)  
 9 12372: Intergovernmental Review of Federal Programs, NMCS D sought concurrence  
 10 from the United States Fish and Wildlife Service (USFWS), the California Department of  
 11 Fish and Game (CDFG), and all appropriate local agencies. Comments on a Draft of the  
 12 EA and INRMP were requested from the USFWS and CDFG, and the comments  
 13 received were considered in the preparation of the documents. This process, along with  
 14 signatures on the document or letters of concurrence, which will be sought for the final  
 15 document, ensures that the INRMP reflects the mutual agreement of these parties  
 16 concerning conservation, protection, and management of fish and wildlife resources on  
 17 the installation. Also as required by the SAIA, the Draft INRMP will be made available for  
 18 public comment, as it will be noticed in the *San Diego Union Tribune*, and the installation  
 19 will consider any comments received during the 30-day public comment period when  
 20 preparing the Final EA and INRMP.

1 The Navy will implement the recommendations in the INRMP within the framework of  
2 regulatory compliance, national Navy mission obligations, anti-terrorism and force  
3 protection limitations, and funding constraints.

#### 4 **Alternatives**

5 This EA addresses the Proposed Action and the No-Action Alternative. No other  
6 alternatives were developed or considered.

7 The No-Action Alternative would continue the implementation of the objectives and  
8 practices outlined in the existing INRMP (DoN NAVFAC SWDIV 2001). On-going  
9 practices used for management of natural resources at NMCS D would continue, and  
10 there would be no change to the objectives outlined under the existing INRMP.

11 Subsequent to the writing of the 2001 INRMP, a jurisdictional wetland was identified on  
12 the project site, which can be considered a significant change in baseline condition.  
13 Therefore, an updated INRMP is necessary under SAIA and Navy guidance (DoN 2006),  
14 and the No-Action Alternative would not allow this requirement to be met.

#### 15 **Environmental Consequences**

16 Potential environmental consequences of the Proposed Action and the No-Action  
17 Alternative have been analyzed for geology, seismicity, erosion, hydrology/water quality,  
18 biological resources, noise, air quality, land use, cultural resources, socioeconomics,  
19 transportation and circulation, aesthetics, utilities, and public health and safety. There  
20 would be no significant adverse impact, individually or cumulatively, associated with  
21 implementation of the Proposed Action, which is an update of the 2001 INRMP.

22 The Proposed Action provides a net benefit to the environment, while still allowing for  
23 current levels of military activity. Since the actions proposed are environmentally  
24 beneficial or neutral, there would be little if any environmental controversy surrounding  
25 the implementation of the 2010 INRMP. Table ES-2 summarizes the environmental  
26 effects of both alternatives. The issue of outdoor recreation is not addressed in detail in  
27 this EA, because neither alternative has any effect on the existing recreational uses or  
28 facilities. As described in Section 1.4.2 Issues Dismissed from Further Consideration,  
29 the facilities on NMCS D such as the baseball field, basketball court, volley ball court,  
30 tennis courts, pool, and the activities connected to these facilities are not included in the  
31 Proposed Action or No-Action Alternative.

32 The No Action Alternative, continuation of the 2001 INRMP, would continue to  
33 implement existing management strategies. The No-Action Alternative is expected to  
34 result in a significant impact on erosion, jurisdictional waters, and cultural resources due  
35 to management and implementation occurring under outdated or insufficient planning  
36 measures (see Chapter 4). The No-Action Alternative would likely have a significant

1 cumulative impact to jurisdictional waters and cultural resources when combined with  
 2 other proposed projects. Although the No-Action Alternative was also designed to  
 3 protect and enhance the natural resources on NMCS D, the lack of adequate protections  
 4 for jurisdictional resources and cultural resources could lead to future projects impacting  
 5 these resources.

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**TABLE ES-2  
 COMPARISON OF ENVIRONMENTAL IMPACT OF EACH ALTERNATIVE**

Resource Area	Alternative	
	Proposed Action	No Action Alternative
Geology, Seismicity, and Erosion	<p>This alternative does not propose any actions that would negatively affect current geologic or seismic conditions at NMCS D. Soil retention would be improved by recommended erosion control measures. This alternative also identifies and proposes remediation of erosion behind a retaining wall which is not identified in the 2001 INRMP.</p> <p>Overall, the impact to geology seismicity, and erosion from this alternative would be less than significant.</p>	<p>This alternative does not propose any actions that would negatively affect current geologic or seismic conditions at NMCS D. Soil retention would be improved by recommended erosion control measures. However, this alternative does not identify erosion behind a retaining wall. While the erosion behind this retaining wall does not pose an immediate threat, long-term effects could cause the wall to collapse. As such, continuation of the current erosion control plan could result in a significant impact to resources at NMCS D.</p>
Hydrology—Jurisdictional Waters	<p>This alternative proposes guidelines to reduce unnatural runoff by instituting erosion control measures described above and recommends minimizing runoff of pollutants from NMCS D, which are monitored under a General Discharge permit. The INRMP also recommends coordinating with adjacent landowners to remove exotic plants and recommends measures to protect the jurisdictional wetlands and coordinate with the U.S. Army Corps of Engineers (USACE), if future work could affect the wetland.</p> <p>The impact to jurisdictional waters from this alternative would be less than significant.</p>	<p>The jurisdictional wetland is not identified in the 2001 INRMP. Therefore necessary protection measures would not be included under this alternative and significant impact to jurisdictional waters is expected to result.</p>

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**TABLE ES-2  
COMPARISON OF ENVIRONMENTAL IMPACT OF EACH ALTERNATIVE (CONT.)**

Resource Area	Alternative	
	Proposed Action	No Action Alternative
Hydrology—Water Supply and Quality	<p>This alternative proposes new water conservation measures from an audit by the City of San Diego Water Department including the adjustment of the height and spray of sprinkler heads, increasing the uniformity of water distribution, and trimming plant material blocking sprinkler spray. This alternative also recommends sediment control measures to minimize runoff pollutants.</p> <p>The impacts to water supply and water quality from this alternative would be less than significant.</p>	<p>This alternative proposes general water conservation measures. This alternative also recommends sediment control measures to minimize runoff pollutants.</p> <p>The impacts to water supply and water quality from this alternative would be less than significant.</p>
Biological Resources—Plant Communities	<p>This alternative updates the 2001 INRMP using the most recent plant survey information. The methods outlined for controlling and removing invasive weeds would result in the improvement of the native plant habitat and implement the Exotic Invasive Plant Removal Plan prepared for NMCS D (RECON 2005c).</p> <p>The impact to plant communities from this alternative would be less than significant.</p>	<p>This alternative includes many guidelines that would benefit NMCS D's native coastal sage scrub habitat including invasive weed control, erosion prevention, conservation education, and periodic monitoring.</p> <p>Overall, this alternative would have positive impact on NMCS D's native plant community.</p>
Biological Resources—Wildlife Populations	<p>This alternative updates the 2001 INRMP to provide the most recent wildlife survey information and includes similar guidelines to benefit wildlife populations, including protection for migratory birds and nests in compliance with the Migratory Bird Treaty Act (MBTA).</p> <p>The impact to wildlife populations from this alternative would be less than significant.</p>	<p>This alternative includes many guidelines that would benefit NMCS D's wildlife populations including perimeter fencing, conservation education, and periodic surveys based upon a multiple species approach. Measures are also included to conserve habitat for migratory birds and provide protection for migratory birds and nests in compliance with the MBTA.</p> <p>The impact to wildlife populations from this alternative would be less than significant.</p>



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**TABLE ES-2  
COMPARISON OF ENVIRONMENTAL IMPACT OF EACH ALTERNATIVE (CONT.)**

Resource Area	Alternative	
	Proposed Action	No Action Alternative
Biological Resources— Sensitive Plant and Wildlife Species	<p>This alternative updates the 2001 INRMP to provide the most recent sensitive plant and wildlife survey information including a focused rare plant survey which was recommended in the 2001 INRMP and recommends maintenance of habitat fencing which was constructed as recommended in the 2001 INRMP.</p> <p>The impact to sensitive plant and wildlife populations from this alternative would be less than significant.</p>	<p>This alternative proposes specific guidelines for monitoring and managing populations of sensitive species including the performance of periodic surveys for sensitive plant and wildlife species with the potential to occur on NMCSA, developing a management strategy upon the discovery of a sensitive species, avoiding occupied areas, and keeping cumulative records and maps on sensitive species and their habitats. Specific management recommendations to benefit the coastal California gnatcatcher are described including restricting access to nesting areas during the breeding season using signs or fences, coordinating management with the City of San Diego's Multiple Species Conservation Program (MSCP) Subarea Plan, and distributing information about gnatcatchers to interested parties.</p> <p>The impacts to sensitive plant and wildlife populations from this alternative would be less than significant.</p>

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**TABLE ES-2  
COMPARISON OF ENVIRONMENTAL IMPACT OF EACH ALTERNATIVE (CONT.)**

Resource Area	Alternative	
	Proposed Action	No Action Alternative
Biological Resources— Regional Biodiversity	<p>The means of promoting regional biodiversity under this alternative do not differ from the 2001 INRMP.</p> <p>The impact to regional biodiversity from this alternative would be less than significant.</p>	<p>Regional biodiversity would benefit from guidelines which promote the NMCS D habitat as a contiguous piece of the larger Florida Canyon habitat.</p> <p>Coordinating management with the City of San Diego’s MSCP Subarea Plan is recommended, and management strategies would be based upon a multiple species approach where a few species do not receive all of the management attention. Designing boundary fencing that allows movement of species between adjacent habitat and NMCS D, and limiting activities within native plant communities during the spring and summer will reduce human disturbance to wildlife populations. Above-described erosion control efforts and non-native plant eradication will also benefit native plant and animal populations within Florida Canyon.</p> <p>The impact to regional biodiversity from this alternative would be less than significant.</p>
Noise	<p>This alternative would produce an increase in noise levels during projects such as construction of the Golden Eagle Native Landscape Tribute, interpretive trail, or removal of salt cedar with chain saws. These projects would produce adverse but temporary impact.</p> <p>The impact to noise from this alternative would be less than significant.</p>	<p>This alternative would produce an increase in noise levels during projects such as construction of an interpretive trail or removal of salt cedar with chain saws. These projects would produce adverse but temporary impact.</p> <p>The impact to noise from this alternative would be less than significant.</p>

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**TABLE ES-2  
COMPARISON OF ENVIRONMENTAL IMPACT OF EACH ALTERNATIVE (CONT.)**

Resource Area	Alternative	
	Proposed Action	No Action Alternative
Air Quality	<p>Implementation of the INRMP would not result in any major new air emission sources, and therefore pollutant emissions are anticipated to be similar to those estimated for year 2006. Ambient Air Quality Standards would not be exceeded by any actions and there would be no measurable change to health risks for any person from emissions produced by actions in the INRMP. Any emissions from activities outlined in the INRMP would be temporary.</p> <p>The impact to air quality from this alternative would be less than significant.</p>	<p>This alternative would not change current ambient air conditions with the exception of construction of the interpretive trail that was also proposed as a project under the 2001 INRMP. Any emissions from activities outlined in the INRMP would be temporary.</p> <p>The impact to air quality from this alternative would be less than significant.</p>
Land Use	<p>The activities outlined in this alternative are similar to the 2001 INRMP and would not conflict with NMCS D's military mission. There would not be a loss of available land or operational carrying capacity. Land currently used for NMCS D functions would continue to be utilized in a similar manner. The development of the Golden Eagle Native Landscape Tribute or a nature trail may slightly increase foot traffic in an area or change the vegetation in those areas, but the changes would be negligible.</p> <p>The would be no impact to land use from this alternative</p>	<p>No activities outlined in this alternative would conflict with NMCS D's military mission, and there would not be a loss of available land or operational carrying capacity. Land currently used for NMCS D functions would continue to be utilized in a similar manner. New landscaping practices may change the appearance of an area, but would not change its use. The 2001 INRMP recommends coordinated regional planning including cooperative work with the City of San Diego on neighboring property. Personnel trained in natural resource management would make land use decisions, and guidelines are described for evaluating land use changes.</p> <p>The would be no impact to land use from this alternative</p>

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**TABLE ES-2  
COMPARISON OF ENVIRONMENTAL IMPACTS OF EACH ALTERNATIVE**

Resource Area	Alternative	
	Proposed Action	No Action Alternative
Cultural Resources	<p>This alternative recommends maintaining a list of the buildings and structures located within the NMCS D boundary and the year they were constructed. This alternative specifies that a building evaluation to determine eligibility for listing on the National Register of Historic Places shall be conducted by an archeologist before a structure reaches 50 years of age. It states that if a building reaches 50 years of age, and a building evaluation has not yet been completed, it would be treated as a significant resource until such an evaluation determines otherwise. Any construction projects taking place on NMCS D must go through the Section 106 process.</p> <p>The impact to cultural resources from this alternative would be less than significant.</p>	<p>This alternative does not outline procedures for the evaluation and conservation of structures that may qualify for the National Register of Historic Places. Cultural resources that are not identified cannot be adequately protected.</p> <p>The impact to cultural resources from this alternative would be significant.</p>
Socioeconomics	<p>This alternative would not change current conditions. This alternative would have no effect on local population, employment, or income contributions, as no increase or decrease in NMCS D personnel is expected under proposed measures.</p> <p>This alternative would have no impact on current socioeconomic conditions in the area.</p>	<p>This alternative would not change current conditions. This alternative would have no effect on local population, employment, or income contributions, as no increase or decrease in NMCS D personnel is expected under proposed measures.</p> <p>This alternative would have no impact on current socioeconomic conditions in the area.</p>
Transportation and Circulation	<p>This alternative would have no effect on current levels of transportation and circulation, as no road closures or new roads are proposed. Any increase in traffic or decrease in parking spaces that may result from proposed measures, such as during construction of a nature trail or the Golden Eagle Native Landscape Tribute, would be temporary.</p> <p>This alternative would have no impact on transportation or circulation.</p>	<p>This alternative would have no effect on current levels of transportation and circulation, as no road closures or new roads are proposed. Any increase in traffic or decrease in parking spaces that may result from proposed measures, such as during construction of a nature trail, would be temporary.</p> <p>This alternative would have no impact on transportation or circulation.</p>

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**TABLE ES-2  
COMPARISON OF ENVIRONMENTAL IMPACT OF EACH ALTERNATIVE (CONT.)**

Resource Area	Alternative	
	Proposed Action	No Action Alternative
Aesthetics	<p>This alternative would improve the local aesthetics by enhancing natural habitats and the human environment through updated measures for habitat management, landscaping, and erosion control. The additions of an interpretive nature trail and the Golden Eagle Native Landscape Tribute would also enhance the aesthetics of NMCS D.</p> <p>The impact to aesthetics from this alternative would be less than significant.</p>	<p>This alternative would improve the local aesthetics by enhancing natural habitats and the human environment through measures of habitat management, landscaping, and erosion control. Using landscaping to moderate environmental influences (e.g., solar heat gain, glare, dust, and wind), unify exterior spaces, and enhance formal/ceremonial activities would also improve the environment of NMCS D.</p> <p>The impact to aesthetics from this alternative would be less than significant.</p>
Utilities	<p>This alternative proposes no changes in utility use and will not affect any utility structures.</p> <p>This alternative would have no impact on utilities.</p>	<p>This alternative would not change current utility conditions.</p> <p>This alternative would have no impact on utilities.</p>
Public Health and Safety	<p>The health and safety impact resulting from this alternative would be identical to the No-Action Alternative.</p>	<p>This alternative institutes policies that would improve public health and safety. Landscaping with non-allergenic plants will benefit patients and personnel with allergy problems or reduced immune systems. Measures for animal damage control would reduce the risk of disease on the property. Additional measures that could improve public health and safety include ensuring NEPA evaluation of projects that have the potential to impact the human environment, use of best management practices (BMPs) for any new construction project, and control of the use of rodenticides and herbicides.</p> <p>Improvements to public health and safety would be considered less than significant impact</p>

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22	A:	Final NMCS D Natural Resources Inventory and Implementation Guide
23	B:	NMCS D Erosion Evaluation and Control
24	C:	Draft Vegetation management Plan NMCS D
25	D:	Commercial Landscape Survey Program
26	E:	Non-native Plants on NMCS D; Natural Resources at NMCS D
27	F:	City of San Diego MSC P Subarea Plan
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29	H:	2009 Annual Drinking Water Quality Report
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32  
33  
34

# 1 1.0 Purpose and Need

## 2 1.1 Introduction

3 The Navy has prepared this environmental assessment (EA) to address the potential  
4 environmental impacts associated with proposed implementation of the 2010 Integrated  
5 Natural Resources Management Plan (INRMP) for Naval Medical Center San Diego  
6 (NMCSO). The INRMP provides for long-term management of natural resources at  
7 NMCSO, and the Proposed Action is the implementation of all goals and actions  
8 contained in the 2010 INRMP.

9 This EA provides a programmatic analysis of the Proposed Action. Programmatic EAs  
10 address a group of actions occurring in the same place or a single action occurring in  
11 many different places. Because funding for proposed projects may not be available and  
12 the details of certain project elements are not certain (e.g., periodic species surveys may  
13 result in identifying new sensitive species, invasive species control would depend on  
14 species identified, erosion and sedimentation management depends on where and how  
15 severe the problem is, etc.) some specific implementation objectives may need further  
16 analysis when additional detail becomes available. Further analysis may involve the  
17 evaluation of an activity's impact on a resource area not previously addressed in this EA.  
18 This EA has been prepared in accordance with:

- 19 • The National Environmental Policy Act (NEPA) of 1969 (42 United States Code  
20 [USC] 4321) as amended;
- 21 • Council on Environmental Quality (CEQ) Regulations for Implementing the  
22 Procedural Provisions of NEPA, July 1, 1986 (40 Code of Federal Regulations [CFR]  
23 1500-1508);
- 24 • United States Department of the Navy (DoN) Procedures for Implementing NEPA (32  
25 CFR 775), as described in Chief of Naval Operations Instructions (OPNAVINST)  
26 5090.1C; and
- 27 • Navy guidance on preparing NEPA documents for INRMPs (U.S. Navy 1998).

28 Documentation under NEPA is required before approval of any new or newly revised  
29 INRMPs for consideration of potential environmental impact during the decision-making  
30 process. The Department of the Navy OPNAVINST regulations implement the  
31 procedural provisions of NEPA to ensure that federal programs comply with the letter  
32 and spirit of NEPA.

## 1 1.2 Background and Mission

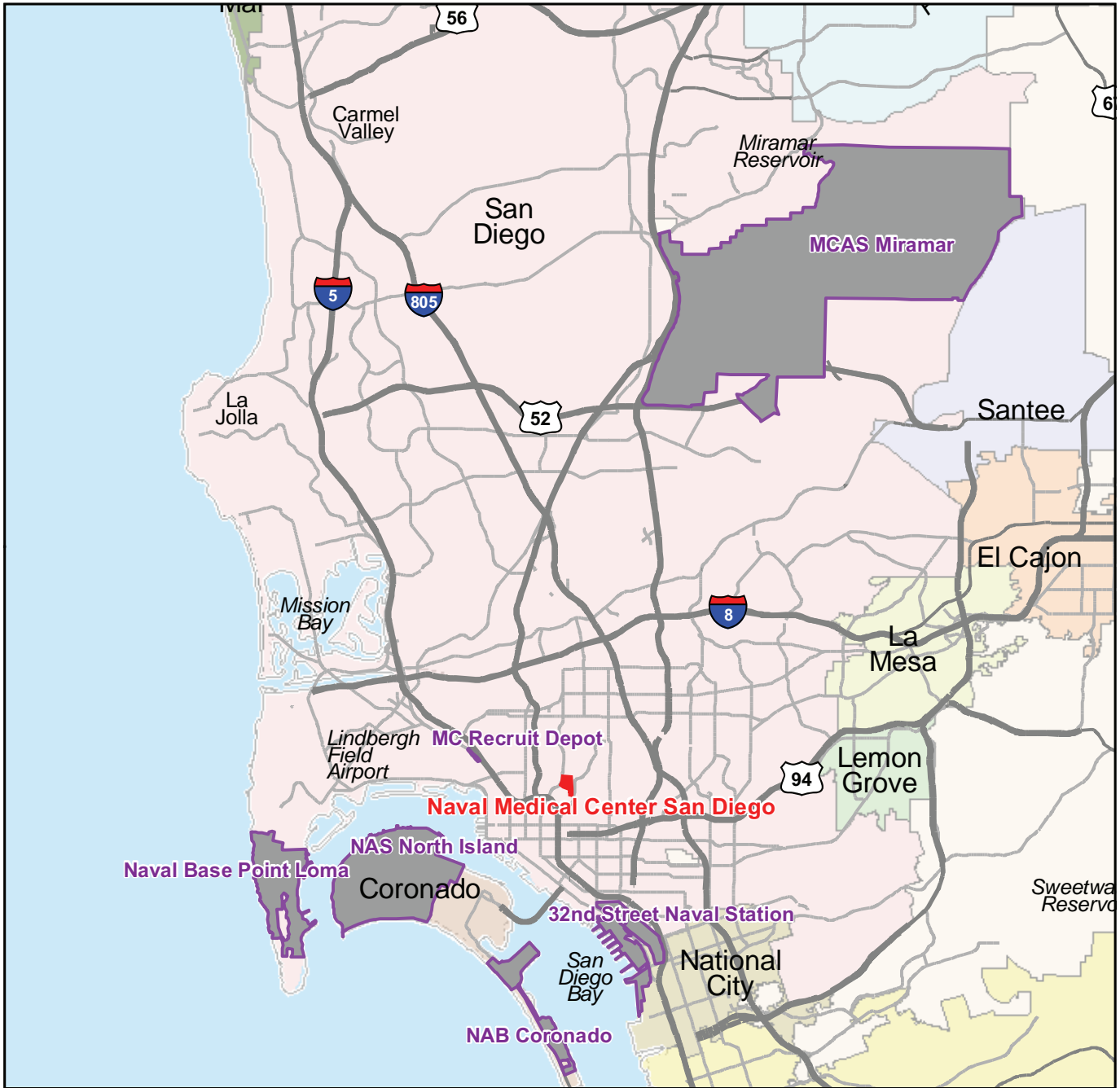
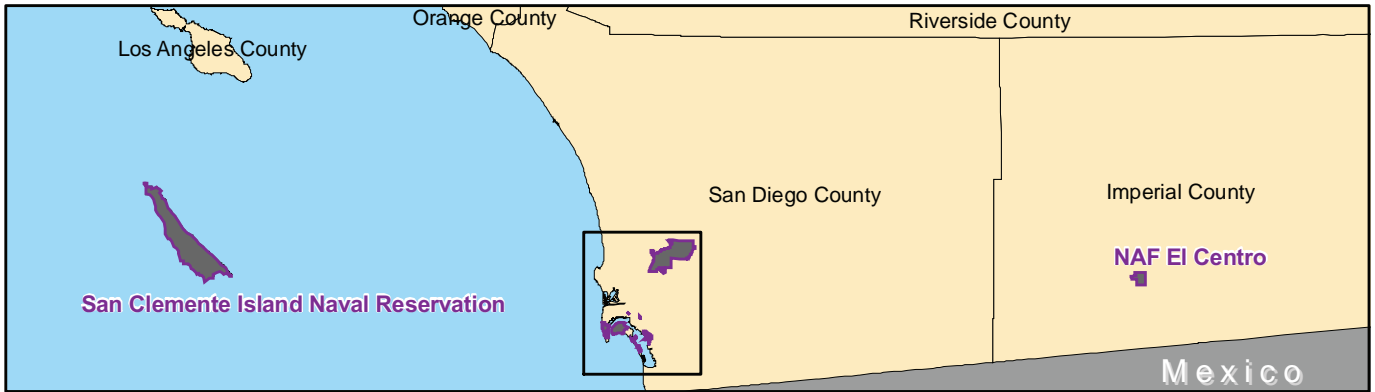
2 San Diego is the home port to more than one third of the U.S. Naval Pacific fleet  
3 (Global Security 2008). NMCS D supports several military installations throughout the  
4 area (Figure 1-1), many of which contain Branch Medical Clinics. Branch Medical Clinics  
5 are primary care clinics offering medical services to active duty personnel and their  
6 families. The mission of NMCS D is to deliver quality health services in support of the  
7 U.S. Armed Forces and to maintain medical readiness. NMCS D provides for the  
8 advancement of military medicine through education, training, and research and acts as  
9 the tertiary care referral center for the region. Tertiary care is usually specialized  
10 consultative care, usually on referral from primary or secondary medical care personnel.

11 NMCS D provides patient care to active duty service members and their families, retired  
12 military members, and survivors of members who have died in active duty. Hospital  
13 services, primary care clinics, specialty clinics, and ancillary services (such as  
14 pharmacy, laboratory, and radiology services) are available at NMCS D (Figures 1-1  
15 and 1-2). Care is provided by staff of more than 6,200 military, civilian, contractor, and  
16 volunteer personnel (NMCS D 2010).

17 NMCS D occupies approximately 75 acres within the southeast corner of Balboa Park in  
18 the City of San Diego. Consisting of 1,200 acres, Balboa Park contains numerous  
19 structures that are on the National Register of Historic Places (Balboa Park n.d.; San  
20 Diego Historical Society n.d.). The eastern boundary of NMCS D is bordered by Florida  
21 Canyon (see Figure 1-2), which still contains large tracts of native coastal sage scrub  
22 habitat. NMCS D is bounded on the southwest by Interstate 5 and on the northwest by  
23 Park Boulevard. It lies southeast of the San Diego Zoo and 4 miles east of the San  
24 Diego International Airport. Principal access is by Interstate 5 or State Route 163.

25 The majority of the property (approximately 60 acres, or 80 percent) is developed with  
26 buildings, parking lots, streets, and irrigated non-native landscaped areas (see Figure 1-  
27 2). Future construction may be required, but is not currently identified. There are  
28 retaining walls and manufactured slopes surrounding development, with no original  
29 natural landforms remaining.

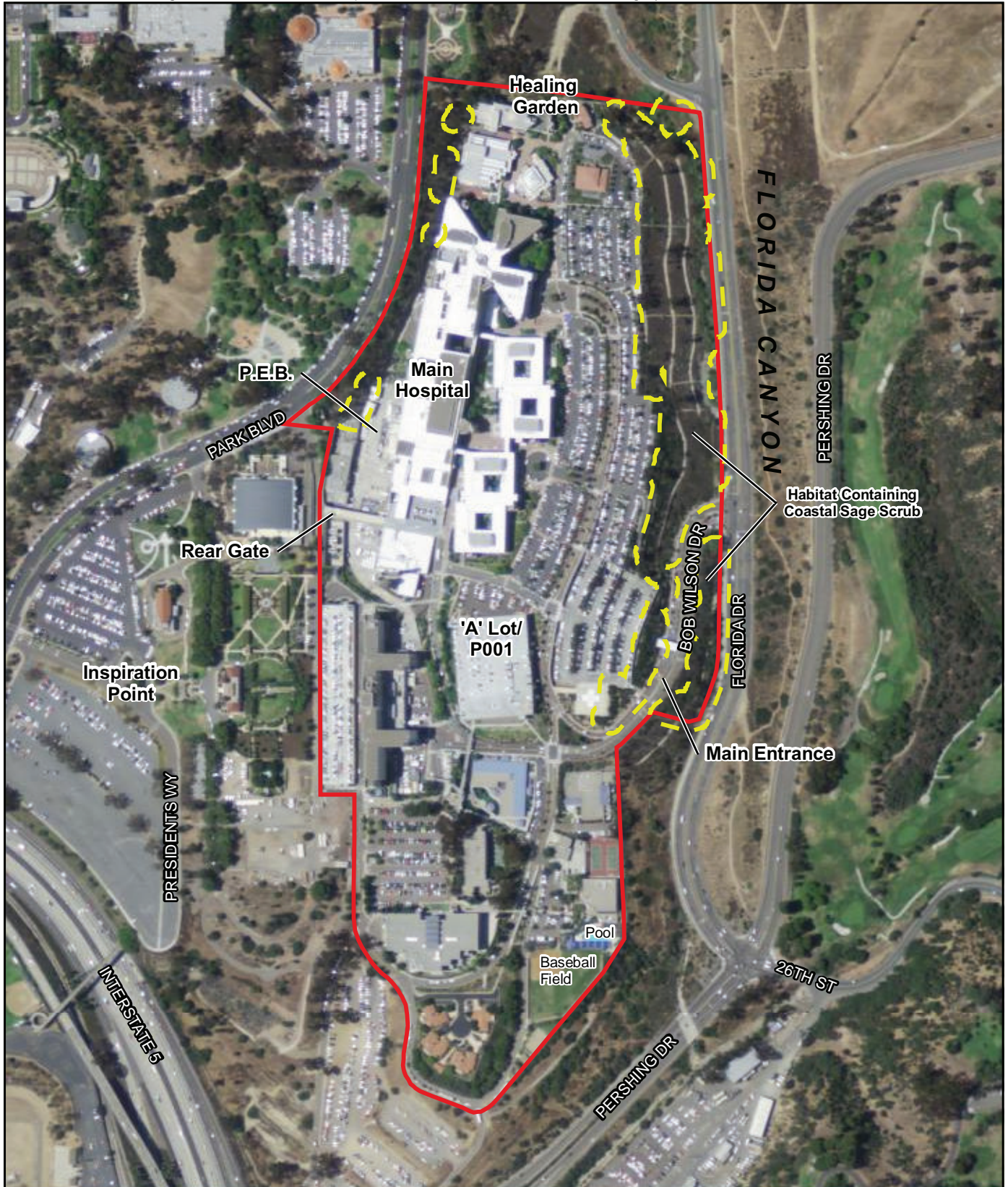
30 The natural open space on NMCS D consists of an approximate 9-acre slope that runs  
31 along the eastern edge of the property adjacent to Florida Canyon containing  
32 approximately 7 acres of natural habitat and native plant species (see Figure 1-2) with  
33 the remaining 2 acres being disturbed habitat with non-native species. Eucalyptus trees  
34 (*Eucalyptus* sp.) line the parking lots above this slope. This slope was revegetated with  
35 native coastal sage scrub species when the NMCS D hospital was built. The revegetated  
36 species are well-established, but there are also large inclusions of invasive exotics  
37 present on the slope. In addition to the 7 acres of natural habitat along the eastern edge  
38 of the property, NMCS D includes a variety of non-native landscaped areas throughout.



- Supported Military Bases
- Naval Medical Center San Diego



**FIGURE 1-1**  
Regional Location of Naval Medical Center San Diego  
and Supported Military Bases



- Naval Medical Center San Diego
- Location of Coastal Sage Scrub Habitat

0 Feet 450

FIGURE 1-2  
Aerial Photograph of NMCSD and Surrounding Areas

## 1 **1.3 Purpose of and Need for Proposed Action**

2 The purpose of the Proposed Action, implementation of the 2010 INRMP, is to update  
3 the INRMP prepared for the NMCS D in 2001. Section 101(b)(2) of the Sikes Act (SAIA)  
4 [16 U.S.C. 670a(b)(2)] states that each INRMP “must be reviewed as to operation and  
5 effect by the parties thereto on a regular basis, but not less often than every 5 years.”  
6 The requirement to “review” the INRMPs “on a regular basis, but not less often than  
7 every 5 years” does not mean that every INRMP necessarily needs to be revised. The  
8 Sikes Act specifically directs that the INRMPs be reviewed “as to operation and effect,”  
9 emphasizing that the review is intended to determine whether existing INRMPs are  
10 being implemented to meet the requirements of the Sikes Act and contribute to the  
11 conservation and rehabilitation of natural resources on military installations.

12 Because new Navy guidance, resources, and management strategies have been  
13 identified since the publication of the 2001 INRMP, the 2001 INRMP no longer meets  
14 current OPNAVINST 5090.1C guidelines and must be updated. This action of updating  
15 the INRMP would meet the statutory requirements under the SAIA as amended through  
16 2003.

17 In accordance with the Assistant Secretary of the Navy (Installations & Environment)  
18 memo of 12 August 1998, DoN Policy Memo 98-06: Review of INRMPS under NEPA,  
19 NEPA documentation is required before approval of all new or newly revised INRMPs.  
20 This EA is being prepared to analyze the potential environmental impact associated with  
21 the implementation of the Proposed Action. Because the Proposed Action would not  
22 have significant impact on resource areas, an EIS is not deemed necessary.

## 23 **1.4 Scope of Environmental Review**

### 24 **1.4.1 Issues Analyzed in the EA**

25 The EA includes an analysis of potential environmental impacts and beneficial effects  
26 associated with the Proposed Action. Thorough analyses of environmental impact can  
27 be found in Chapter 2. A brief summary of these analyses is provided in Table 1.  
28 Resources analyzed in the EA include:

- 29 • geology, seismicity, and erosion
- 30 • hydrology/water quality
- 31 • biological resources
- 32 • noise

- 1 • air quality
- 2 • land use
- 3 • cultural resources
- 4 • socioeconomics
- 5 • transportation and circulation
- 6 • aesthetics
- 7 • utilities
- 8 • public health and safety

**TABLE 1  
PROPOSED ACTION POTENTIAL IMPACTS TO RESOURCE AREAS**

<b>Resource Area</b>	<b>Potential Impact from Proposed Action</b>
GEOLOGY, SEISMICITY, AND EROSION	No significant impact anticipated Beneficial effects related to erosion control measures.
HYDROLOGY/WATER QUALITY	No significant impact anticipated
Jurisdictional Waters	Beneficial effects of erosion control and coordination with USACE on future projects.
Water Supply and Quality	Beneficial effects of new water conservation measures.
BIOLOGICAL RESOURCES	No significant impact anticipated
Plant Communities	Beneficial effects of updated and on-going surveys, and new exotic invasive plant removal plan.
Wildlife Populations	Beneficial effects of updated and on-going surveys
Sensitive Plant and Wildlife Species	Beneficial effects of updated and on-going surveys
Regional Biodiversity	Beneficial effects of coordination with MSCP, guidelines promoting habitat connectivity with Florida Canyon, and certain restrictions on activities within native habitat.
NOISE	Less than significant, short-term impact from construction projects and non-native species removal.



1  
2  
3

**TABLE 1**  
**PROPOSED ACTION POTENTIAL IMPACTS TO RESOURCE AREAS (CONT.)**

---

<b>Resource Area</b>	<b>Potential Impact from Proposed Action</b>
AIR QUALITY	Less than significant, short-term impact from construction projects and non-native species removal.
LAND USE	No impact anticipated
CULTURAL RESOURCES	No significant impact anticipated Beneficial effects of new procedures for considering historic buildings.
SOCIOECONOMICS	No impact anticipated
TRANSPORTATION AND CIRCULATION	No impact anticipated
AESTHETICS	No significant impact anticipated Beneficial effects of enhancing natural habitats.
UTILITIES	No impact anticipated
PUBLIC HEALTH AND SAFETY	No significant impact anticipated Beneficial effects of proposed landscaping with non-allergenic plants, controlling of pest species, and ensuring NEPA process for any proposed new projects.

---

4

5 OPNAVINST 5090.1C regulations for implementing NEPA state that an EA should  
6 address only those resource areas potentially subject to impacts. In addition, the level of  
7 analysis should be commensurate with the anticipated level of environmental impact.  
8 The INRMP is designed to create long-term beneficial effects to the region and  
9 associated environment. Any short-term impact that may occur to facilitate these long-  
10 term benefits is discussed in the Environmental Consequences section (Chapter 4) of  
11 this EA.

## 12 **1.4.2 Issues Dismissed from Further Consideration**

13 The only resource not addressed further in this EA is:

- 14 • **Outdoor Recreation.** Outdoor recreation, as defined for the purposes of this  
15 section, is the active use of the natural resources of NMCS D for recreation and  
16 physical exercise. Therefore, the facilities on MNMCS D such as the baseball field,  
17 basketball court, volley ball court, tennis courts, pool, and the activities connected to  
18 these facilities are not included in the 2010 INRMP. The roads and sidewalks at  
19 NMCS D are used for walking, jogging, and biking. In addition, due to the presence of  
20 a federally threatened species, the restricted nature of the facilities, and safety and

1 security issues, NMCS D is unable to provide outdoor recreation opportunities for the  
2 general public.

### 3 **1.5 Regulatory and NEPA Compliance**

4 The SAIA requires each installation to prepare an INRMP that provides for the following  
5 management activities, to the extent that such activities are consistent with the use of  
6 the installation for military preparedness:

- 7 • Fish and wildlife management, land management, forest management, and fish-and-  
8 wildlife-oriented recreation;
- 9 • Fish and wildlife habitat enhancement or modification;
- 10 • Wetland protection, enhancement, and restoration where necessary for support of  
11 fish, wildlife, or plants;
- 12 • Integration of and consistency among the various activities conducted under the  
13 INRMP;
- 14 • Establishment of specific natural resource management goals and objectives, and  
15 time frames for Proposed Action;
- 16 • Sustainable use by the public of natural resources to the extent that the use is not  
17 inconsistent with the needs of fish and wildlife resources;
- 18 • Public access to the military installation that is necessary or appropriate for the  
19 sustainable use of natural resources, subject to requirements necessary to ensure  
20 safety and military security;
- 21 • Enforcement of applicable natural resource laws (including regulations);
- 22 • No net loss to the capability of the installation's lands to support the military mission  
23 of the installation; and
- 24 • Such other activities as the United States Department of Defense (DoD) has  
25 determined appropriate.

26 The 2010 INRMP is intended to be compatible with NMCS D's other planning documents  
27 including the NMCS D Master Plan (DoN 1994) and the City of San Diego's Multiple  
28 Species Conservation Program (MSCP) (City of San Diego 1998). (See Section 4.6 for  
29 further discussion of the NMCS D Master Plan.)

30 In preparing this document, other planning documents consulted include:

- 1   ▪ NMCS D Base Exterior Architecture Plan (DoN 1996a);
- 2   ▪ Results of an Intensive Phase I Cultural Resource Survey of the NMCS D (RECON
- 3       2001); and
- 4   ▪ NMCS D Natural Resources Inventory and Implementation Guide (Attachment A;
- 5       RECON 2005).

6 In preparing this INRMP, as required by the SAIA and in accordance with the  
7 Interagency and Intergovernmental Coordination Act of 1968 and Executive Order (EO)  
8 12372: Intergovernmental Review of Federal Programs (EO 12372), NMCS D sought  
9 concurrence from the United States Fish and Wildlife Service (USFWS), the California  
10 Department of Fish and Game (CDFG), and all appropriate local agencies. Comments  
11 on a Draft of the EA and INRMP were requested from the USFWS and CDFG, and the  
12 comments received were considered in the preparation of the documents. This process,  
13 along with signatures on the document or letters of concurrence, which will be sought for  
14 the final document, ensures that the INRMP reflects the mutual agreement of these  
15 parties concerning conservation, protection, and management of fish and wildlife  
16 resources on the installation. Also as required by the SAIA, the Draft INRMP will be  
17 made available for public comment as will be noticed in the *San Diego Union Tribune*,  
18 and the installation will consider any comments received during the 30-day public  
19 comment period when preparing the Final EA and INRMP.

20 The Navy will implement the recommendations in the INRMP within the framework of  
21 regulatory compliance, national Navy mission obligations, anti-terrorism and force  
22 protection limitations, and funding constraints.

23

## 1    **2.0 Proposed Action and No-Action** 2            **Alternatives**

3    This chapter describes the Proposed Action, the No-Action Alternative (continued  
4    implementation of the 2001 INRMP; DoN Naval Facilities Engineering Command  
5    Southwestern Division [NAVFAC SW] 2001), and summarizes the environmental  
6    consequences of each.

### 7    **2.1 Criteria for Selection**

8    The planning timeframe of the 2001 INRMP is expired. Subsequent to the writing of the  
9    2001 INRMP, a jurisdictional wetland was identified on the project site, which can be  
10   considered a significant change in baseline condition. Therefore, an updated INRMP is  
11   necessary under SAIA and Navy guidance (DoN 2006), and the No-Action Alternative  
12   would not allow this requirement to be met.

### 13   **2.2 Proposed Action**

14   The Proposed Action is to update the existing (2001) INRMP for NMCS D consistent with  
15   the military use of the property, and the goals and objectives established in the SAIA  
16   using the most recent ecosystem and facility information. The goal of the INRMP is to  
17   implement an ecosystem-based conservation program (vs. a single-species based  
18   program) that provides for conservation and rehabilitation of natural resources in a  
19   manner that is consistent with and results in no negative impact to the military mission,  
20   integrates and coordinates all natural resource management activities, provides for  
21   sustainable multipurpose uses of natural resources, and provides public access to use  
22   of natural resources subject to safety and military security considerations. Ecosystem-  
23   based conservation programs address the well-recognized principle that managing  
24   habitats and ecosystems is more prudent and scientifically sound than managing  
25   individual species.

26   The 2010 INRMP includes existing management strategies and new management  
27   practices for resource areas. The INRMP presents both general goals and specific  
28   actions for attaining those goals and providing a net benefit to NMCS D's natural  
29   resources.

1    **2.2.1    Erosion Control**

2    The Proposed Action would continue implementation of the 2001 INRMP strategy for  
3    ensuring incorporation of innovative Best Management Practices (BMPs) in the  
4    preliminary design of construction and maintenance activities involving ground  
5    disturbance. This strategy is outlined in the No-Action Alternative section below. The  
6    Proposed Action would also update the 2001 INRMP with the specific measures  
7    identified in the Erosion Evaluation and Control Plan (EECP) prepared for NMCS D in  
8    2005 (Attachment A; RECON 2005) and the NMCS D Erosion Evaluation and Control  
9    (EEC) report prepared in 2009 (Attachment B; Tierra Data 2009).

10   The EECP identified short-term, long-term, monitoring and inspection, and maintenance  
11   tasks. These tasks are summarized below:

12   **Short-term Erosion Control.** Figure 2-1 shows the location of the short-term  
13   maintenance sites. These are areas that require immediate attention and should be  
14   considered a high priority:

15   S1. Install native shrubs and herbs at the site of the two identified bare/sparsely  
16    vegetated areas (Tables 2 and 3 of EECP).

17   S2. Fill and revegetate the off-site eroded gullies and redesign the drainage to redirect  
18    water so that it does not drain off-site in concentrated flows. Construction of a  
19    drainpipe to the bottom of the slope may be necessary to avoid future erosion  
20    problems if redirection of runoff is not possible. Adjacent landowners should be  
21    consulted and coordinated with. An engineer should be consulted for design  
22    options.

23   S3. Install a catch basin inlet filter in the drain that receives runoff from the hillside in  
24    order to trap sediment.

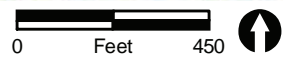
25   S4. Prevent erosion behind the retaining wall at the north of the project site by  
26    constructing a small berm or ditch to divert runoff to the drain mentioned in item S3  
27    above.

28   S5. A large cavity is forming behind the retaining wall near the northeast corner of the  
29    parking structure. Consult an engineer to develop plans to repair the retaining wall  
30    and a concrete culvert, which appears to be causing the problem.

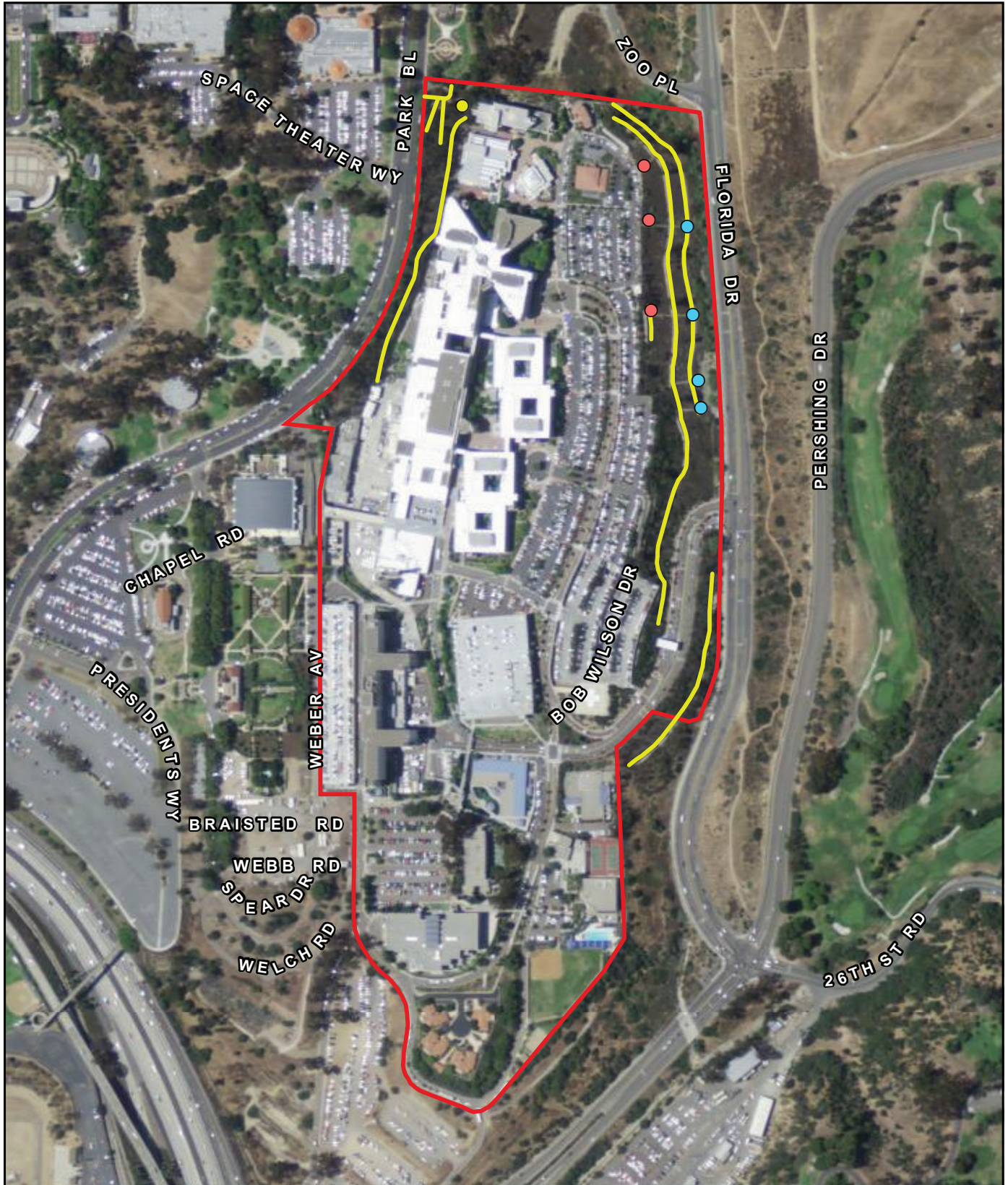
31   **Long-term Erosion Control.** Figure 2-2 shows the location of the long-term  
32   maintenance sites. These are areas that should be regularly monitored and managed in  
33   order to prevent large and costly problems:



- Naval Medical Center San Diego
- Short-term Maintenance Sites**
- S1
- S2
- S3
- S4
- S5



**FIGURE 2-1**  
Short-Term Sediment and Erosion Control Maintenance Sites



Naval Medical Center San Diego

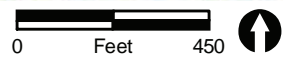
**Long-Term Maintenance Sites**

L1

● L1

● L2

● L3



**FIGURE 2-2**

Long-Term Sediment and Erosion Control Maintenance Sites

- 1 L1. Inspect drains and culverts located on the steep hillsides of NMCS D before and  
2 after a significant rainfall event with the post-inspection occurring before the  
3 following rainfall event. All sediment and debris that are obstructing flow should be  
4 removed and disposed of in an area that is not subject to erosion (debris should  
5 also not be deposited into the jurisdictional wetland on-site). Inspect points of  
6 discharge and repair any erosion sites.
- 7 L2. Place sediment and debris traps at the point where runoff from the parking lot  
8 enters the concrete drains on the west end of the parking lot. Maintain as  
9 necessary.
- 10 L3. Sweep the identified drainages following significant storm events to remove  
11 sediment and debris.

12 **Monitoring and Inspection.** NMCS D staff would inspect all sediment and erosion  
13 management sites within 24 hours of a significant storm event (0.25 inch or more of rain  
14 over a 24-hour period). Any damages or deficiencies would be recorded. Any damages  
15 or deficiencies recorded by the Erosion Control Manager would be repaired or replaced  
16 as soon as feasible, preferably before the next storm event.

17 The EEC report identified twelve sites where erosion occurs (Figure 2-3). Areas that  
18 require short-term erosion and sediment control identified in the EEC P overlap with Sites  
19 1, 2, 3, 4, 9, 10, and 11 of the EEC. Areas identified for long-term sediment and erosion  
20 management in the EEC P overlap with Sites 5, 8, and 12. Sites 6 and 7 in the EEC were  
21 not previously identified in the EEC P.

22 Attachments 1 and 2 of the EEC P present a range of BMPs for continued control of  
23 erosion, sedimentation, and stormwater pollution. The categories of BMPs addressed  
24 include topsoiling, seeding, planting, and catchbasin inserts. Each BMP fact sheet  
25 presents a description, application, and limitation information, as well as design  
26 parameters, implementation guidelines, and operation and maintenance tips. The most  
27 important factors for successful performance of these BMPs are adherence to the  
28 manufacturer's application specifications and regular inspection and maintenance  
29 following installation. BMP fact sheets have been acquired through the Idaho  
30 Department of Environmental Quality Catalog of Stormwater Best Management  
31 Practices and modified for use at NMCS D (IDEQ 2001).

## 32 **2.2.2 Improvement of Native Plant Community**

33 The Proposed Action would continue implementation of the 2001 INRMP management  
34 strategies for improvement of native plant community. These strategies are outlined in  
35 the No-Action Alternative section below. The Proposed Action would update the 2001  
36 INRMP to require vegetation surveys every 3 years instead of every 5 years. It also



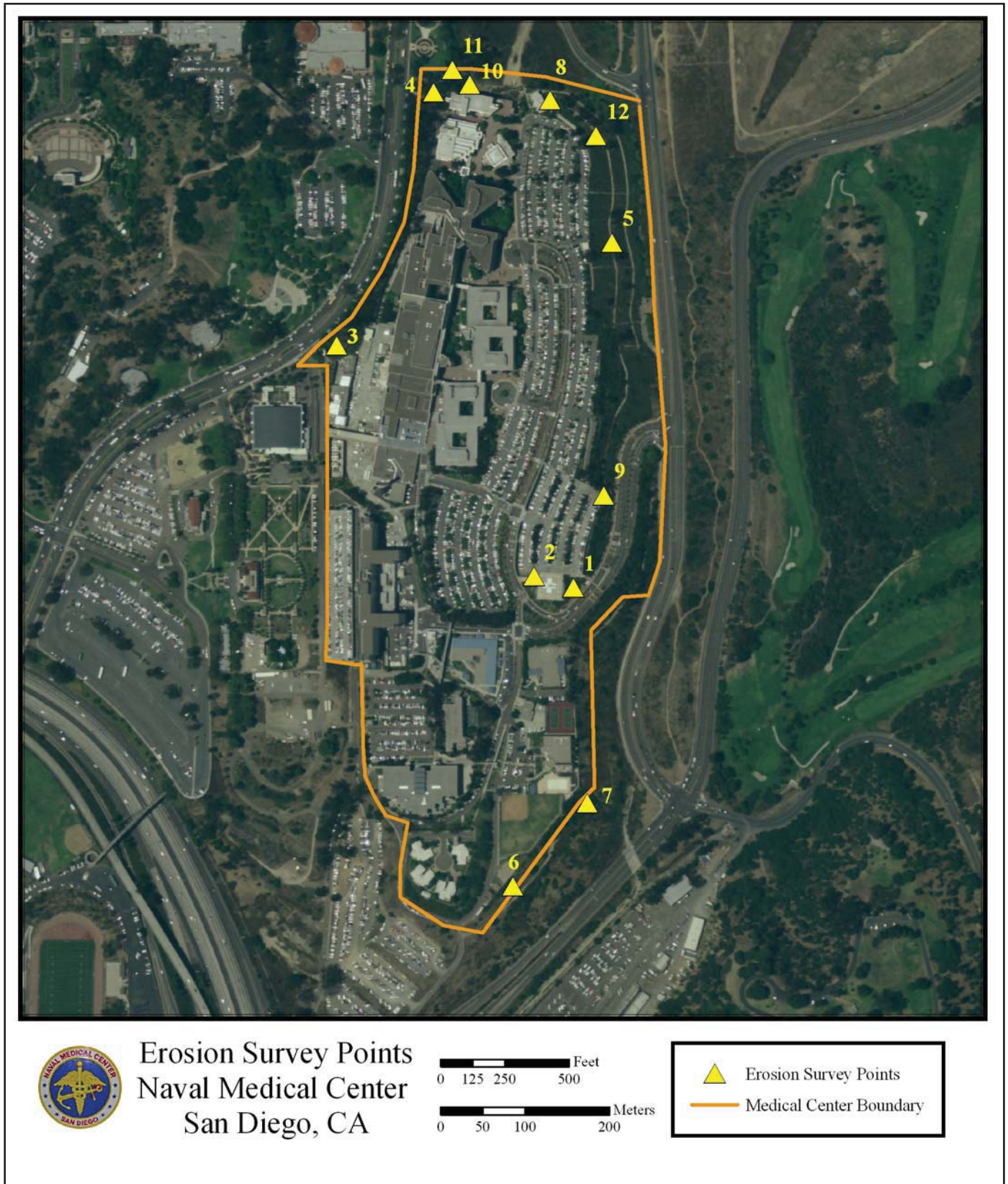


FIGURE 2-3  
Specific Locations of Erosion Concerns  
at Naval Medical Center San Diego

1 updates the management strategy for the control of invasive species on native habitats,  
2 as discussed below.

### 3 **2.2.3 Habitat and Ecosystem Management**

4 The Proposed Action would continue implementation of the 2001 INRMP management  
5 strategies for habitat and ecosystem management. These strategies are outlined in the  
6 No-Action Alternative section below.

### 7 **2.2.4 Management of Wildlife Populations**

8 The Proposed Action would update the 2001 INRMP to provide the most recent wildlife  
9 survey information (2009) and would continue implementation of the 2001 INRMP  
10 management strategies for wildlife populations. These strategies are outlined in the No-  
11 Action Alternative section below.

### 12 **2.2.5 Conservation of Migratory Birds**

13 The Proposed Action would continue implementation of the 2001 INRMP management  
14 strategies for the conservation of migratory birds. These strategies are outlined in the  
15 No-Action Alternative section below.

16 The Proposed Action differs from the No Action Alternative in that it would specify  
17 cooperating with large-scale efforts to research, monitor, and manage migratory bird  
18 populations, including the Partners in Flight (PIF) program. PIF is an international effort  
19 involving partnerships among federal, state, and local government agencies,  
20 professional organizations, conservation groups, and all other interested parties to  
21 improve monitoring, research, management, and education programs involving birds and  
22 their habitats.

### 23 **2.2.6 Sensitive Species Management**

24 The Proposed Action would continue implementation of the 2001 INRMP management  
25 strategies for sensitive species management. These strategies are outlined in the No-  
26 Action Alternative section below. The Proposed Action would also update the 2001  
27 INRMP to require vegetation surveys every 3 years instead of every 5 years.

### 28 **2.2.7 Coastal California Gnatcatcher Management**

29 The Proposed Action would continue implementation the 2001 INRMP management  
30 strategies for coastal California gnatcatcher (*Polioptila californica californica*; CAGN)  
31 management. These strategies are outlined in the No-Action Alternative section below.

1 The Proposed Action would also update the 2001 INRMP with the most recent CAGN  
2 survey data gathered in 2009.

### 3 **2.2.8 Animal Damage Control**

4 The Proposed Action would continue implementation of the 2001 INRMP management  
5 strategies for animal damage control. These strategies are outlined in the No-Action  
6 Alternative section below.

### 7 **2.2.9 Control of Invasive Plant Species**

8 The Proposed Action would update the 2001 INRMP management strategies for the  
9 control of invasive plant species as described in the No Action Alternative. Updates  
10 would involve the requirement of invasive species surveys every three years, and  
11 inclusion of the measures identified in the Exotic Invasive Plant Removal Plan (EIRP)  
12 prepared for NMCS D in 2005 (Attachment A; RECON 2005) and the Draft Vegetation  
13 Management Plan NMCS D (VMP) prepared in 2009 (Agri Chem 2009) (Attachment C).  
14 The EIRP applies to all native open space areas in NMCS D. The VMP builds upon the  
15 EIRP and includes not just the native open space areas, but all of NMCS D including  
16 landscaped areas.

17 The Proposed Action would also specify the control or eradication of the spread and  
18 introduction of noxious plant species with priority on those with the greatest potential to  
19 degrade coastal sage scrub or riparian habitat. The Proposed Action calls for conducting  
20 focused surveys of exotic plants every 3 years to track the density and distribution of  
21 exotic species on and adjacent to NMCS D. Survey results would be compared between  
22 years. Surveys will also note any invasive species on adjacent properties that could  
23 spread to NMCS D.

24 Appropriate personnel would be given non-native plant recognition training so that newly  
25 arriving invasive species can quickly be discovered and eradicated. NMCS D has  
26 produced a binder of native and non-native plants and presented it to NMCS D  
27 landscape contractors in 2005. This binder would be provided for all new landscape  
28 personnel.

29 Adjacent landowners would be coordinated with in order to eradicate exotics and prevent  
30 their spread. Specifically, NMCS D staff would communicate with the City of San Diego's  
31 manager for Florida Canyon to facilitate removal of invasive species along Florida Creek  
32 including giant reed (*Arundo donax*) and salt cedar (*Tamarix*).

33 The Proposed Action would specify the eradication and control of weeds according to  
34 the EIRP. The plants recommended for management, the recommended course of  
35 action, and their priority are summarized in Table 2-1.

1  
2  
3  
4

**TABLE 2-1  
SUMMARY FOR PRIORITY OF REMOVAL OF EXOTIC INVASIVE PLANTS**

Species	Areas Recommended for Action	Recommended Course of Action
<b>High Priority</b>		
Salt cedar	All	Eradicate existing plants within 3 years.
Giant reed	All	Eradicate existing plants within 3 years.
Cardoon (artichoke thistle)	Riparian and DCSS	Eradicate existing plants within 3 years.
Tocolote	Riparian and DCSS where established	Eradicate existing plants within 3 years.
Pampas grass	Riparian and DCSS where established	Eradicate existing plants within 3 years.
Sweet fennel	DCSS where established	Eradicate existing plants within 3 years.
<b>Medium Priority</b>		
Icelandic poppy	Riparian and DCSS	Eradicate existing plants within 3 years (excluding ornamental areas).
Eucalyptus	All but ornamental	Eliminate the spread to native areas.
Tree of heaven	All	Eradicate existing plants within 3 years.
Castor bean	All	Eradicate existing plants within 3 years.
Brazilian pepper tree	All	Eradicate existing plants within 3 years.
Acacia*	All	Eradicate existing plants within 3 years.
<b>Low to Medium Priority</b>		
Hollow-stem asphodel	All	Manage to control existing populations within 3 years.
Australian saltbush	All	Manage to control existing populations within 3 years.
Black mustard	All	Manage to control existing populations within 3 years.
English ivy	All	Manage to control existing populations within 3 years.
Russian thistle	All	Manage to control existing populations within 3 years.
Greater periwinkle	All	Manage to control existing populations within 3 years.
Crown daisy	All	Manage to control existing populations within 3 years.
<b>Low to Medium Priority (cont.)</b>		
Plus other invasive species listed in the Cal-IPC California Invasive Plant Inventory (Cal-IPC 2006, 2007)	All	Manage to control existing populations within 3 years.
<b>Low Priority</b>		
Fountain grass	Most	Prevent spread into native habitats.

5 DCSS: Diegan coastal sage scrub.  
6 \* Acacia is ranked a medium-priority for removal, however, if subsequent monitoring indicates the spread of  
7 this species into coastal sage scrub or riparian habitat it should be reassessed as a higher priority.  
8

1 The VMP focuses on restoration as a tool to enhance native habitats. It provides  
2 guidance on evaluating and identifying possible restoration sites in NMCS D. The VMP  
3 identified 22 sites (Figure 2-4) on NMCS D that would benefit from restoration efforts and  
4 prioritized the sites selected. Table 2-2 provides an overview of the sites and the  
5 numerical values used to prioritize the sites. Numerical values are 0-5, with 0 meaning  
6 there is no benefit for that criteria, and 5 meaning there is substantial benefit. The list of  
7 sites would be reviewed annually to determine if modifications or additions need to be  
8 made. Sites 3, 5, 16, 19, and 20 were considered high priority, and instructions as to  
9 how to restore each site were given. Restoration would involve non-native species  
10 eradication, planting and seeding with native species, and erosion control. Detailed  
11 restoration descriptions can be found in the attached VMP (Attachment C).

## 12 **2.2.10 Landscaping**

13 The Proposed Action would continue implementation of the 2001 INRMP management  
14 strategies for landscaping. These strategies are outlined in the No-Action Alternative  
15 section below.

16 The Proposed Action differs from the No-Action Alternative in that there is a new  
17 landscaping project and a new recommended plant list. The new project, the “Golden  
18 Eagle Native Landscape Tribute,” would benefit all NMCS D personnel, patients, and  
19 visitors. This project would comprise a memorial statue of a golden eagle and the  
20 planting of a coast live oak adjacent to the existing Healing Garden. A new plant list was  
21 developed in August, 2009 and identifies plants unacceptable for landscaping, as well as  
22 plants recommended for landscaping.

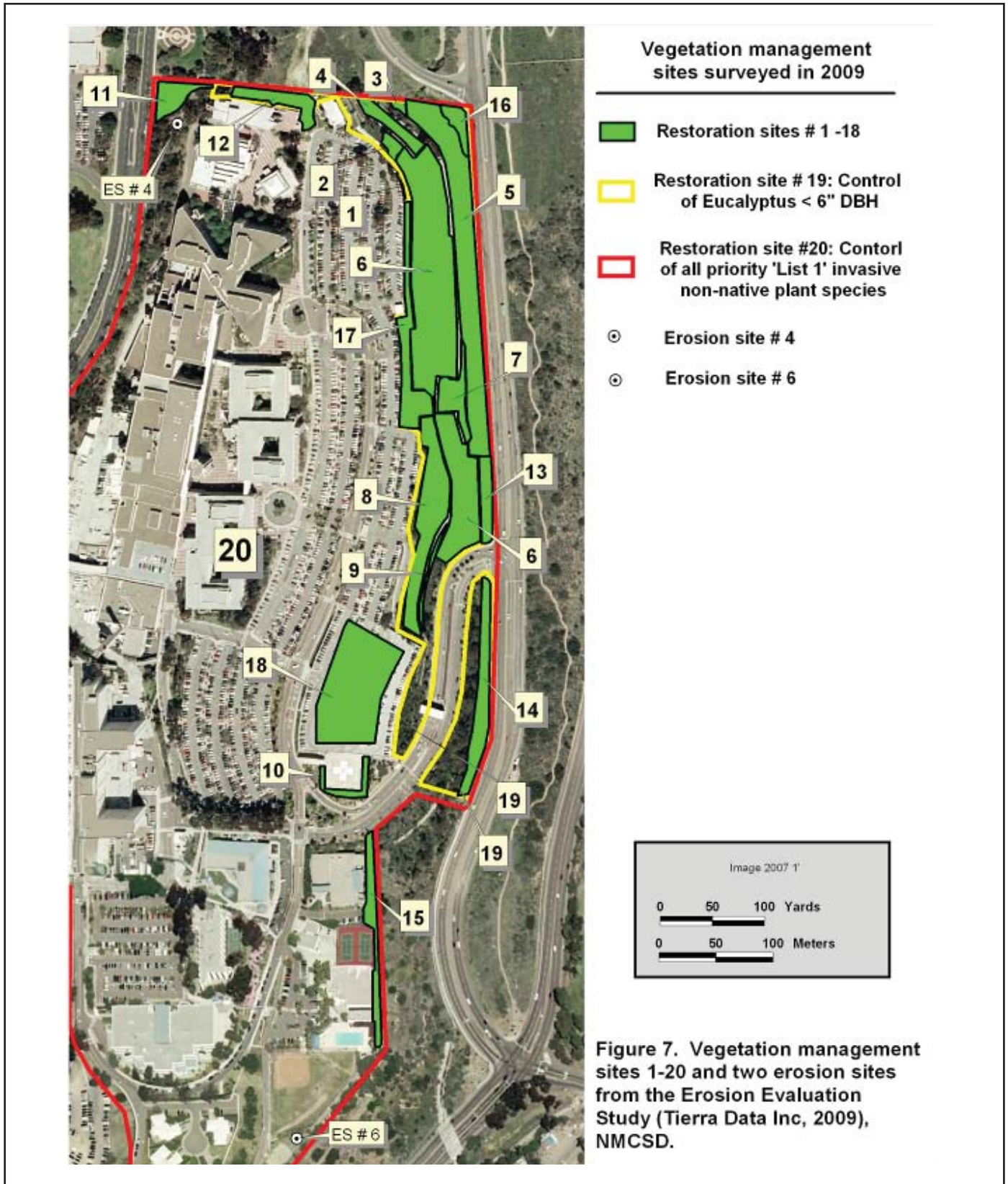
## 23 **2.2.11 Water Conservation**

24 The Proposed Action would continue implementation of the 2001 INRMP management  
25 strategies for water conservation. These strategies are outlined in the No-Action  
26 Alternative section below.

27 The Proposed Action would also include additional measures that were recommended in  
28 a free landscaping audit performed by the City of San Diego Water Department in 2004  
29 (Attachment D). Recommended measures that are relatively easy and inexpensive to  
30 implement would include adjusting the height and spray arc of sprinkler heads and  
31 trimming plant material that blocks the spray. .

## 32 **2.2.12 Jurisdictional Waters**

33 The Proposed Action would implement a management strategy for protecting the  
34 jurisdictional wetlands on NMCS D by ensuring that impact is avoided or proper permits  
35 are obtained.



**FIGURE 2-4**

Vegetation Management Sites 1-20 and Two Erosion Sites from the Erosion Evaluation Study (Tierra Data Inc, 2009), NMCS

1  
2

**TABLE 2-2  
CRITERIA AND NUMERICAL VALUES (0-5) GIVEN TO SITES ASSESSED FOR RESTORATION NEEDS.**

Rank	Site Number	Site Name	Habitat value improvement	Fire risk reduction	Flood Risk reduction	Reduce Potential for Erosion	Aesthetic	Efficiency (part of another site)	Summary
1	5	Florida Canyon Riparian Site*	5	5	4	2	1	0	17
2	20	Treatment of all List 1 Species on *NMCS D	5	3	1	3	2	2	16
3	19	Treatment of all Eucalyptus Under 6**	5	4	0	2	2	2	15
4	3	Florida Canyon NE Corner Riparian* Scrub	4	4	0	1	1	3	13
5	16	Florida Canyon Chrysanthemum Site	4	3	0	3	2	0	12
6	7	Slope Adjacent to Florida Canyon Outfall	4	4	0	3	1	0	12
7	22	Erosion Site 6 (TDS 2009)	4	2	0	4	2	0	12
8	6	High Quality CSS Slope	4	2	0	3	2	0	11
9	11	Northwest Corner Non-native Grassland	4	3	0	3	1	0	11
10	4	Middle Slope NE Corner CSS	4	2	0	3	1	0	10
11	9	Crib Wall Restoration	3	2	0	3	2	0	10
12	13	Gate Entrance—North	3	2	0	2	3	0	10
13	14	Gate Entrance—South	3	2	0	2	3	0	10
14	15	Southeast Corner—Top of Slope	3	3	0	3	1	0	10
15	1	Fisher House Future Native Garden Site	3	0	0	3	3	0	9
16	2	Fisher House Slope	3	2	0	2	2	0	9
17	8	Acacia and Rhus Dominated Parking Lot	3	3	0	2	1	0	9
18	12	Healing Garden	2	2	0	2	3	0	9
19	17	Mature Acacia and NN** Trees—Parking Lot	3	3	0	2	1	0	9
20	10	Helipad Slope	3	0	0	3	2	0	8
21	21	Erosion Site 4 (TDS 2009)	1	0	0	5	1	2	9
22	18	Eucalyptus in Parking Structures	0	5	0	0	1	0	6

Coastal Sage Scrub (CSS)

\*\* Non-native (NN)

1 The jurisdictional wetlands would be protected by educating all landscape, storm drain  
2 maintenance, or other personnel who perform work in the natural habitat area about the  
3 wetland area. Debris or sediment would not be disposed of in the wetland area. The U.S.  
4 Army Corps of Engineers (USACE) would be contacted regarding any future activities  
5 within or affecting the jurisdictional wetlands.

6 Priority would be given to projects that enhance the on-site jurisdictional wetland to  
7 increase its biological functioning and its value as habitat and a dispersal area for wildlife  
8 (i.e., invasive species removal). Invasive plant removal within the jurisdictional wetland  
9 may require a permit, if the soil would be disturbed or if heavy equipment is used.

### 10 **2.2.13 Construction and Maintenance**

11 The Proposed Action would continue implementation of the 2001 INRMP management  
12 strategies for construction and maintenance. These strategies are outlined in the No-  
13 Action Alternative section below.

### 14 **2.2.14 Cultural Resources**

15 The Proposed Action would specify that prior to a NMCS D building reaching 50 years of  
16 age, a building evaluation shall be performed to determine its eligibility for listing on the  
17 National Register of Historic Places under Special Consideration Criterion G. If a  
18 building reaches 50 years of age and a building evaluation has not yet been completed,  
19 it would be treated as a significant resource until such an evaluation determines  
20 otherwise.

21 The Proposed Action would also specify that any construction project taking place on  
22 NMCS D must go through the process outlined in Section 106 of the National Historic  
23 Preservation Act (Section 106).

### 24 **2.2.15 Conservation Awareness and Education**

25 The Proposed Action would continue implementation of the 2001 INRMP management  
26 strategies for conservation awareness and education. These strategies are outlined in  
27 the No Action Alternative section below.

28 The Proposed Action would update the 2001 INRMP with the 2010 publication of two  
29 new brochures to educate NMCS D personnel and the public about natural resources  
30 (Attachment E). One brochure focuses on the various types of natural resources at  
31 NMCS D and the other brochure focuses on non-native species and the conservation of  
32 native habitats.



1 **2.3 No-Action Alternative—Continue**  
2 **Implementation of 2001 INRMP**

3 The No-Action Alternative would continue implementation of the objectives and practices  
4 outlined in the existing INRMP (DoN NAVFAC SWDIV 2001). On-going practices used  
5 for management of natural resources at NMCS D would continue.

6 **2.3.1 Erosion Control**

7 The No-Action Alternative specifies the prevention of degradation of NMCS D facilities  
8 and native habitats through erosion and sediment control management. The No-Action  
9 Alternative also specifies the protection and restoration of soil productivity and wildlife  
10 habitat through effective implementation of BMPs, such as topsoiling, seeding, planting,  
11 and catchbasin inserts to prevent and control soil erosion. Priority will be given to  
12 erosion prevention through proper planning, rather than restoring or correcting  
13 conditions of accelerated or unnatural erosion.

14 The No-Action Alternative would ensure incorporation of innovative BMPs in the  
15 preliminary design of construction and maintenance activities involving ground  
16 disturbance with the following strategy:

- 17 • Minimize site disturbance.
- 18 • Stabilize site disturbance.
- 19 • Protect slopes and channels.
- 20 • Control site perimeter.
- 21 • Control internal erosion.
- 22 • After construction, add source-control BMPs and treatment-control BMPs.
- 23 • Keep a record of the most effective BMPs for use in NEPA planning and mitigations.
- 24 • Regularly monitor storm runoff and its effect on particularly vulnerable areas such as  
25 steep slopes.

26 The No-Action Alternative also prioritizes soil erosion control activities according to the  
27 seriousness of the degradation and potential impact using the following parameters:

- 28 • Potential impact on high-value facilities.
- 29 • Damage to NMCS D lands.

- 1 • Likelihood of sediment entering a jurisdictional wetland or waters of the U.S.,  
2 impacting a listed species, or affecting significant cultural resources.
  - 3 • Volume of potential soil loss.
  - 4 • Cost-effectiveness of the control measure.
- 5 Erosion control measures would be implemented based on the needs of each type of  
6 erosion source. Soil may be stabilized through protection of existing plant cover, using  
7 wood chips or vegetation mulch to reduce runoff on slopes, using chemical mulches  
8 where necessary, planting disturbed sites with appropriate plant material, and installing  
9 water bars, retaining walls, or diversion culverts.

## 10 **2.3.2 Improvement of Native Plant Community**

11 The No-Action Alternative specifies the protection and enhancement of the coastal sage  
12 scrub habitat on NMCS D to support biodiversity and ecosystem health, with emphasis  
13 on coastal California gnatcatcher habitat. The No-Action Alternative would prevent  
14 unnecessary damage or disturbance to native plant communities by managing the  
15 corridor of coastal sage scrub habitat between NMCS D and the rest of Florida Canyon,  
16 consistent with the MSC P, and coordinating the management of the eastern slope of  
17 NMCS D with the City of San Diego.

18 Erosion would be actively controlled in areas supporting coastal sage scrub habitat, and  
19 native plant communities would be enhanced in areas where exotic species are  
20 prevalent.

21 The No-Action Alternative proposes the improvement of the habitat along the eastern  
22 slopes of NMCS D including the slope east of Bob Wilson Drive (see Figure 4-3) by  
23 removing exotic species. After removing exotic species, larger bare areas would be  
24 planted or seeded with native species.

25 The condition of coastal sage scrub habitat on NMCS D would be monitored through  
26 periodic (every 5 years) focused vegetation surveys to determine the health and  
27 composition of the coastal sage scrub habitat.

28 Overall plant and soil cover condition would be used as a primary indicator of a need for  
29 adjustments to management. If it is determined that the coastal sage scrub habitat is  
30 threatened or requires additional monitoring, it may be appropriate to coordinate these  
31 activities with the City of San Diego and the MSC P.

1     **2.3.3   Habitat and Ecosystem Management**

2     The No-Action Alternative specifies the enhancement, restoration, and protection of the  
3     natural diversity and long-term viability of the ecological and evolutionary processes  
4     within the wildlife habitats of NMCS D. Protection and enhancement of community-level  
5     habitat values would be achieved by adopting and implementing policies which preserve  
6     structural and species biodiversity. Policies would involve maintaining existing coastal  
7     sage scrub habitat through erosion control, exotic plant eradication, and other  
8     management means, and monitoring habitat condition and the effectiveness of  
9     management activities.

10    The No-Action Alternative also specifies minimizing habitat fragmentation by maintaining  
11    continuity with off-site open space areas. Delineating and maintaining connectivity  
12    between habitat patches to link foraging and nesting areas will foster population  
13    dispersion and recolonization potential, and increase the area available for foraging.

14    **2.3.4   Management of Wildlife Populations**

15    The No-Action Alternative specifies general wildlife and CAGN surveys every 5 years.  
16    CAGN surveys would be done in accordance to USFWS protocols. General wildlife  
17    surveys refer to surveys of wildlife to determine the diversity, abundance, location, and  
18    condition of species inhabiting NMCS D.

19    To protect and enhance the habitat for wildlife populations on NMCS D, the No-Action  
20    Alternative would call for 1) minimizing activity within native habitats during the spring  
21    and summer months when many bird species are nesting and reptiles and amphibians  
22    are most active, 2) protecting movement corridors adjacent to native habitats on NMCS D  
23    and designing perimeter security fencing to ensure that wildlife can move between  
24    NMCS D and adjacent habitats, and 3) inspecting for presence of roosting bats before  
25    implementing any building and demolition projects, and encouraging the relocation of bat  
26    colonies to alternative roosting sites.

27    The No-Action Alternative would also call for pest management practices to minimize the  
28    harm to wildlife and to educate personnel about the need for non-lethal control measures  
29    and the benefits of sustaining wildlife populations. Education would be achieved through  
30    the use of educational brochures.

31    **2.3.5   Conservation of Migratory Birds**

32    The No-Action Alternative specifies that NMCS D determine the status, health, and  
33    habitat use of migratory birds on its property. Cooperative assistance from wildlife  
34    agencies, non-governmental organizations, and volunteers may be used to collect  
35    needed data.

1 The No-Action Alternative would also call for sustaining these bird populations and their  
2 habitat. This would be done by restricting access and disturbance of nesting and  
3 breeding grounds during the breeding season (February–August), and by including this  
4 restriction as a mitigation measure for any proposed project. Habitat enhancement may  
5 be done through 1) using artificial aids such as nest boxes, 2) choosing appropriate food  
6 plants for landscaping, except near eating establishments, 3) protecting areas of dense  
7 vegetative cover, and 4) preventing noxious weeds from taking over native habitats.

8 Bird populations would be protected from the lethal effects of human facilities and  
9 activities where this does not conflict with safety concerns by limiting the use of  
10 rodenticides and herbicides, and by removing any dead or dying rodents from treated  
11 areas to reduce the possibility of secondary poisoning.

12 Bird populations would also be considered when reviewing all projects, scopes of work,  
13 contracts, and agreements associated with construction and/or vegetation manipulations  
14 or removal. Projects would be phased to avoid disturbing nesting birds, and if nesting  
15 birds or eggs are encountered within a project area, the contractor would immediately  
16 notify the Contracting Officer or Project Manager and refrain from attempting to remove  
17 the bird or its nest from the area.

### 18 **2.3.6 Sensitive Species Management**

19 The No Action Alternative would provide for the recovery, enhancement, and protection  
20 of all sensitive species and their respective habitats. Presence/absence on NMCS D  
21 property of each sensitive plant with the potential to occur would continue to be  
22 confirmed through periodic rare plant surveys. Wildlife surveys would continue and  
23 would provide the opportunity to detect any sensitive wildlife species. If sensitive species  
24 are identified, management strategies for such species would be developed. A map and  
25 record of surveys and findings of sensitive species would be kept by NMCS D personnel.  
26 Impacts to sensitive species would be avoided by avoiding areas in which they occur.

### 27 **2.3.7 Coastal California Gnatcatcher Management**

28 The No-Action Alternative would ensure the continued use of the eastern slope of  
29 NMCS D for CAGN without impeding the military mission. The CAGN is a listed as  
30 federally threatened, is a California species of special concern, and is listed as a  
31 “covered species” in the City of San Diego Multiple Species Conservation Program  
32 (MSCP) Subarea Plan (City of San Diego 1998) (Attachment F). The MSCP provides  
33 specific management directives for open space. The MSCP is a plan and a process for  
34 the local issuance of permits under the federal and state Endangered Species Acts  
35 (ESAs) for impact to threatened and endangered species.

1 Continued use of the eastern slope of NMCS D for CAGN would be accomplished by 1)  
2 restricting access to occupied areas especially during the breeding season (15 February  
3 through 31 August), 2) restricting the establishment of new roads, 3) erecting and  
4 maintaining signs and/or fences restricting access to the coastal sage scrub habitat  
5 during the breeding season, and 4) incorporating management guidelines prescribed  
6 within the MSCP and coordinating the management of CAGN with the City of San Diego.

7 The MSCP includes implementation strategies, preserve design, and management  
8 guidelines. Rather than focusing preservation efforts on one species at a time, the  
9 MSCP is designed to preserve native vegetation and meet the habitat needs of multiple  
10 species. Multiple Habitat Planning Area (MHPA) lands are areas within the MSCP to be  
11 preserved and managed for biological resources. The City of San Diego's MHPA lands  
12 include Florida Canyon in and adjacent to NMCS D. NMCS D falls within the Urban  
13 Subarea section of the MSCP. Urban habitats are to be managed for a variety of uses  
14 ranging from sensitive species protection to outdoor education. See the MSCP  
15 (Attachment F) for the general planning guidelines and for the specific recommendations  
16 for the Urban Subarea. As a federal agency, NMCS D is not required to comply with the  
17 guidelines in the MSCP; however, managing the open areas on NMCS D in a similar  
18 fashion as Florida Canyon would benefit NMCS D's natural resources. The existing  
19 INRMP specifies 1) the restriction of access to nesting areas during the breeding season  
20 using signs or fences, 2) incorporation of guidelines prescribed in the City of San  
21 Diego's MSCP (City of San Diego 1998), and 3) distribution of information about  
22 gnatcatchers to interested parties.

### 23 **2.3.8 Animal Damage Control**

24 If wildlife species can find food, water, or shelter in areas populated by humans, many  
25 will adapt to and even thrive in the new environment. Conflicts with humans can arise  
26 and range from simple nuisance cases to damage to buildings or dwellings or serious  
27 issues of disease transmission to people. Coyotes, rats, pigeons, sparrows, feral dogs,  
28 and cats can become nuisances and occasionally a health hazard.

29 The No-Action Alternative specifies the protection of NMCS D facilities, personnel,  
30 visitors, and native species from risk or loss due to wild or feral animal predation or  
31 damage. This would be achieved by anticipating problems through monitoring and public  
32 relations. Monitoring would involve regular surveys for pigeons, mice and other potential  
33 pests, and speaking with personnel who frequent areas which have had problems in the  
34 past, to determine if problems persist.

35 In order to prevent the risks and potential losses and liabilities from wild or feral animal  
36 damage, the No-Action Alternative specifies that: 1) when areas in or around eating  
37 establishments are affected by nuisance wildlife, a food inspector should be contacted;  
38 2) all outdoor trash containers are covered and that a sufficient number of them is

1 located around NMCS D to discourage littering; 3) feral pigeons be discouraged from  
2 inhabiting NMCS D facilities through the use owl decoys, Nixalite® bird control products,  
3 and signs prohibiting the feeding of pigeons where appropriate; 4) habitation of occupied  
4 buildings by wildlife be discouraged through appropriate and biologically acceptable  
5 measures, and 5) mice be discouraged from entering buildings by the use of barriers,  
6 ensuring that existing building openings have been sealed, and if new openings are  
7 discovered, sealing openings larger than 1/2 inch across with rodent proof materials  
8 such as cement or metal.

9 The No-Action Alternative also specifies that non-lethal measures be used when the  
10 removal of nuisance wildlife is necessary, and that feral animals be trapped alive as  
11 needed and turn them over to the County Animal Control Officer. Personnel must avoid  
12 the killing of non-target species whenever possible.

### 13 **2.3.9 Control of Invasive Plant Species**

14 The No-Action Alternative provides management guidelines for the control of exotic  
15 invasive species. These guidelines include regular monitoring to detect new pest plants,  
16 contingencies for removing exotics as they first appear, and ensuring that invasive plant  
17 control programs cause the least possible disturbance to indigenous species.

18 The No-Action Alternative would suggest the City of San Diego remove tamarisk and  
19 giant reed along the creek on NMCS D's eastern boundary. The No-Action Alternative  
20 would also specify the removal of acacia along the eastern edge of the parking structure  
21 and the eradication of iceplant, pampas grass, myoporum, and tamarisk where they still  
22 occur.

### 23 **2.3.10 Landscaping**

24 The No-Action Alternative landscaping management strategy would improve the visual  
25 and aesthetic environment for both civilian and military personnel living, working, or  
26 visiting NMCS D. It would avoid the introduction of invasive exotic species, decrease  
27 water use, and improve the drought tolerance of plant communities. This would be  
28 achieved through the prioritization of landscape improvement projects. Areas that serve  
29 as important gathering places or highly used areas would be given high priority. The  
30 improvement of existing landscaping in areas of importance, including those visible to  
31 long-term patients or frequented by high-ranking officials and visitors would also be  
32 given high priority.

33 Minimizing water use, maintenance, and fertilizers wherever possible would be achieved  
34 through efficient irrigation systems, drought-tolerant plants, appropriate plant use, and  
35 effective plant establishment techniques.

1 The No-Action Alternative would also require the development of a priority scheme to  
2 determine which areas should receive higher levels of watering during emergency  
3 drought conditions. The following would be considered: 1) trees are normally the most  
4 valuable and most easily sustained, 2) shrubs, vines, and groundcovers are of moderate  
5 value and can be replaced with like-size materials if lost during a drought, and 3) lawns  
6 take the least amount of time to grow back to maturity.

7 The No-Action Alternative would specify the use of landscaping to moderate  
8 environmental influences (e.g., solar heat gain, glare, dust, and wind), mitigate human  
9 activities (e.g., noise, construction), unify exterior spaces, enhance biological values,  
10 and improve functionality. New facilities would be planned in coordination with existing  
11 landscaping with attention to building orientation, overhangs, trellises, and other building  
12 features and to reduce the need for large landscaped areas. Trees and shrubs would be  
13 used to block all undesirable views and lights and provide privacy for patients.  
14 Deciduous trees would be planted for summer solar-insulation/winter heat-gain  
15 screening at buildings (tree leaves help shade in summer, whereas the lack of leaves in  
16 winter allows buildings to take advantage of solar warmth). Windbreaks would be  
17 planted for wind deflection and dust control. Rocks or mulch (free of exotic plants and  
18 seeds which may spread) would be used as ground covers to reduce water needs,  
19 control weeds, and reduce erosion. Landscaping would be used, where necessary, to  
20 define edges and buffer areas that are incompatible with the surrounding use. Native  
21 plants that are useful to wildlife as a food source, where practicable, would be chosen,  
22 but not near eating areas. Herbicides would be used on an as-needed basis only. Plant  
23 locations and spacing would permit normal plant development without undue crowding  
24 or pruning. Native groundcovers such as morning glory (*Calystegia macrocarpa*) or  
25 ropevine (*Clematis paciflora*) would be used instead of iceplant.

26 A list of acceptable and successful drought-tolerant, native, non-allergenic plants to be  
27 used on NMCS D for landscaping was provided in the 2001 INRMP and was updated for  
28 insertion in the Proposed Action in August, 2009. The No-Action Alternative calls for the  
29 landscape planting list to be updated during the INRMP review process.

30 The No-Action Alternative identified the development of a “healing garden” between the  
31 Ambulatory Care Building and the property boundary. The Healing Garden was  
32 constructed in 2008. The No-Action Alternative would also call for an update of the Base  
33 Exterior Architecture Plan (BEAP) (DoN 1996a).

### 34 **2.3.11 Water Conservation**

35 The No-Action Alternative would reduce the use of water for landscaping while  
36 continuing to provide a quality environment to NMCS D personnel and visitors. The No-  
37 Action Alternative called for a free landscaping audit through the Professional  
38 Assistance for Landscape Management program at the San Diego County Water

1 Authority. This audit was performed in 2004. The No-Action Alternative also specified the  
2 maintenance of NMCS D's irrigation system and requires all new irrigation to use  
3 automatic systems with water-conserving design. The following devices shall be  
4 considered when implementing new irrigation systems: wet taps, backflow preventers,  
5 main and lateral line piping, isolation water meters, wiring, moisture sensors, clocks, rain  
6 shut-off devices, weather station monitors, flow and pressure sensors, irrigation sprinkler  
7 heads and/or drip irrigation equipment, and pressure regulating valves. All new irrigation  
8 projects would be designed to use reclaimed water (gray water), when available, in  
9 accordance with Health Department standards.

10 The No-Action Alternative would call for an increase the uniformity of water distribution in  
11 manual and automatic irrigation systems and adjusting irrigation schedules to maximize  
12 efficiency and emphasize a reduction in evaporation. Runtimes would be set during  
13 periods of less wind velocity, usually dusk until dawn. The irrigation interval between  
14 irrigations would be lengthened and the amount of water at each irrigation point would  
15 be increased to promote deep rooted turf. Deep watering once a week is preferable to  
16 more frequent, shallow watering which promotes surface rooting. Lawn and shrub areas  
17 would be separated into individual stations. This may require additional valves, lateral  
18 piping, and control equipment. Sprinkler direction would be corrected frequently to  
19 prohibit sprinkler runoff onto streets and sidewalks. Existing high-water use plants and  
20 areas of seldom-used lawns would be replaced with native, low-water-use plants. The  
21 California Water Authority's water use and conservation policies with seven stages of  
22 alert would be observed (Table 2-3).

23 The No-Action Alternative prohibits the substitution of existing plant materials with  
24 asphalt, plain concrete, or barren soil. Plants would be grouped into "hydrozones" based  
25 on similar water requirements and exposure to sun and wind. All plants that require  
26 higher amounts of water would be placed in sites protected from drying winds and out of  
27 direct sunlight. Excessively compacted, heavy, or saline soils would be amended or  
28 reclaimed to improve water retention, drainage, and aeration. Soil that has become  
29 compacted by continuous traffic would be aerated. Also, turfgrass would be aerated on  
30 an annual basis by removing 0.25-to-0.50-inch diameter soil cores that are  
31 approximately 3 to 4 inches deep.



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**TABLE 2-3  
RECOMMENDATIONS FOR LANDSCAPE IRRIGATION FROM THE COUNTY WATER  
AUTHORITY DROUGHT RESPONSE PROGRAM LISTED BY STAGES OF DROUGHT ALERT**

<b>Stage One Alert</b>
<ul style="list-style-type: none"> <li>▪ Irrigate only during morning, evening, or nighttime hours.</li> <li>▪ Check irrigation systems for leaks, broken parts, and sprinkler aim. Repair as necessary.</li> <li>▪ Set irrigation schedules appropriate to the season.</li> <li>▪ Request a landscape audit by the Professional Assistance for Landscape Management Program.</li> <li>▪ Convert non-functional turf areas to drought tolerant plants.</li> <li>▪ Convert shrubs and planter areas to drip irrigation.</li> </ul>
<b>Stage Two Alert</b> —Same as Stage One Alert with the following additions:
<ul style="list-style-type: none"> <li>▪ Reduce watering of low use areas.</li> <li>▪ Reduce water use by 10%</li> </ul>
<b>Stage Three Alert</b> —Same as Stage Two Alert with the following additions:
<ul style="list-style-type: none"> <li>▪ Eliminate watering of non-functional turf areas.</li> <li>▪ Reduce water use by 15%.</li> </ul>
<b>Stage Four Alert</b> —Same as Stage Three Alert with the following additions:
<ul style="list-style-type: none"> <li>▪ Irrigate no more than twice per week.</li> <li>▪ Reduce water use by 20%.</li> </ul>
<b>Stage Five Alert</b> —Same as Stage Four Alert with the following additions:
<ul style="list-style-type: none"> <li>▪ Eliminate watering of ornamental turf areas.</li> <li>▪ Water only actively used turf area no more than twice per week.</li> <li>▪ Reduce water use by 30%.</li> </ul>
<b>Stage Six Alert</b> —Same as Stage Five Alert with the following additions:
<ul style="list-style-type: none"> <li>▪ Irrigate playing fields only.</li> <li>▪ Reduce water use by 40%.</li> </ul>
<b>Water Emergency</b>
<ul style="list-style-type: none"> <li>▪ Short-term system failure.</li> <li>▪ No outdoor watering.</li> </ul>

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Note: Stage one is least drastic.

7 **2.3.12 Jurisdictional Waters**

8 The jurisdictional wetland is not identified in the 2001 INRMP. Therefore necessary  
9 protection measures would not be included under this alternative.

10 **2.3.13 Construction and Maintenance**

11 On occasion, there is a need to build new facilities to ensure the ability of the installation  
12 to fulfill its military mission. The No-Action Alternative specifies new construction  
13 complies with all appropriate permits.

14 Fish and wildlife conservation would be considered in all site feasibility studies and  
15 project planning, design, and construction. The USFWS would be consulted, if proposed  
16 projects could potentially affect sensitive species. The No-Action Alternative would  
17 specify new structures be built in previously disturbed areas where possible. The No-

1 Action Alternative would also reinforce the Navy practice of using BMPs for controlling  
2 soil erosion from construction and landscaping sites. BMPs for erosion and sediment  
3 control are discussed in the EECF (Attachment A).

4 A new interpretive nature trail along the eastern edge of the parking lot, above the  
5 revegetated slope, is proposed for construction. Outdoor interpretive signs and displays  
6 regarding native plants, pollution prevention, and water conservation are also proposed  
7 for construction.

8 Routine maintenance safeguards the military mission by maintaining access and  
9 operation of roads, utilities, and other infrastructure. The No-Action Alternative would  
10 specify that infrastructure shall be aligned to contribute to the military mission and  
11 protection of environmental values. Loss of environmental values due to maintenance  
12 would be avoided. If loss of environmental values is unavoidable, mitigation would be  
13 used to minimize the impact. Mitigation may involve the use of BMPs (i.e., avoidance of  
14 breeding season, exclusionary fencing, noise abatement, erosion, and sediment control)  
15 or enhancement of resources elsewhere on the property. Mitigation would be determined  
16 during the planning process by NMCS D staff and approved by the appropriate agency, if  
17 necessary.

18 Attachment G provides a list of proposed, on-going, and completed maintenance  
19 projects on NMCS D. These maintenance projects range from elevator maintenance, to  
20 roof repairs, to seismic retrofitting. These maintenance projects do not pose a threat to  
21 the natural resources on NMCS D. The No-Action Alternative specifies that when repair  
22 work becomes necessary, it will be prioritized according to its seriousness and potential  
23 impact based on the following criteria:

- 24 • Safety or security, e.g., for emergency or military vehicle access on secondary roads.
- 25 • Potential for affecting high-value facilities or areas crucial to the military mission.
- 26 • Likelihood of affecting a listed species (beneficially or otherwise), a sensitive habitat,  
27 or a significant cultural resource.
- 28 • Volume of potential soil or habitat loss.
- 29 • Cost-effectiveness of the repair or control measure.

### 30 **2.3.14 Cultural Resources**

31 The No-Action Alternative would require that any construction projects adjacent to the  
32 San Diego Veterans War Memorial Building (i.e., the western boundary of NMCS D) go  
33 through the Section 106 process.

1 **2.3.15 Conservation Awareness and Education**

2 The No-Action Alternative specifies building a strong conservation ethic and personal  
3 commitment to natural and cultural resource stewardship by personnel through the  
4 promotion of education and awareness of the unique environmental setting and history  
5 of NMCS D and southern California’s military installations. This would be done through  
6 providing a clear, concise annually reviewed manual of environmental precautions and  
7 restrictions to be used by personnel, and by supporting a natural resource orientation  
8 program for new facilities management personnel. Brochures about the natural  
9 resources present on NMCS D would be distributed to personnel during indoctrination.

10 Presentations regarding natural resources would be given on a regular basis to  
11 interested individuals. This would be especially effective with longer-term patients  
12 looking for activities. The development of a self-guided interpretive trail for wildlife  
13 viewing, with interpretive signs, along the edge of the parking lot at the top of the eastern  
14 slope of NMCS D is proposed. The development of outdoor interpretive demonstrations  
15 and displays near benches with native plantings to be viewed by the public and NMCS D  
16 personnel is also proposed.

17 Participation in annual Earth Day events would continue and new methods created by  
18 NMCS D personnel to benefit natural resources shall be exhibited.

19 **2.4 Alternatives Considered and Eliminated**  
20 **from Further Action**

21 No additional alternatives were developed or considered.

22 **2.5 Summary of Potential Effects**

23 Table 2-4 summarizes the environmental effects of both alternatives. The issue of  
24 outdoor recreation is not addressed in detail in the EA, because neither alternative has  
25 any effect on the existing recreational uses or facilities. As described in Section 1.4.2  
26 Issues Dismissed from Further Consideration, the facilities on NMCS D such as the  
27 baseball field, basketball court, volley ball court, tennis courts, pool, and the activities  
28 connected to these facilities are not included in the Proposed Action or No-Action  
29 Alternative.

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**TABLE 2-4  
COMPARISON OF ENVIRONMENTAL IMPACT OF EACH ALTERNATIVE**

Resource Area	Alternative	
	Proposed Action	No Action Alternative
Geology, Seismicity, and Erosion	<p>This alternative does not propose any actions that would negatively affect current geologic or seismic conditions at NMCS D. Soil retention would be improved by recommended erosion control measures. This alternative also identifies and proposes remediation of erosion behind a retaining wall which is not identified in the 2001 INRMP.</p> <p>Overall, the impact to geology seismicity, and erosion from this alternative would be less than significant.</p>	<p>This alternative does not propose any actions that would negatively affect current geologic or seismic conditions at NMCS D. Soil retention would be improved by recommended erosion control measures. However, this alternative does not identify erosion behind a retaining wall. While the erosion behind this retaining wall does not pose an immediate threat, long-term effects could cause the wall to collapse. As such, continuation of the current erosion control plan could result in a significant impact to resources at NMCS D.</p>
Hydrology—Jurisdictional Waters	<p>This alternative proposes guidelines to reduce unnatural runoff by instituting erosion control measures described above and recommends minimizing runoff of pollutants from NMCS D, which are monitored under a General Discharge permit. The INRMP also recommends coordinating with adjacent landowners to remove exotic plants and recommends measures to protect the jurisdictional wetlands and coordinate with the U.S. Army Corps of Engineers (USACE), if future work could affect the wetland.</p> <p>The impact to jurisdictional waters from this alternative would be less than significant.</p>	<p>The jurisdictional wetland is not identified in the 2001 INRMP. Therefore necessary protection measures would not be included under this alternative and significant impact to jurisdictional waters is expected to result.</p>

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**TABLE 2-4  
COMPARISON OF ENVIRONMENTAL IMPACT OF EACH ALTERNATIVE (CONT.)**

Resource Area	Alternative	
	Proposed Action	No Action Alternative
Hydrology—Water Supply and Quality	<p>This alternative proposes new water conservation measures from an audit by the City of San Diego Water Department including the adjustment of the height and spray of sprinkler heads, increasing the uniformity of water distribution, and trimming plant material blocking sprinkler spray. This alternative also recommends sediment control measures to minimize runoff pollutants.</p> <p>The impacts to water supply and water quality from this alternative would be less than significant.</p>	<p>This alternative proposes general water conservation measures. This alternative also recommends sediment control measures to minimize runoff pollutants.</p> <p>The impacts to water supply and water quality from this alternative would be less than significant.</p>
Biological Resources—Plant Communities	<p>This alternative updates the 2001 INRMP using the most recent plant survey information. The methods outlined for controlling and removing invasive weeds would result in the improvement of the native plant habitat and implement the Exotic Invasive Plant Removal Plan prepared for NMCS D (RECON 2005c).</p> <p>The impact to plant communities from this alternative would be less than significant.</p>	<p>This alternative includes many guidelines that would benefit NMCS D’s native coastal sage scrub habitat including invasive weed control, erosion prevention, conservation education, and periodic monitoring.</p> <p>Overall, this alternative would have positive impact on NMCS D’s native plant community.</p>
Biological Resources—Wildlife Populations	<p>This alternative updates the 2001 INRMP to provide the most recent wildlife survey information and includes similar guidelines to benefit wildlife populations, including protection for migratory birds and nests in compliance with the Migratory Bird Treaty Act (MBTA).</p> <p>The impact to wildlife populations from this alternative would be less than significant.</p>	<p>This alternative includes many guidelines that would benefit NMCS D’s wildlife populations including perimeter fencing, conservation education, and periodic surveys based upon a multiple species approach. Measures are also included to conserve habitat for migratory birds and provide protection for migratory birds and nests in compliance with the MBTA.</p> <p>The impact to wildlife populations from this alternative would be less than significant.</p>

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**TABLE 2-4  
COMPARISON OF ENVIRONMENTAL IMPACT OF EACH ALTERNATIVE (CONT.)**

Resource Area	Alternative	
	Proposed Action	No Action Alternative
Biological Resources— Sensitive Plant and Wildlife Species	<p>This alternative updates the 2001 INRMP to provide the most recent sensitive plant and wildlife survey information including a focused rare plant survey which was recommended in the 2001 INRMP and recommends maintenance of habitat fencing which was constructed as recommended in the 2001 INRMP.</p> <p>The impact to sensitive plant and wildlife populations from this alternative would be less than significant.</p>	<p>This alternative proposes specific guidelines for monitoring and managing populations of sensitive species including the performance of periodic surveys for sensitive plant and wildlife species with the potential to occur on NMCS, developing a management strategy upon the discovery of a sensitive species, avoiding occupied areas, and keeping cumulative records and maps on sensitive species and their habitats. Specific management recommendations to benefit the coastal California gnatcatcher are described including restricting access to nesting areas during the breeding season using signs or fences, coordinating management with the City of San Diego's Multiple Species Conservation Program (MSCP) Subarea Plan, and distributing information about gnatcatchers to interested parties.</p> <p>The impacts to sensitive plant and wildlife populations from this alternative would be less than significant.</p>

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**TABLE 2-4  
COMPARISON OF ENVIRONMENTAL IMPACT OF EACH ALTERNATIVE (CONT.)**

Resource Area	Alternative	
	Proposed Action	No Action Alternative
Biological Resources— Regional Biodiversity	<p>The means of promoting regional biodiversity under this alternative do not differ from the 2001 INRMP.</p> <p>The impact to regional biodiversity from this alternative would be less than significant.</p>	<p>Regional biodiversity would benefit from guidelines which promote the NMCS D habitat as a contiguous piece of the larger Florida Canyon habitat. Coordinating management with the City of San Diego’s MSCP Subarea Plan is recommended, and management strategies would be based upon a multiple species approach where a few species do not receive all of the management attention. Designing boundary fencing that allows movement of species between adjacent habitat and NMCS D, and limiting activities within native plant communities during the spring and summer will reduce human disturbance to wildlife populations. Above-described erosion control efforts and non-native plant eradication will also benefit native plant and animal populations within Florida Canyon.</p> <p>The impact to regional biodiversity from this alternative would be less than significant.</p>
Noise	<p>This alternative would produce an increase in noise levels during projects such as construction of the Golden Eagle Native Landscape Tribute, interpretive trail, or removal of salt cedar with chain saws. These projects would produce adverse but temporary impact.</p> <p>The impact to noise from this alternative would be less than significant.</p>	<p>This alternative would produce an increase in noise levels during projects such as construction of an interpretive trail or removal of salt cedar with chain saws. These projects would produce adverse but temporary impact.</p> <p>The impact to noise from this alternative would be less than significant.</p>

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**TABLE 2-4  
COMPARISON OF ENVIRONMENTAL IMPACT OF EACH ALTERNATIVE (CONT.)**

Resource Area	Alternative	
	Proposed Action	No Action Alternative
Air Quality	<p>Implementation of the INRMP would not result in any major new air emission sources, and therefore pollutant emissions are anticipated to be similar to those estimated for year 2006. Ambient Air Quality Standards would not be exceeded by any actions and there would be no measurable change to health risks for any person from emissions produced by actions in the INRMP. Any emissions from activities outlined in the INRMP would be temporary.</p> <p>The impact to air quality from this alternative would be less than significant.</p>	<p>This alternative would not change current ambient air conditions with the exception of construction of the interpretive trail that was also proposed as a project under the 2001 INRMP. Any emissions from activities outlined in the INRMP would be temporary.</p> <p>The impact to air quality from this alternative would be less than significant.</p>
Land Use	<p>The activities outlined in this alternative are similar to the 2001 INRMP and would not conflict with NMCS D's military mission. There would not be a loss of available land or operational carrying capacity. Land currently used for NMCS D functions would continue to be utilized in a similar manner. The development of the Golden Eagle Native Landscape Tribute or a nature trail may slightly increase foot traffic in an area or change the vegetation in those areas, but the changes would be negligible.</p> <p>The would be no impact to land use from this alternative</p>	<p>No activities outlined in this alternative would conflict with NMCS D's military mission, and there would not be a loss of available land or operational carrying capacity. Land currently used for NMCS D functions would continue to be utilized in a similar manner. New landscaping practices may change the appearance of an area, but would not change its use. The 2001 INRMP recommends coordinated regional planning including cooperative work with the City of San Diego on neighboring property. Personnel trained in natural resource management would make land use decisions, and guidelines are described for evaluating land use changes.</p> <p>The would be no impact to land use from this alternative</p>



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**TABLE 2-4  
COMPARISON OF ENVIRONMENTAL IMPACTS OF EACH ALTERNATIVE**

Resource Area	Alternative	
	Proposed Action	No Action Alternative
Cultural Resources	<p>This alternative recommends maintaining a list of the buildings and structures located within the NMCS D boundary and the year they were constructed. This alternative specifies that a building evaluation to determine eligibility for listing on the National Register of Historic Places shall be conducted by an archeologist before a structure reaches 50 years of age. It states that if a building reaches 50 years of age, and a building evaluation has not yet been completed, it would be treated as a significant resource until such an evaluation determines otherwise. Any construction projects taking place on NMCS D must go through the Section 106 process.</p> <p>The impact to cultural resources from this alternative would be less than significant.</p>	<p>This alternative does not outline procedures for the evaluation and conservation of structures that may qualify for the National Register of Historic Places. Cultural resources that are not identified cannot be adequately protected.</p> <p>The impact to cultural resources from this alternative would be significant.</p>
Socioeconomics	<p>This alternative would not change current conditions. This alternative would have no effect on local population, employment, or income contributions, as no increase or decrease in NMCS D personnel is expected under proposed measures.</p> <p>This alternative would have no impact on current socioeconomic conditions in the area.</p>	<p>This alternative would not change current conditions. This alternative would have no effect on local population, employment, or income contributions, as no increase or decrease in NMCS D personnel is expected under proposed measures.</p> <p>This alternative would have no impact on current socioeconomic conditions in the area.</p>
Transportation and Circulation	<p>This alternative would have no effect on current levels of transportation and circulation, as no road closures or new roads are proposed. Any increase in traffic or decrease in parking spaces that may result from proposed measures, such as during construction of a nature trail or the Golden Eagle Native Landscape Tribute, would be temporary.</p> <p>This alternative would have no impact on transportation or circulation.</p>	<p>This alternative would have no effect on current levels of transportation and circulation, as no road closures or new roads are proposed. Any increase in traffic or decrease in parking spaces that may result from proposed measures, such as during construction of a nature trail, would be temporary.</p> <p>This alternative would have no impact on transportation or circulation.</p>

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**TABLE 2-4  
COMPARISON OF ENVIRONMENTAL IMPACT OF EACH ALTERNATIVE (CONT.)**

Resource Area	Alternative	
	Proposed Action	No Action Alternative
Aesthetics	<p>This alternative would improve the local aesthetics by enhancing natural habitats and the human environment through updated measures for habitat management, landscaping, and erosion control. The additions of an interpretive nature trail and the Golden Eagle Native Landscape Tribute would also enhance the aesthetics of NMCS D.</p> <p>The impact to aesthetics from this alternative would be less than significant.</p>	<p>This alternative would improve the local aesthetics by enhancing natural habitats and the human environment through measures of habitat management, landscaping, and erosion control. Using landscaping to moderate environmental influences (e.g., solar heat gain, glare, dust, and wind), unify exterior spaces, and enhance formal/ceremonial activities would also improve the environment of NMCS D.</p> <p>The impact to aesthetics from this alternative would be less than significant.</p>
Utilities	<p>This alternative proposes no changes in utility use and will not affect any utility structures.</p> <p>This alternative would have no impact on utilities.</p>	<p>This alternative would not change current utility conditions.</p> <p>This alternative would have no impact on utilities.</p>
Public Health and Safety	<p>The health and safety impact resulting from this alternative would be identical to the No-Action Alternative.</p>	<p>This alternative institutes policies that would improve public health and safety. Landscaping with non-allergenic plants will benefit patients and personnel with allergy problems or reduced immune systems. Measures for animal damage control would reduce the risk of disease on the property. Additional measures that could improve public health and safety include ensuring NEPA evaluation of projects that have the potential to impact the human environment, use of best management practices (BMPs) for any new construction project, and control of the use of rodenticides and herbicides.</p> <p>Improvements to public health and safety would be considered less than significant impact</p>

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## 1    **3.0    Existing Environmental Conditions**

2    This section describes NMCS D, its surroundings, and the environment that could  
3    potentially be affected by the Proposed Action and the No-Action Alternative. The  
4    chapter is divided into 12 sections that address all topics relevant to natural resource  
5    management in the area including geology, hydrology, biological resources, noise, air  
6    quality, land use, cultural resources, socioeconomics, transportation, aesthetics, utilities,  
7    and public health and safety. This section is designed to describe the current state of  
8    NMCS D. Actions proposed under specific alternatives are not addressed here.

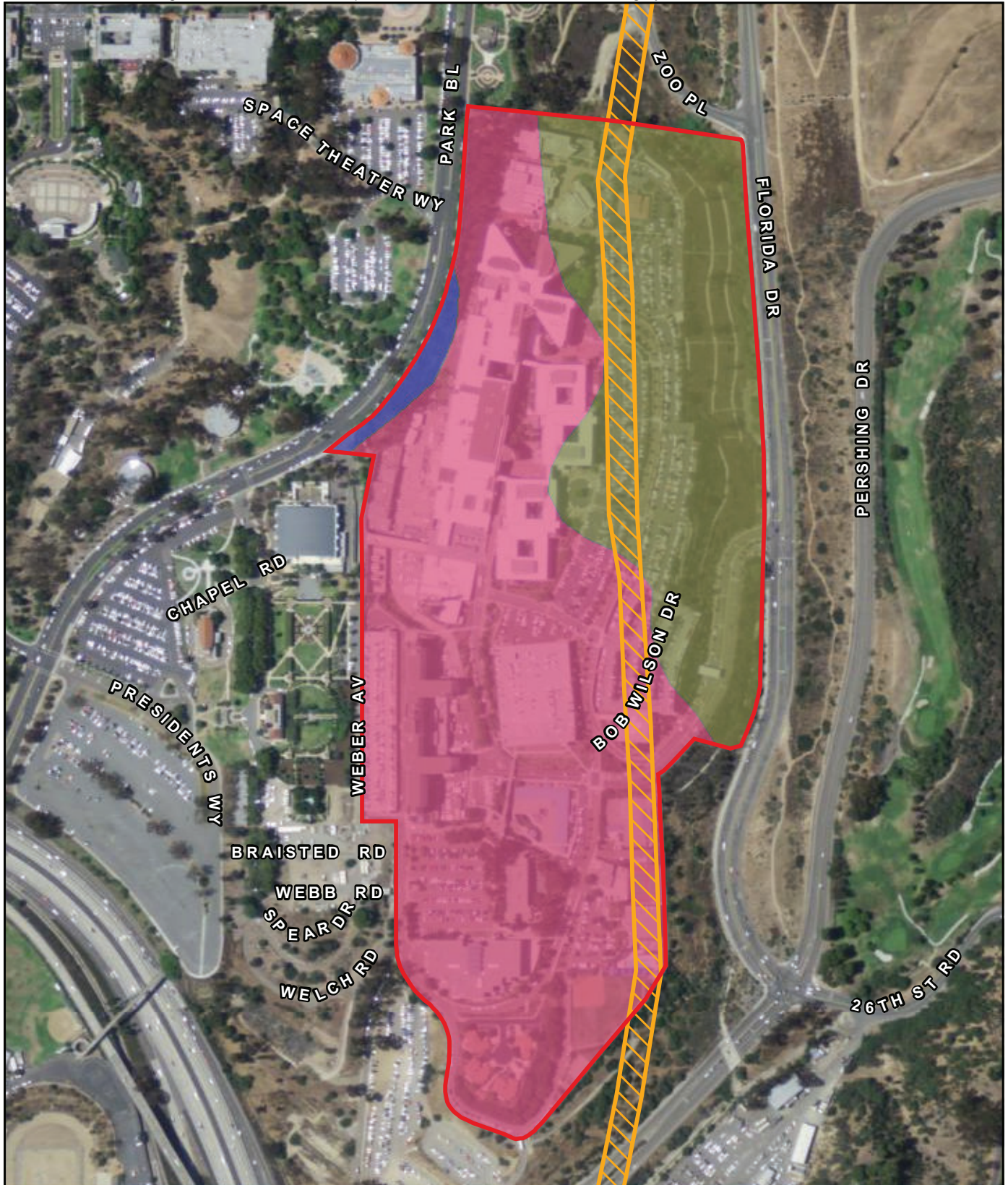
### 9    **3.1    Geology, Seismicity, and Erosion**

10    NMCS D lies on a bluff called Inspiration Point approximately 4 miles inland of San Diego  
11    Bay. This area consists of gently rolling hills dissected by canyons that eventually  
12    ascend to the peninsular mountain ranges to the east.

13    The mean elevation is approximately 250 feet above mean sea level. The area is very  
14    steep, with a 180-foot-elevational rise between the lowest and highest points within the  
15    complex. In order to provide a level base for the construction of buildings and parking  
16    lots, the NMCS D site was deeply excavated. Design modifications to the original overall  
17    building plan of NMCS D were necessitated when a seismic fault was discovered running  
18    in a northerly direction just east of the center line of NMCS D. However, early site  
19    investigations indicated that the vertical slip displacement rate was very minor compared  
20    to other faults. Although it was concluded that this fault posed no threat to the site, a  
21    100-foot foundation buffer zone was enforced along the fault. Figure 3-1 indicates the  
22    location of the fault.

23    Erosion is caused by the action of water and wind wearing away the land’s surface.  
24    Wind speeds at NMCS D are generally not sufficient to cause significant erosion and,  
25    consequently, the majority of erosion is caused by water. Due to the steep slopes  
26    around much of the complex, the erosion hazard on NMCS D is high. Natural and  
27    landscaped vegetation and a series of runoff drains along the eastern edge of NMCS D  
28    have stabilized much of this slope. However, erosion is still common in some areas on  
29    NMCS D and on the steeper slopes just off the property. The current erosion control  
30    practices used by the facilities maintenance personnel, such as the use of BMPs and  
31    retaining walls, do control some erosion, but there is still erosion occurring behind the  
32    retaining wall on the northern project boundary (Photograph 3-23, Attachment B); behind  
33    the northeast corner of the retaining wall below the parking structure located adjacent to  
34    the vegetated slopes (Photograph 3-17, Attachment B); and there are four locations  
35    identified where runoff from NMCS D, typically associated with drainpipes or V-ditches,  
36    has created erosion gullies off-site (Photograph 3-9, Attachment B). Additionally, two

Image source: Natural color representation of the NAIP 2009 aerial imagery.



- Naval Medical Center San Diego
- Fault

**Soils**

- Redding Cobbly Loam, 9 to 30% Slopes
- Redding Gravelly Loam, 2 to 9% Slopes
- Urban land

FIGURE 3-1  
Soils

1 areas of bare or sparsely vegetated ground are identified on highly erodible slopes (see  
2 Figures 2-1 and 2-2) (RECON 2005b).

3 An erosion evaluation was recently completed at NMCS D (Attachment B; Tierra Data  
4 2009). The evaluation identified 12 sites where erosion was occurring (see Figure 2-3).  
5 Areas of erosion concern included steep areas, drainage ditches, and most notably, crib  
6 walls.

### 7 **3.1.1 Soils**

8 The soils found at NMCS D are excessively drained cobbly loams, coarse gravelly loams,  
9 and urban land types consisting of highly altered soil materials (U.S. Department of  
10 Agriculture 1973) (see Figure 3-1). Soil types identified are general categories mapped  
11 at a large scale and represent the site condition prior to current development.

12 **Redding cobbly loam, 9 to 30 percent slopes.** This is a 10–20 inch deep cobbly loam  
13 over hardpan. Twenty to 30 percent of the surface layer and 25 to 35 percent of the  
14 subsoil is composed of cobblestones. The water holding capacity is only 1.5 to 2 inches,  
15 and runoff can be rapid. Consequently, the erosion hazard is moderate to high. This soil  
16 is present in the northeastern quarter of NMCS D. This area contains the largest patch of  
17 native vegetation remaining at NMCS D and is relatively steep.

18 **Redding gravelly loam, 2 to 9 percent slopes.** This soil consists of well drained,  
19 undulating to steep gravelly loams that have a gravelly clay subsoil and a hardpan. This  
20 soil type is only found in a very small section in the northwest corner of NMCS D.

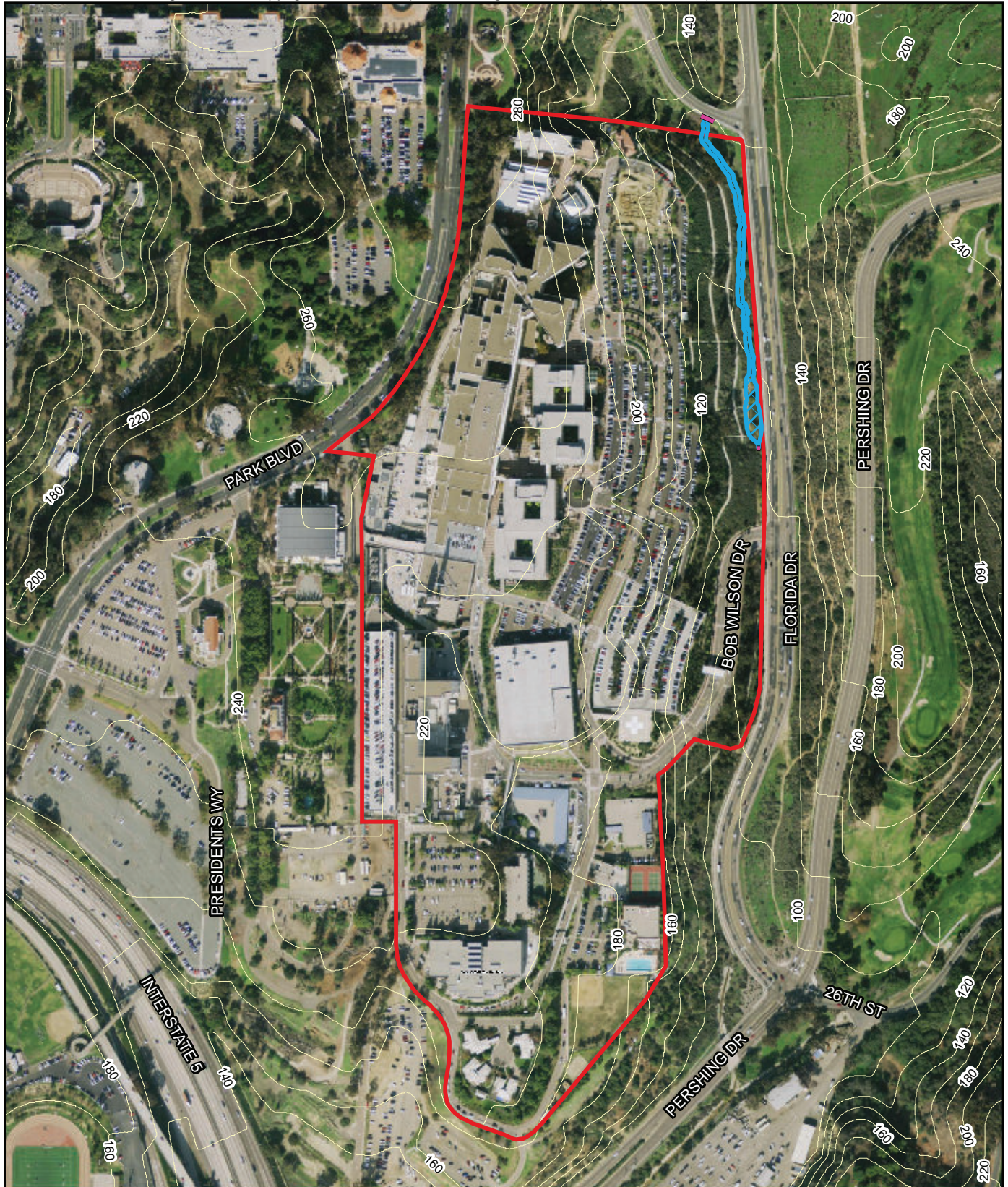
21 **Urban land.** The majority (67 percent) of the NMCS D is classified as urban land by the  
22 soil survey. This is soil that has been altered by construction projects to the point where  
23 identification is not possible. This classification is reserved for buildings, streets, and  
24 other developed areas.


## 25 **3.2 Hydrology**

26 The San Diego region relies heavily on water imported from the Colorado River and  
27 Northern California. More than half of the water use is residential.

### 28 **3.2.1 Drainage and Jurisdictional Waters**

29 A total of 0.48 acre of jurisdictional wetlands was delineated in the urban drainage  
30 adjacent to Florida Drive, as shown in Figure 3-2 (RECON 2005a). Urban runoff and  
31 sedimentation contribute greatly to this creek; therefore, the site may be considered an  
32 atypical situation. The presence of strong indicators of hydrophytic vegetation and  
33 wetland hydrology, and the evidence of pockets of hydric soil indicators were used to  
34 determine the wetland boundary. Hydrophytic vegetation included pale spikerush



-  Naval Medical Center San Diego
-  Jurisdictional wetland
-  20 foot Contours
-  Culvert

**FIGURE 3-2**  
Jurisdictional Wetlands

1 (*Eleocharis macrostachya*), yerba mansa (*Anemopsis californica*), watercress  
2 (*Nasturtium officinale*), and arroyo willow (*Salix lasiolepis*). Hydrologic indicators  
3 included inundation, saturated soils, drift lines, and sediment deposits.

4 The drainage has been channelized and is well defined with riprap throughout much of  
5 its length. The southern extent of the creek has been stabilized with concrete banks. The  
6 creek averages 15 feet wide at the ordinary high water mark.

7 The creek enters the site through a box culvert beneath Zoo Drive and exits to the south  
8 via a large pipe. Additional water enters the drainage via runoff from the adjacent east-  
9 facing slope. Culverts drain the hillside into the creek. The creek is part of the Pueblo  
10 San Diego watershed and is part of the Powerhouse Canyon drainage. The water  
11 draining into Powerhouse Canyon flows southward into an urbanized area's storm drain  
12 system which drains into San Diego Bay and the Pacific Ocean.

### 13 **3.2.2 Water Supply and Quality**

14 Water for all purposes at NMCSD is supplied by the City of San Diego. The two locations  
15 where the City of San Diego water system connects with NMCSD are at the intersection  
16 of Park Boulevard and Wieber Avenue, and at Weiber Avenue, south of the first location.

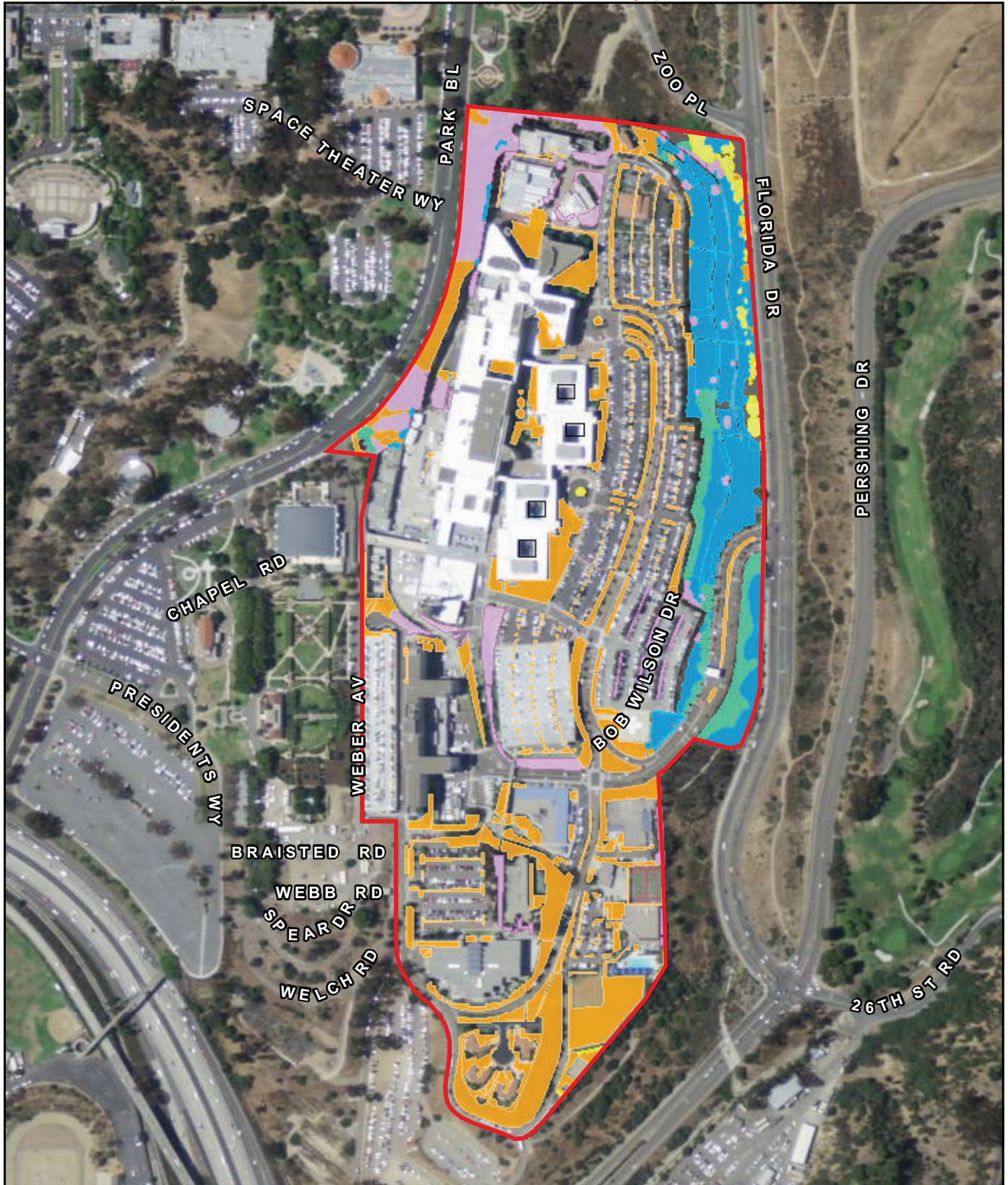
17 The City of San Diego's water supply is regularly tested and within all state or federal  
18 contaminant standards (City of San Diego 2008). Thus, the water quality at NMCSD is  
19 also within all state or federal contaminant standards. Results are shown in Attachment H.

## 20 **3.3 Biological Resources**

### 21 **3.3.1 Plant Communities**

22 Vegetation communities on NMCSD were mapped in 2002 and 2003 according to the  
23 Sawyer and Keeler-Wolf (1995), and Holland (1986) classification systems. The Holland  
24 classification system provides a broader view of the native and non-native vegetation  
25 communities. Five land cover types were mapped on-site in accordance with the Holland  
26 classification system (Figure 3-3): Diegan coastal sage scrub, southern willow scrub,  
27 ornamental vegetation, disturbed habitat, and urban/developed lands.

28 The majority of the NMCSD property is developed and occupied by buildings, roads,  
29 parking lots, and irrigated landscape (approximately 66 acres) (see Figure 1-2).  
30 However, a small portion of the property (approximately 9 acres) along the northeastern  
31 edge of NMCSD consists of manufactured slopes that are primarily vegetated with native  
32 species, but do contain some non-native species. This slope along the northeastern  
33 edge contains approximately 7 acres of native habitat. When the hospital was built,



- |   |   |
|---|---|
| <span style="border: 2px solid red; padding: 2px;"> </span> Naval Medical Center San Diego  | <span style="display: inline-block; width: 15px; height: 10px; background-color: #4CAF50; border: 1px solid black;"></span> Acacia-dominated ornamental landscape     |
| <b>Vegetation Communities</b>   | <span style="display: inline-block; width: 15px; height: 10px; background-color: #9E9E9E; border: 1px solid black;"></span> Eucalyptus-dominated ornamental landscape |
| <span style="display: inline-block; width: 15px; height: 10px; background-color: #2196F3; border: 1px solid black;"></span> Diegan coastal sage scrub | <span style="display: inline-block; width: 15px; height: 10px; background-color: #808080; border: 1px solid black;"></span> Disturbed habitat                         |
| <span style="display: inline-block; width: 15px; height: 10px; background-color: #FFEB3B; border: 1px solid black;"></span> Southern willow scrub     | <span style="display: inline-block; width: 15px; height: 10px; background-color: #FFFFFF; border: 1px solid black;"></span> Not Mapped                                |
| <span style="display: inline-block; width: 15px; height: 10px; background-color: #FF9800; border: 1px solid black;"></span> Ornamental landscape      |   |

**FIGURE 3-3**  
Vegetation Map  
(Holland Classification System)



1 planting of native vegetation was incorporated into the project design to mitigate the  
2 environmental consequences of the construction.

3 The vegetation in this northeastern section forms a dense cover over most of the  
4 revegetated slope and is predominantly native Diegan coastal sage scrub (7 acres) with  
5 some native southern willow scrub (less than 1 acre), and the remaining vegetation  
6 being disturbed habitat and non-native invasive species (RECON 2005a). A few small  
7 patches of native shrubs also occur within the ornamental vegetation on the steep slope  
8 in the northwest portion of the property. Exotic plant species are often used in  
9 landscaping on NMCS D. Some of the species of particular concern that may require  
10 eradication on NMCS D include tamarisk, acacia, pampas grass, eucalyptus, and  
11 iceplant.

12 Attachment I provides the acreage of each land cover type and a brief description of  
13 each of the NMCS D Holland vegetation communities. A total of 202 plant species were  
14 identified within the NMCS D boundary. Of this total, 64 (32 percent) are species native  
15 to southern California. Attachment J provides a list of all plant species observed on the  
16 property.

### 17 **3.3.2 Wildlife Populations**

18 Recent surveys for amphibians and reptiles, invertebrates, birds, and mammals were  
19 conducted in 2002/2003 for the preparation of the Natural Resources Inventory and  
20 Implementation Guide (RECON 2005a) (Attachment A). The 2010 INRMP recommends  
21 periodic wildlife surveys every 5 years.

22 No amphibians were observed during the 2002/2003 surveys at NMCS D. However,  
23 there is a potential for Pacific treefrogs (*Hyla regilla*) to occur in the drainage on the east  
24 side of the property. The reptile population is large but of limited species diversity; four  
25 species were observed in the 2002/2003 surveys. In the 2002/2003 surveys, 29 bird  
26 species and nine mammal species were also observed. A total of 344 invertebrates were  
27 collected representing twelve different orders.

28 The federally protected coastal California gnatcatcher was detected in the Diegan  
29 coastal sage scrub habitat. At least two gnatcatchers were observed in 2003 (RECON  
30 2005a) and one male gnatcatcher in 2009 (Clark 2009).

31 The revegetated coastal sage scrub along the northeastern slope and southern willow  
32 scrub along the eastern edge of NMCS D provide good habitat for reptile, bird, and  
33 mammal species. In addition, some wildlife—especially birds—also occur in some parts  
34 of the developed areas. Although most of the birds from the 2002/2003 surveys were  
35 detected in the coastal sage scrub habitat, some also utilized the adjacent landscaped  
36 habitat.

1 There is good habitat connectivity between the revegetated coastal sage scrub habitat at  
2 NMCS D and the habitat that exists within Florida Canyon. The creek just below the  
3 slope provides a natural corridor, facilitating movement of animals between adjacent  
4 areas in search of appropriate habitat for feeding, breeding, and cover. This connectivity  
5 is likely the reason that a federally protected species like the coastal California  
6 gnatcatcher utilizes NMCS D property.

### 7 **3.3.3 Sensitive Plant and Wildlife Species**

8 NMCS D holds little potential for most sensitive plant and wildlife species because of the  
9 relatively small size of its native communities. No sensitive plant species have been  
10 observed on NMCS D, and only one sensitive species—the coastal California  
11 gnatcatcher—has been observed on-site. The coastal California gnatcatcher is federally  
12 listed as threatened by the USFWS and is a California Special Concern species  
13 according to the CDFG.

14 At least two coastal California gnatcatchers were observed during surveys conducted  
15 during the fall of 2003, and one was observed most recently in 2009 (Clark 2009).  
16 Gnatcatchers were also observed at NMCS D during focused surveys for the species  
17 during 1994–1995. One was observed in the revegetated coastal sage scrub habitat  
18 during the winter surveys, and a pair was observed during the spring surveys. One male  
19 and one female coastal California gnatcatcher were observed during winter surveys  
20 conducted in 2000–2001, and the pair was again observed in surveys during the spring  
21 2001 breeding season. An active nest was also located. Based upon average territory  
22 size of 4 to 11 acres (CDFG n.d.), the approximate 9-acre eastern slope of NMCS D  
23 probably has enough potential habitat to contain no more than two breeding pairs of  
24 California gnatcatchers. The coastal California gnatcatchers present on NMCS D may be  
25 part of a larger population which inhabits Florida Canyon, adjacent to NMCS D. In recent  
26 years, one to four coastal California gnatcatchers have been observed annually during  
27 the breeding season, and up to nine individuals have been seen during the winter in  
28 Florida Canyon (Unitt, *pers. comm.* 2001).

### 29 **3.3.4 Regional Biodiversity**

30 Regional land development reduces habitat, creates a mosaic of isolated remaining  
31 habitat patches, or “islands,” and restricts wildlife movement among islands of habitat  
32 reducing both species richness and abundance. Therefore, it is increasingly important to  
33 maintain wildlife corridors for managing biological resources on a regional scale. Wildlife  
34 corridors provide protected pathways for wildlife movement between otherwise isolated  
35 “islands.” There is good habitat connectivity between the revegetated coastal sage scrub  
36 habitat at NMCS D and the native habitat that exists within Florida Canyon. The creek  
37 just below the slope provides a natural corridor, facilitating movement of animals

1 between adjacent areas in search of appropriate habitat for feeding, breeding, and  
2 cover.

3 Because much of the coastal sage scrub habitat in San Diego County has been lost to  
4 development or is highly fragmented, every remaining acre becomes important to the  
5 regional biodiversity of southern California. Though the 5 acres of coastal sage scrub  
6 that are included on the eastern slope of NMCS D are a relatively small patch of habitat,  
7 the area supports a pair of coastal California gnatcatchers. The area is a portion of the  
8 much larger coastal sage scrub system located in Florida Canyon just north and east of  
9 NMCS D. Therefore, the patch of coastal sage scrub on NMCS D plays a significant role  
10 in the preservation of sensitive wildlife in urban San Diego. Florida Canyon is included in  
11 the City of San Diego's MSC P (City of San Diego 1998) as an urban habitat area, and  
12 contains 127 acres of coastal sage scrub over a 195-acre area.

### 13 **3.4 Noise**

14 Noise-sensitive receptors are those persons who occupy areas where noise is an  
15 important attribute of the environment. Such areas include residential dwellings, mobile  
16 homes, hotels, hospitals, nursing homes, education facilities, and libraries. In addition,  
17 noise-sensitive receptors may also include wildlife species such as migratory birds which  
18 rely on vocalizations for communication. Although exposure to high noise levels has  
19 been demonstrated to cause hearing loss, the principal human responses to  
20 environmental noise are annoyance and stress.

21 The DoD's *Planning in the Noise Environment Unified Facilities Criteria* (UFC) provides  
22 compatibility criteria for various land uses on military installations (DoD 1978). These  
23 criteria are described in Table 3-1. Land uses present on NMCS D such as residences,  
24 bachelor housing, and medical facilities are compatible with sound levels up to 65  
25 decibels (dB) day-night average sound level (Ldn). Appropriate noise mitigation is  
26 required for development in areas where the Ldn exceeds 65 dB. Sound levels at or  
27 exceeding 75 dB Ldn are incompatible with these types of land uses with the exception  
28 of bachelor housing.

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**TABLE 3-1  
ACCEPTABLE LAND USES AND MINIMUM BUILDING SOUND LEVEL REQUIREMENTS**

Facility	SLUCM Code	Outdoor Noise Environment (L <sub>dn</sub> /L <sub>eq</sub> in dB)				
		65-69	60-64	75-79	70-74	65-69
Family Housing	1100	No	No	No	NLR30(4)	NLR25(4)
Resistor Housing	1100	No	No	NLR35(4)	NLR30(4)	NLR25(4)
Transient Lodging - Hotel, Motel, etc.	15	No	No	NLR35(4)	NLR30(4)	NLR25(4)
*Classrooms, Libraries, Churches	68,711	No	No	No	NLR30	NLR25
*Offices & Administration Buildings - Military		NLR40	NLR35	NLR30	NLR25	Yes
*Offices - Business & Professional	81, 82, 83, 85	No	No	NLR30	NLR25	Yes
Hospitals, Medical Facilities, Nursing Homes (24-hour Occupancy)	651	No	No	No	NLR30	NLR25
*Dental Clinic, Medical Dispensaries	651	No	No	NLR30	NLR25	Yes
*Outdoor Music Shells	7211	No	No	No	No	No
*Commercial & Retail Stores, Exchanges, Movie Theaters, Restaurants & Cafeterias, Banks, Credit Unions, BMO/Office Clubs	63, 64, 66, 67, 69	No	No	NLR30	NLR25	Yes
*Flight Line Operations Maintenance & Training		NLR35(5)	NLR30(5)	Yes	Yes	Yes
*Industrial, Manufacturing & Laboratories	21-29, 31-35, 39, 41-49, 51, 52, 64	No	NLR35(5)	NLR30(5)	NLR25(5)	Yes
*Outdoor Sports Areas, Outdoor Spectator Sports	722	No	No	No	Yes(1)	Yes(1)
*Playgrounds, Active Sport Recreational Areas	7610	No	No	No	Yes	Yes
*Neighborhood Parks	7610	No	No	No	Yes	Yes
*Gymnasiums, Indoor Pools	7425, 7432	No	NLR30(3)	NLR25(3)	Yes	Yes
*Outdoor - Frequent Speech Communication		No(2,3)	No(2,3)	No(2)	No(2)	No(2)
*Outdoor - Infrequent Speech Communication		No(2,3)	No(2,3)	Yes	Yes	Yes
Livestock Farming, Animal Breeding	815-817	No	No	No	Yes	Yes
*Agricultural (except Livestock)	81	Yes(3)	Yes(3)	Yes	Yes	Yes

\*For detailed design, the L<sub>eq</sub> for the appropriate period of usage is the preferred measure of the noise environment. See 4-2.2 for L<sub>eq</sub> estimation from L<sub>dn</sub>.

**Yes** - Land use compatible with noise environment. **No** - special noise control restriction. Normal construction appropriate.

**NLR** - Appropriate noise level reduction where indoor activities predominate.

**No** - Land use not compatible with noise environment, even if special building noise insulation provided.

Refer to text for further explanations of Yes, NLR, and No designations.

FOOTNOTES:

1. Land use is acceptable provided special sound reinforcement systems are installed.
2. Land use may be acceptable provided special speech communication systems are used.
3. Land use may be acceptable provided hearing protection devices are worn by personnel. Check applicable hearing damage regulations.
4. Although it is recognized that local conditions may require residential uses in these areas, this use is strongly discouraged in L<sub>dn</sub> 70-74 and L<sub>dn</sub> 75-79 and discouraged in L<sub>dn</sub> 65-69. The absence of viable alternative development options should be determined. NLR criteria will not eliminate outdoor environment noise problems and, as a result, site planning and design should include measures to minimize this impact, particularly where the noise is from ground level sources.
5. The NLR must only be incorporated into the design and construction of portions of these buildings where the public is received, office areas, and noise sensitive work areas or where the normal noise level is low.

35

SOURCE: U.S. Department of Defense 1978. Figure 4-5.

1 The southern portion of NMCS D lies under the east–west flight path of Lindbergh Field  
2 (City of San Diego 2007). Consequently, the southern portion of NMCS D is exposed to  
3 aircraft noise levels greater than 65 Community Noise Equivalent Level (CNEL), but less  
4 than 70 CNEL. The CNEL is a 24-hour weighted noise level similar to the Ldn and  
5 typically is within one decibel of the Ldn. Future projected aircraft noise contours due to  
6 Lindbergh Field indicate that the southern tip of NMCS D would be exposed to noise  
7 levels at or just above 70 CNEL (City of San Diego 2007). Aircraft noise from the North  
8 Island Naval Station does not impact NMCS D (City of San Diego 2007). Traffic noise  
9 comes from nearby Interstate 5, Pershing Drive, Florida Drive, and Park Boulevard.  
10 Future year 2030 traffic volumes on Interstate 5 are 243 average daily trips adjacent to  
11 the project site (SANDAG 2005). As such, noise levels near the southwest portion of the  
12 project site could be as high as 75 CNEL due to traffic on Interstate 5. The combination  
13 of freeway and aircraft noise could cause future noise levels to exceed 75 CNEL for the  
14 southwesternmost portion of the project site. Freeway noise would drop off further into  
15 the site due to distance, topography, and building shielding. Because of the exterior  
16 noise levels, hospital, training, housing, and community support facilities must achieve  
17 outdoor-to-indoor noise level reductions (NLR) of 25 to 35 dB to comply with  
18 compatibility criteria depending on a future building’s location on the project site.

### 19 **3.5 Air Quality**

20 The Environmental Protection Agency (EPA) has established primary and secondary  
21 National Ambient Air Quality Standards (NAAQS) for seven pollutants (carbon  
22 monoxide, nitrogen dioxide, particulate matter less than 10 microns (PM<sub>10</sub>) and less than  
23 2.5 microns (PM<sub>2.5</sub>), ozone, sulfur dioxide, and lead). Primary standards are adopted to  
24 protect public health, and secondary standards are adopted to protect public welfare.  
25 States are required to adopt ambient air quality standards which are at least as stringent  
26 as the federal NAAQS, however, the state standards may be more stringent. California  
27 has adopted standards more stringent than federal standards for some pollutants (Table  
28 3-2).

29 Section 176 of the Clean Air Act requires any action on the part of a federal agency in an  
30 area considered in nonattainment or maintenance of air quality standards to conform to  
31 the state’s efforts to attain and maintain these standards. San Diego County is a basic  
32 nonattainment area for ozone (O<sub>3</sub>) under federal standards, and is classified as a  
33 serious nonattainment area under state standards. San Diego County is also a  
34 nonattainment area for PM<sub>2.5</sub> and PM<sub>10</sub> under state standards. San Diego County is  
35 listed as unclassifiable/attainment for the federal PM<sub>10</sub> and PM<sub>2.5</sub> standards (State of  
36 California 2007).

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**TABLE 3-2  
AMBIENT AIR QUALITY STANDARDS**

Pollutant	Averaging Time	California Standards <sup>1</sup>		Federal Standards <sup>2</sup>		
		Concentration <sup>3</sup>	Method <sup>4</sup>	Primary <sup>3,5</sup>	Secondary <sup>3,6</sup>	Method <sup>7</sup>
Ozone (O <sub>3</sub> )	1 Hour	0.09 ppm (180 µg/m <sup>3</sup> )	Ultraviolet Photometry	--	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.07 ppm (137 µg/m <sup>3</sup> )		0.75 ppm (147 µg/m <sup>3</sup> )		
Respirable Particulate Matter (PM <sub>10</sub> )	24 Hour	50 µg/m <sup>3</sup>	Gravimetric or Beta Attenuation	150 µg/m <sup>3</sup>	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m <sup>3</sup>		--		
Fine Particulate Matter (PM <sub>2.5</sub> )	24 Hour	No Separate State Standard		35 µg/m <sup>3</sup>	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m <sup>3</sup>	Gravimetric or Beta Attenuation	15 µg/m <sup>3</sup>		
Carbon Monoxide (CO)	8 Hour	9.0 ppm (10 mg/m <sup>3</sup> )	Non-dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m <sup>3</sup> )	None	Non-dispersive Infrared Photometry (NDIR)
	1 Hour	20 ppm (23 mg/m <sup>3</sup> )		35 ppm (40 mg/m <sup>3</sup> )		
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m <sup>3</sup> )		--	--	
Nitrogen Dioxide (NO <sub>2</sub> )	Annual Arithmetic Mean	0.030 ppm (57 µg/m <sup>3</sup> )	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m <sup>3</sup> )	Same as Primary Standard	Gas Phase Chemiluminescence
	1 Hour	0.18 ppm (339 µg/m <sup>3</sup> )		--		
Lead <sup>8</sup>	30 days average	1.5 µg/m <sup>3</sup>	Atomic Absorption	--	--	High Volume Sampler and Atomic Absorption
	Calendar Quarter	--		1.5 µg/m <sup>3</sup>	Same as Primary Standard	
Sulfur Dioxide (SO <sub>2</sub> )	Annual Arithmetic Mean	--	Ultraviolet Fluorescence	0.030 ppm (80 µg/m <sup>3</sup> )	--	Pararosaniline
	24 Hour	0.04 ppm (105 µg/m <sup>3</sup> )		0.14 ppm (365 µg/m <sup>3</sup> )	--	
	3 Hour	--		--	0.5 ppm (1300 µg/m <sup>3</sup> )	
	1 Hour	0.25 ppm (655 µg/m <sup>3</sup> )		--	--	
Visibility Reducing Particles	8 Hour	Extinction coefficient of 0.23 per kilometer—visibility of 10 miles or more (0.07–30 miles or more for Lake Tahoe) due to particles when relative humidity is less than 70 percent. Method: Beta Attenuation and Transmittance through Filter Tape.		No Federal Standards		
Sulfates	24 Hour	25 µg/m <sup>3</sup>	Ion Chromatography	No Federal Standards		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m <sup>3</sup> )	Ultraviolet Fluorescence	No Federal Standards		
Vinyl Chloride <sup>8</sup>	24 Hour	0.01 ppm (26 µg/m <sup>3</sup> )	Gas Chromatography	No Federal Standards		

<sup>4</sup>SOURCE: State of California 2008

<sup>5</sup>See table notes on next page.

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ppm = parts per million;  $\mu\text{g}/\text{m}^3$  = micrograms per cubic meter.

<sup>1</sup> California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, suspended particulate matter— $\text{PM}_{10}$ ,  $\text{PM}_{2.5}$ , and visibility reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

<sup>2</sup> National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest eight-hour concentration in a year, averaged over three years, is equal to or less than the standard. For  $\text{PM}_{10}$ , the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above  $150 \mu\text{g}/\text{m}^3$  is equal to or less than one. For  $\text{PM}_{2.5}$ , the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact U.S. EPA for further clarification and current federal policies.

<sup>3</sup> Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of  $25^\circ \text{C}$  and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of  $25^\circ \text{C}$  and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

<sup>4</sup> Any equivalent procedure which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.

<sup>5</sup> National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.

<sup>6</sup> National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

<sup>7</sup> Reference method as described by the EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the EPA.

<sup>8</sup> The ARB has identified lead and vinyl chloride as "toxic air contaminants" with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

31 NMCS D is located within the San Diego Air Basin (SDAB). The San Diego Air Pollution  
32 Control District (SDAPCD) is the agency that regulates air quality in the SDAB. The  
33 SDAPCD maintains air quality monitoring stations located throughout the greater San  
34 Diego metropolitan region that continuously record air pollutant concentrations and  
35 meteorological information. There are no monitoring stations on NMCS D; however, the  
36 Navy cooperates with all SDAPCD federal and state air quality standards and permitting  
37 regulations. Annual air quality emissions reports for NMCS D are produced by the Naval  
38 Facilities Engineering Command (NAVFAC). NAVFAC provides a toxic and criteria  
39 pollutant air emissions inventory for 2006 (NMCS D 2007).

40 On November 30, 1993, the EPA promulgated its rules for determining general  
41 conformity of federal actions with state air quality implementation plans, as required by  
42 Clean Air Act Section 176(c). To demonstrate conformity with a local State  
43 Implementation Plan (SIP), a project must clearly demonstrate that it does not (1) cause  
44 or contribute to any new violation of any standard in the area; (2) interfere with  
45 provisions in the applicable SIP for maintenance or attainment of air quality standards;  
46 (3) increase the frequency or severity of any existing violation of any standard; or  
47 (4) delay timely attainment of any standard, any interim emission reduction, or other  
48 milestones included in the SIP for air quality. The EPA has developed specific  
49 procedures for conformity determinations for federal actions which include preparing an  
50 assessment of emissions associated with the project based on the latest and most  
51 accurate emissions estimating techniques.

## 1    **3.6    Land Use**

2    The majority of NMCS D property (approximately 80 percent) comprises developed land,  
3    including buildings, parking lots, and streets. The buildings support a variety of functions  
4    including the hospital, training, housing, gym, other community facilities, and  
5    maintenance and storage (Figure 3-4). Most of the medical facilities are located in the  
6    northwest area of the complex. Housing, training, and community support buildings are  
7    located in the southern half, on the opposite side of Bob Wilson Drive.

8    The undeveloped area on-site (labeled as *Open Space* on Figure 3-4) includes an  
9    approximate 9-acre slope that runs along the eastern edge of the property and contains  
10    approximately 7 acres of habitat, vegetated primarily with native species (5 acres of  
11    Diegan coastal sage scrub, less than 1 acre of southern willow scrub), and the  
12    remaining 2 acres being disturbed habitat and non-native invasive species (RECON  
13    2005a). The coastal sage scrub habitat on this eastern slope is home to the federally  
14    threatened coastal California gnatcatcher.

15    Unrestricted access to natural resources is impractical at NMCS D due to its small size  
16    and topography. There are few opportunities for outdoor recreation and little room for  
17    additional development.

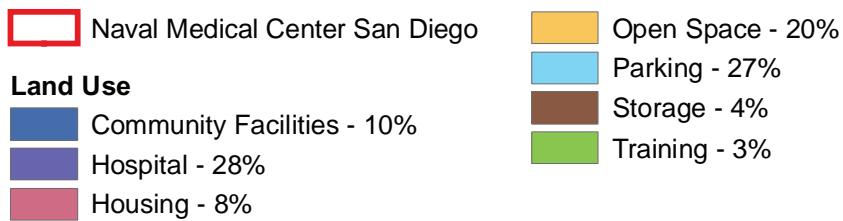
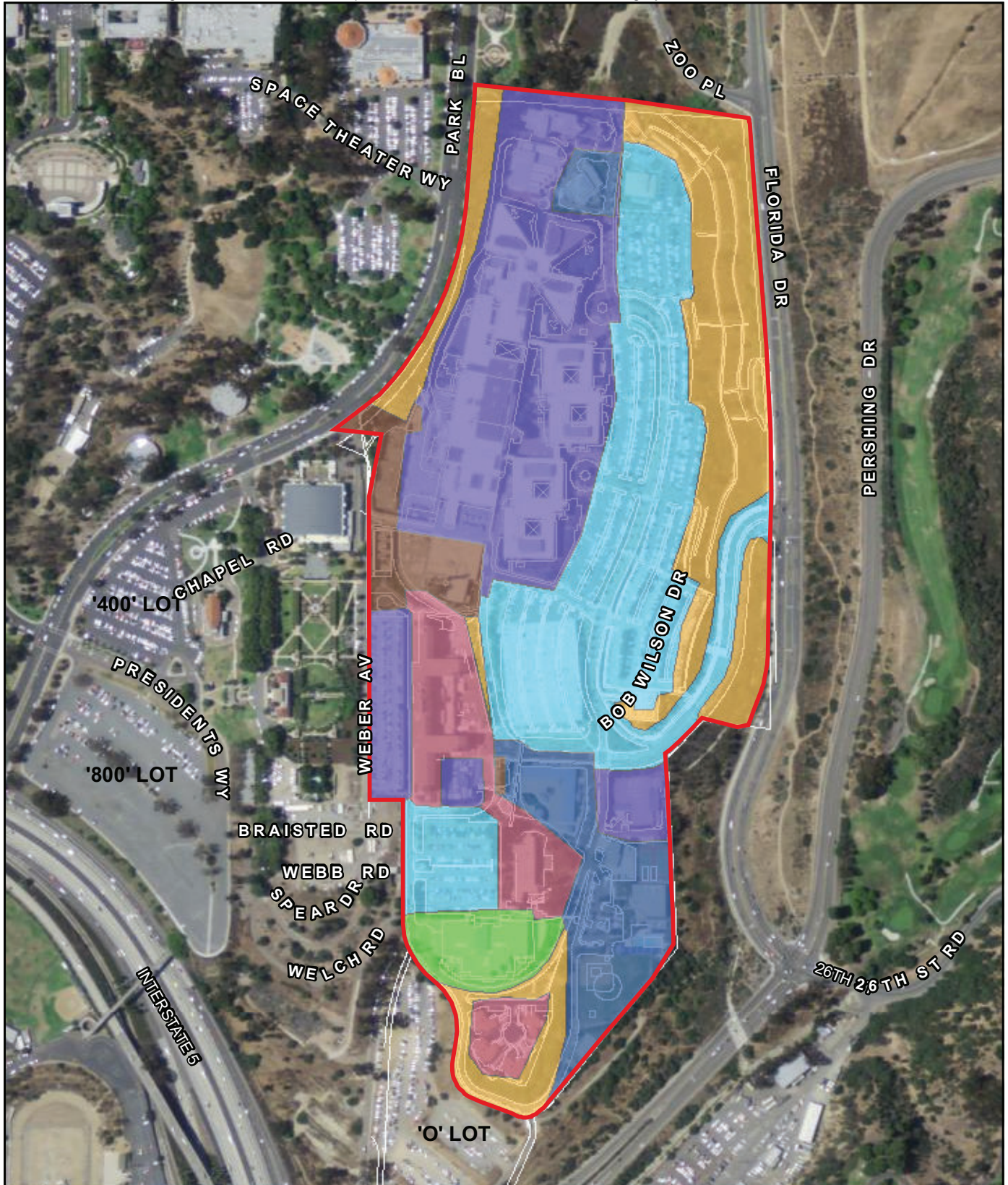
## 18    **3.7    Cultural Resources**

19    Balboa Park is considered a National Historic Landmark (NHL). The City of San Diego  
20    has established a review procedure that allows for the National Park Service and the  
21    State Historic Preservation Officer to comment on projects within the NHL park  
22    boundaries. However NMCS D falls outside of the landmark boundary. Within Balboa  
23    Park, numerous structures are on the *National Register of Historic Places (National*  
24    *Register)*.

25    According to the National Historic Preservation Act (NHPA), as amended, a property  
26    must be at least 50 years old to be considered historic. However, the act provides for  
27    exceptions under what is called Criteria Consideration G, which states that a property  
28    that is less than 50 years old, but that otherwise meets *National Register* criteria, must  
29    have exceptional historical importance to be eligible for listing on the *National Register*  
30    (National Park Service 1997).

31    All but two, Buildings 26 and 27, of the facilities at NMCS D were constructed since 1988.  
32    The student housing facility was built in 1956, and is therefore over 50 years old. These  
33    structures are currently being evaluated for significance. They must be treated as if they  
34    were significant, until they have been properly evaluated. Any construction projects on  
35    NMCS D must go through the Section 106 process which evaluates the potential effect  
36    on historic resources.





**FIGURE 3-4**  
Facilities and Land Use at NMCS D

1 Compliance with Section 106 and Advisory Council on Historic Preservation Protection  
2 of Historic Properties (36 CFR 800) for the NMCS D has been previously accomplished  
3 under the San Diego Metropolitan Area Programmatic Agreement (Metro Area PA; DoN  
4 2003), executed in February 2003 between the Commander Navy Region Southwest  
5 (CNRSW), the Advisory Council on Historic Preservation (Council), and the State of  
6 California Historic Preservation Officer (SHPO). The Metro Area PA streamlines  
7 compliance with Section 106 and allows CNRSW to determine an undertaking's area of  
8 potential effect (APE) to make findings of "No Historic Properties Affected" and to make  
9 the determination that an undertaking will have no adverse effect on historic properties  
10 without consulting the SHPO, which is normally required without a PA under 36 CFR  
11 800. In accordance with the *National Register* criteria, and the Metro Area PA, no further  
12 compliance efforts under Section 106 or 36 CFR 800 are required for this undertaking.

### 13 **3.8 Socioeconomics**

14 This section addresses the population, employment, and income contribution affected by  
15 activities at NMCS D. While the Bureau of Medicine and Surgery (BUMED) is the  
16 responsible landowner of NMCS D, it has close social and economic ties to the  
17 surrounding civilian community. In 2004 the City of San Diego had the highest military  
18 and military-employed civilian payroll in the nation at nearly \$3.5 billion and received the  
19 second highest amount in grants and contracts at nearly \$3.9 billion (DoD 2005).

20 In addition, each federal agency shall make achieving environmental justice part of its  
21 mission by identifying and addressing, as appropriate, disproportionately high and  
22 adverse human health or environmental effects of its programs, policies, and activities  
23 on minority populations and low-income populations. This is the requirement of EO  
24 12898, Environmental Justice, signed on February 11, 1994. The DoD relies upon the  
25 NEPA process to assess the effects proposed actions may have on minority and low  
26 income populations.

27 NMCS D lies within the City of San Diego, which grew from a population of 1,110,549 in  
28 1990 to 1,223,400 in 2000 and was estimated at 1,263,756 in 2004 (U.S. Census  
29 Bureau 2001, 2005a). In 2000, minority groups comprised 40 percent of San Diego's  
30 population. According to 2004 survey census data (U.S. Census Bureau 2005b), an  
31 estimated 9.5 percent of families in the city of San Diego lived below the poverty level.

32 NMCS D occupies California census tract 55. In 1990, this tract had a population of 1,051  
33 all but 11 of which lived in the Bachelors Enlisted Quarters (BEQ). In 2000, this census  
34 tract had a resident population of 1,139 with approximately 45 percent consisting of  
35 minority groups. Income level information on individuals living in quarters housing is not  
36 available.

1 Census data from the year 2000 showed that only one individual living at NMCS D was  
2 under the age of 18. There is a child day-care center for the children of employees at  
3 NMCS D, and any children living on the property would be eligible to attend schools in  
4 the San Diego Unified School District.

### 5 **3.9 Transportation and Circulation**

6 Traffic enters NMCS D primarily by Bob Wilson Drive on the eastern boundary via Florida  
7 Drive (see Figure 3-4). The only other access is through the rear gate off of Park  
8 Boulevard on the northwestern side of NMCS D. In order to lessen traffic congestion, the  
9 rear gate access which is primarily used by emergency and maintenance vehicles is  
10 currently available for use by staff from 0600 to 0730 in the morning and open to all for  
11 exiting NMCS D from 1500 to 1700. With the recent addition of the P001 parking  
12 structure, the roadway in front of the parking structure has been changed to  
13 accommodate two-way traffic to ease traffic flow in and out of the structure. Figure 1-3  
14 shows these access points.

15 Parking is distributed throughout NMCS D and is severely limited. There is a total  
16 capacity for 4,871 vehicles within the parking lots and the parking structures on NMCS D  
17 including 3,122 non-patient reserved spaces; 185 disabled spaces; 1,431 patient  
18 reserved spaces; 53 motorcycle spaces; and 80 government vehicle reserved spaces.  
19 As more than 1,431 patients visit NMCS D per day, there is a parking space shortfall  
20 (Holman pers. com. 2008). Additional parking is located in overflow lots adjacent to  
21 NMCS D. These lots can accommodate an additional 1,181 vehicles and are serviced by  
22 a tram.

### 23 **3.10 Aesthetics**

24 Directly surrounding NMCS D to the east and northwest are East Mesa and Central  
25 Mesa, respectively, which are portions of Balboa Park that consist of active and passive  
26 park uses. The portion of Inspiration Point west of NMCS D consists of historic  
27 courtyards and three former Naval Hospital buildings converted to offices. Outlying the  
28 park surrounding NMCS D are communities that include residential, commercial, and  
29 office buildings. To the east, across Florida Canyon, is the Balboa Park Municipal Golf  
30 Course. Directly adjacent to NMCS D to the south is a city-owned parking lot used by  
31 NMCS D and Interstate 5. Because of its elevated position, the view to the southwest  
32 includes downtown San Diego and San Diego Bay. Many of these areas can be seen in  
33 Figure 1-3.

34 The most visible features of NMCS D from most viewpoints outside of its boundary are  
35 buildings, namely the Main Hospital Complex and the BEQ. These features are most

1 visible from areas east of NMCS D including the Balboa Park Municipal Golf Course,  
2 Morley Field Sports Complex, and Golden Hill Park located in the East Mesa area of  
3 Balboa Park. Looking at NMCS D from the east, the slope of coastal sage scrub habitat  
4 on NMCS D's eastern boundary is also conspicuous. A view of NMCS D from the  
5 northeast is pictured on the front cover of this EA. The NMCS D is aesthetically  
6 comparable with its surroundings and aesthetically compatible from the viewpoints  
7 described above.

## 8 **3.11 Utilities**

9 NMCS D relies on the same utility connections as most inhabitants of the City of San  
10 Diego. NMCS D's storm drainage system and sewage systems are both connected to the  
11 City of San Diego's systems along Florida Drive, and the sewage is treated by the city.  
12 Water is provided by the City of San Diego via two points of connection. AT&T maintains  
13 and provides service for the telecommunications system.

14 Electricity and natural gas are provided by SDG&E. The hospital has backup generators.  
15 There are no utility corridors or right-of-ways within NMCS D.

## 16 **3.12 Public Health and Safety**

17 Public health and safety issues are defined as those factors that directly impact the  
18 ability to protect and preserve life and property associated with NMCS D. Federal  
19 agencies must also "make it a high priority to identify and assess environmental health  
20 risks that may disproportionately affect children, and shall ensure that its policies,  
21 programs, activities, and standards address disproportionate risks to children that result  
22 from environmental health risks and safety risks" as required by EO 13045: Protection of  
23 Children (EO 13045). Other than attending as a patient or visitor, the only areas at  
24 NMCS D where children are regularly present are the housing complex and child care  
25 facilities.

26 The DoD's Installation Restoration Program is intended to provide a safety net to protect  
27 the ecosystems on which most living organisms depend by facilitating the investigation  
28 and cleanup of contaminated sites at military installations. At NMCS D, no sites have  
29 been identified as potentially contaminated by hazardous materials and consequently  
30 there are no restoration sites.

31 Because of its duties as a medical hospital, NMCS D does have multiple sources of  
32 hazardous waste and biomedical waste. The Facilities Management Department is  
33 responsible for the disposal of the waste which is conducted through Public NAVFAC or  
34 licensed private companies. Waste is stored on NMCS D for no more than 90 days.

1 There are a number of management plans and systems in place at NMCSO to address  
2 contaminant concerns. The following protection protocols are just a few of these  
3 programs:

- 4 • Integrated Oil and Hazardous Substance Pollution Contingency Plan, NMCSO, CA.  
5 July 2006;
- 6 • Integrated Solid Waste Management Plan with Pollution Prevention Plan and  
7 Hazardous Waste Management Plan for NMCSO, CA. July 2006;
- 8 • Hazardous Material Business Plans for NMCSO, CA. September 2006; and
- 9 • Oil and Hazardous Substance Spill Prevention, Control, and Countermeasure Plan.



1 **4.0 Environmental Consequences of**  
 2 **Proposed Action and No-Action**  
 3 **Alternative**

4 This section describes the effects that the Proposed Action and the No-Action  
 5 Alternative would have on the environment. The impact topics are presented in the same  
 6 order as in Chapter 3. The 2001 INRMP (No-Action Alternative) is the baseline, or  
 7 prevailing conditions, for changes discussed in each section. The Proposed Action  
 8 would have no significant negative impact on current conditions at NMCS D. Most of the  
 9 activities outlined in the 2001 INRMP are either completed or presented as general  
 10 guidelines, which are expanded on in the Proposed Action. Table 4-1 summarizes the  
 11 impacts of both alternatives.

12 **TABLE 4-1**  
 13 **COMPARISON OF ENVIRONMENTAL EFFECTS OF THE PROPOSED ACTION AND NO-**  
 14 **ACTION ALTERNATIVE**  
 15

Topic	Proposed Action	No-Action Alternative
Geology, Seismicity, and Erosion	⊙	●
Jurisdictional Waters	⊙	●
Water Supply and Quality	⊙	⊙
Plant Communities	⊙	⊙
Wildlife Populations	⊙	⊙
Sensitive Species	⊙	⊙
Regional Biodiversity	⊙	⊙
Noise	⊙	⊙
Air Quality	⊙	⊙
Land Use	○	○
Cultural Resources	⊙	●
Socioeconomics	○	○
Transportation and Circulation	⊙	⊙
Aesthetics	○	○
Utilities	○	○
Public Health and Safety	⊙	⊙

- 16 ○ = no impact  
 17 ⊙ = not significant impact  
 18 ● = Significant adverse impact  
 19

20 Table 4-2 highlights the differences between the specific management actions of the  
 21 2001 INRMP (No-Action Alternative) and the recommended management actions in the  
 22 2010 INRMP (Proposed Action) actions.

1  
2  
3  
4

**TABLE 4-2  
SPECIFIC AND RECOMMENDED MANAGEMENT ACTIONS OF  
THE 2001 AND 2010 INRMPs FOR NMCS D**

INRMP	Project Description	FY	Date Completed
2001	Coastal Sage Scrub Monitoring Survey	2002	2002–2003 (Veg. communities mapped)
2001	Baseline Herpetological Survey	2002	2002–2003
2001	Baseline Invertebrate Survey	2002	2003
2001	Baseline Mammal Survey	2002	2003
2001	Baseline Rare Plant Survey	2002	2003
2001	Fence or sign gnatcatcher habitat to restrict access during breeding season.	2002	Dec. 02
2001	Seal openings to buildings with rodent proof materials.	2004	On-going
2001	Non-native Plant Recognition Training	2002	Dec. 05
2001	Healing Garden	2002	Apr. 05
2001	SDCWA Landscaping Audit	2002	2004
2010	Erosion Control	2010	Not applicable (N/A)
2010	Erosion Control–Drainage Redesign	2010	On-going
2010	Rodent / Pest Control	On-going	N/A
2010	Focused Coastal Sage Scrub Vegetation Survey	2009 and triennially	N/A
2010	Periodic Rare Plant Survey	2009 and triennially	N/A
2010	Focused Exotic/Invasive Plant Survey	2009 and triennially	N/A
2010	Non-native Plant Recognition Training	On-going	N/A
2010	Coordinate with City of San Diego on non-native plant removal on land adjacent to NMCS D	On-going	N/A
2010	Non-native Plant Removal	On-going	N/A
2010	Golden Eagle Native Landscape Tribute	2010	Not completed
2010	Periodic Wildlife Survey	2009 and every five years	N/A
2010	Animal Damage Control education programs and brochure	2010	N/A
2010	Cat-proof fencing, as-needed, around the housing areas.	On-going as-needed	On-going
2010	NMCS D Natural Resources Training Video	2010	Not completed
2010	NMCS D natural resources brochure	2007	2010
2010	Interpretive Nature Trail	2006	Not completed
2010	Conservation Outreach	On-going	N/A
2010	Annual Environmental Quality Assessments	On-going	N/A
2010	Long-term Maintenance Plan	2009	Not completed
2010	NEPA Brochure and Guidance Book for NMCS D	2010	Not completed
2010	Cultural Resources Survey of 50YR+ buildings	2010	N/A
2010	PIF Coordination for migratory bird counts	2010	N/A



## 1    **4.1    Geology, Seismicity, and Erosion**

2    The factors evaluated for geologic environment include the potential for unique geologic  
3    features to occur, seismic safety, landslide or erosion potential, and alteration of existing  
4    topography.

5    **Proposed Action:** This alternative does not propose any actions that would negatively  
6    affect current geologic or seismic conditions at NMCS D. Soil retention would be  
7    improved by erosion control measures recommended in this alternative, as discussed in  
8    Section 2.2. This alternative also identifies and proposes remediation of erosion on  
9    several sites not identified in the 2001 INRMP, including several retaining walls. Erosion  
10   impact may occur during restoration and revegetation efforts as well as during  
11   construction of proposed projects. However, this impact would be less than significant  
12   due to the use of BMPs to minimize erosion and sedimentation, and proposed  
13   stabilization of retaining walls that would decrease the potential for structural damage  
14   caused by settling of foundations over eroded soils.

15   **No-Action Alternative:** This alternative does not propose any actions that would  
16   negatively affect current geologic or seismic conditions at NMCS D. Soil retention would  
17   be improved by erosion control measures recommended in this alternative. However,  
18   this alternative does not identify specific erosion sites, including those behind several  
19   retaining walls. While the erosion behind retaining walls does not pose an immediate  
20   threat, long-term effects could cause the walls to collapse. As such, continuation of the  
21   current erosion control plan could have significant adverse impact on this resource.

## 22   **4.2    Hydrology**

23   The discussion for hydrology considers existing hydrologic features and changes that  
24   may result from proposed activities.

### 25   **4.2.1   Jurisdictional Waters**

26   There is no natural standing water located on NMCS D. However, there is a total of 0.48  
27   acre of jurisdictional wetlands in the urban drainage adjacent to Florida Drive.

28   **Proposed Action:** This alternative proposes guidelines, as discussed in Section 2.2, to  
29   reduce unnatural runoff by instituting erosion control measures and recommends  
30   minimizing runoff of pollutants from NMCS D, which are monitored under a General  
31   Discharge permit. The INRMP also recommends coordination with the City of San Diego  
32   to remove exotic plants and protection of the jurisdictional wetlands by measures  
33   coordinated with the USACE, if future work could affect the wetland. Impact to  
34   jurisdictional wetlands would be mitigated to less than significant through the USACE

1 permit process.

2 **No-Action Alternative:** The jurisdictional wetland is not identified in the 2001 INRMP,  
3 which therefore does not include the necessary protection measures. With no protection  
4 measures to limit soil-disturbing activities that would otherwise require permits or  
5 mitigation, there would be significant impact to the jurisdictional wetland.

## 6 **4.2.2 Water Supply and Quality**

7 Since water utilized at NMCS D is supplied by the City of San Diego, the water supply will  
8 not be affected by new management activities. However, water conservation practices  
9 will help reduce the effect of droughts on the city's water supply.

10 **Proposed Action:** NMCS D compliance with all applicable federal water quality  
11 regulations is assumed. This alternative proposes new water conservation measures, as  
12 discussed in Section 2.2, from an audit by the City of San Diego Water Department  
13 including the adjustment of the height and spray of sprinkler heads, increasing the  
14 uniformity of water distribution, and trimming plant material blocking sprinkler spray.  
15 Impact to water supply would be less than significant though water conservation.

16 **No-Action Alternative:** Ongoing compliance with existing water quality regulations for  
17 the San Diego Basin (9) is mandated. Impact to water supply would be less than  
18 significant though water conservation.

## 19 **4.3 Biological Resources**

20 The discussion for biological resources is focused on rare habitats that are limited in  
21 availability and that serve as concentrated breeding or foraging areas and species listed  
22 as threatened or endangered by federal resource agencies.

### 23 **4.3.1 Plant Communities**

24 **Proposed Action:** This alternative updates the 2001 INRMP using the most recent plant  
25 survey information. The methods outlined for controlling and removing invasive weeds  
26 and improving the native plant habitat in this alternative reflects the Exotic Invasive Plant  
27 Removal Plan prepared for NMCS D (RECON 2005c) and the Draft Vegetation  
28 Management Plan for NMCS D (Agri Chem 2009). This alternative would impact native  
29 plant communities on NMCS D by improving their quality through the methods outlined in  
30 Section 2.2. Habitat improvement would minimize the impact to less than significant.

31 **No-Action Alternative:** This alternative includes many guidelines that would benefit  
32 NMCS D's native coastal sage scrub habitat including invasive weed control, erosion

1 prevention, conservation education, and periodic monitoring. This alternative would  
2 impact native plant communities on NMCS D by improving their quality through the  
3 methods outlined in Section 2.3. Habitat improvement would minimize the impact to less  
4 than significant.

## 5 **4.3.2 Wildlife Populations**

6 **Proposed Action:** This alternative updates the 2001 INRMP to provide the most recent  
7 wildlife survey information and includes similar guidelines, as discussed in Section 2.2,  
8 to benefit wildlife populations, including protection for migratory birds and nests in  
9 compliance with the MBTA. This alternative would impact wildlife populations on  
10 NMCS D through the enhancement and protection of their habitat, as well as compliance  
11 with the MBTA. Habitat protection and compliance with MBTA would minimize the  
12 impact to less than significant.

13 **No-Action Alternative:** This alternative includes many guidelines, as discussed in  
14 Section 2.3, that would benefit NMCS D's wildlife populations including perimeter fencing,  
15 conservation education, and periodic surveys based upon a multiple species approach.  
16 Measures are also included to conserve habitat for migratory birds and provide  
17 protection for migratory birds and nests in compliance with the MBTA. This alternative  
18 would impact wildlife populations on NMCS D through the enhancement and protection of  
19 their habitat as well as compliance with the MBTA. Habitat protection and compliance  
20 with MBTA would minimize the impact to less than significant.

## 21 **4.3.3 Sensitive Plant and Wildlife Species**

22 **Proposed Action:** This alternative updates the 2001 INRMP to provide the most recent  
23 sensitive plant and wildlife survey information including a focused rare plant survey  
24 which was recommended in the 2001 INRMP and recommends maintenance of habitat  
25 fencing, which was constructed as recommended in the 2001 INRMP. This alternative  
26 would impact sensitive plant and wildlife species through the enhancement and  
27 protection of their habitat. Habitat improvement would minimize the impact to less than  
28 significant.

29 **No-Action Alternative:** This alternative proposes specific guidelines for monitoring and  
30 managing populations of sensitive species including performing periodic surveys for  
31 sensitive plant and wildlife species with the potential to occur on NMCS D, developing a  
32 management strategy upon the discovery of a sensitive species, avoiding occupied  
33 areas, and keeping cumulative records and maps on sensitive species and their  
34 habitats. Specific management recommendations to benefit the coastal California  
35 gnatcatcher are also described in this alternative including restricting access to nesting  
36 areas during the breeding season by maintaining signs or fences, coordinating  
37 management with the City of San Diego's MSCP Subarea Plan, and distributing

1 information about gnatcatchers to interested parties. This alternative would impact  
2 sensitive plant and wildlife species through the enhancement and protection of their  
3 habitat. Habitat improvement would minimize the impact to less than significant.

#### 4 **4.3.4 Regional Biodiversity**

5 **Proposed Action:** The means of promoting regional biodiversity under this alternative  
6 do not differ from the 2001 INRMP.

7 **No-Action Alternative:** Regional biodiversity would benefit from guidelines within this  
8 alternative which promote the NMCS D habitat as a contiguous piece of the larger Florida  
9 Canyon habitat. Coordinating management with the City of San Diego's MSCP Subarea  
10 Plan is recommended, and management strategies would be based upon a multiple  
11 species approach where a few species do not receive all of the management attention.  
12 Designing boundary fencing that allows movement of species between adjacent habitat  
13 and NMCS D and limiting activities within native plant communities during the spring and  
14 summer will reduce human disturbance to wildlife populations. This alternative would  
15 impact regional biodiversity through maintaining habitat connectivity via practices  
16 already described including coordination with the MSCP, erosion control efforts, and  
17 non-native plant eradication. Impact to biodiversity would be minimized to less than  
18 significant through maintenance of habitat connectivity.

### 19 **4.4 Noise**

20 Current noise levels on NMCS D are primarily the result of overhead airplane traffic and  
21 automobile traffic on Interstate 5. Traffic noise levels will likely increase over the years  
22 as traffic volumes increase, independent of which project alternative is implemented. Air  
23 traffic noise is not anticipated to increase substantially. The noise levels produced by  
24 individual aircraft would decrease as older airplanes are replaced with newer quieter  
25 airplanes. However, the number of flights is anticipated to increase, until the airport  
26 reaches capacity. Since the combination of air and vehicle traffic noise is not anticipated  
27 to decrease in the near future, present noise levels will either be unaffected by or  
28 increased by the alternatives.

29 **Proposed Action:** This alternative would only produce an increase in noise levels  
30 during projects such as construction of the Golden Eagle Native Landscape Tribute,  
31 interpretive trail, or removal of tamarisk with chain saws. These projects would be  
32 temporary and thus have less than significant impact.

33 **No-Action Alternative:** This alternative would only produce an increase in noise levels  
34 during projects such as construction of an interpretive trail or removal of tamarisk with  
35 chain saws. These projects would be temporary and thus have less than significant  
36 impact on the overall noise on NMCS D.

1 **4.5 Air Quality**

2 The factors considered for air quality include: state or federal ambient air quality  
3 standards, potential for people to be exposed to localized (as opposed to regional) air  
4 pollutant concentrations, net increase in pollutant or pollutant precursor emissions in  
5 excess of relevant emission thresholds, conformance to the adopted air quality  
6 management plan policies or programs, or potential to foster or accommodate  
7 development in excess of levels assumed by the applicable air quality management  
8 plan.

9 A federal action is subject to a full conformity analysis, if the total of direct and indirect  
10 emissions associated with the action equal or exceed emission rates set forth in the EPA  
11 *Determining Conformity of Federal Actions to State or Federal Implementation Plans* (40  
12 CFR Part 93). The threshold (*de minimis*) levels for requiring a full conformity analysis  
13 and the amount of emissions that could result in significant impacts are based on the  
14 attainment statuses of criteria pollutants in the project air basins. These are presented in  
15 Table 4-3:

16 **TABLE 4-3**  
17 **FEDERAL DE MINIMIS THRESHOLDS**  
18 **FOR THE SAN DIEGO AIR BASIN**  
19

Pollutant	San Diego Air Basin	
	Federal Designation	Threshold (tons/year)
Ozone* (VOCs)	Non-Attainment, Basic	100
Ozone* (NOx)	Non-Attainment, Basic	100
PM <sub>10</sub>	Unclassifiable	N/A
PM <sub>2.5</sub>	Unclassifiable	N/A
CO	Maintenance	100
SOx	Attainment	N/A

20 \*Emission thresholds are given for ozone precursor elements, volatile organic compounds  
21 (VOCs), and oxides of nitrogen (NOx) based on the attainment status of ozone.  
22

23 These threshold levels would be used to determine the potential significance of  
24 activities. All classes of activities have the potential to impact air quality depending on  
25 the type of equipment that is required to conduct activities and duration.

26 The 2006 Emissions Inventory (NMCS D 2007) provides an estimate of criteria pollutant  
27 emissions from the facility. Table 4-4 lists the annual criteria air emissions for 2006 and  
28 compares yearly emissions to the *de minimis* thresholds for the SDAB.

29

1  
2  
3

**TABLE 4-4  
ANNUAL AIR QUALITY EMISSIONS**

	VOCs	NOx	PM <sub>10</sub>	PM <sub>2.5</sub>	CO	SOx
Pollutant Emissions (tons/year)	0.8	14.6	1.7	n.i.	1.4	0.2
Federal SDAB <i>De Minimis</i> Thresholds (tons/year)	100	100	N/A	N/A	100	N/A

4 n.i.: Not included in emissions inventory.

5

6 **Proposed Action:** Implementation of the INRMP will have no impact or a negligible  
7 impact on emissions of air pollutants. Implementation of the INRMP will not result in any  
8 major new air emission sources, and therefore pollutant emissions are anticipated to be  
9 similar to those estimated for year 2006. Ambient Air Quality Standards will not be  
10 exceeded by any actions within the Proposed Action and there would be no measurable  
11 change to health risks for any person from emissions produced by actions in the INRMP.  
12 Any emissions from activities outlined in the INRMP would be temporary and not  
13 significantly reduce air quality.

14 A Clean Air Act conformity determination is not required for the implementation of the  
15 INRMP, since the base 2006 annual emissions are well below the *de minimis* thresholds  
16 and no new substantial sources are outlined in the plan. New construction activities, in  
17 particular the construction of an interpretive trail, are also expected to be *de minimis*. A  
18 rough estimate of emissions from construction equipment that may be used for the  
19 construction of an interpretive trail and Golden Eagle Native Landscape Tribute is  
20 provided in Table 4-5. This estimate is based on the types of equipment that may be  
21 used and assumed a three-month construction period. Consequently, the Proposed  
22 Action is exempt from the conformity determination requirements of the Environmental  
23 Protection Agency's conformity rule. A Record of Non-applicability (RONA) has been  
24 prepared and is included as Appendix A to this EA. This alternative would have  
25 temporary project-related impact to air quality that would be considered less than  
26 significant.

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**TABLE 4-5  
ESTIMATED AIR QUALITY EMISSIONS FROM  
ANNUAL EMISSIONS AND CONSTRUCTION OF INTERPRETIVE TRAIL AND GOLDEN  
EAGLE NATIVE LANDSCAPE TRIBUTE**

Equipment	Hours of Operation	CO lbs./day	VOC lbs./day	NOx lbs./day	PM <sub>10</sub> lbs./day	SOx lbs./day
Dozer	8	26.02	3.66	29.28	1.35	0.0
Water Truck	8	14.78	2.08	16.61	0.77	0.0
Crane	8	12.24	1.44	8.70	0.30	0.0
Pickup Truck (2)	1	0.31	0.02	0.04	0.01	0.0
TOTAL (lbs/day)	–	53.39	7.20	54.63	2.43	0.0
TOTAL (tons/year)	–	1.76	0.24	1.80	0.08	0.0
Pollutant Inventory Emissions (tons/year)		1.4	0.8	14.6	1.7	0.2
TOTAL Trail Construction* + Pollutant Inventory Emissions (tons/year)		3.16	1.04	16.4	1.78	0.2
Federal SDAB <i>De Minimis</i> Thresholds		100	100	100	N/A	N/A

6 EMISSION FACTOR SOURCES: URBEMIS2002 (Rimpo and Associates 2005); and Table A9-5-J-8,  
7 California Environmental Quality Act (CEQA) Air Quality Handbook (South Coast Air Quality  
8 Management District 1993).  
9 \*Assumes 3-month construction period with 22 working days per month.

10

11 **No-Action Alternative:** This alternative would not change current ambient air conditions  
12 with the exception of construction of the interpretive trail that is also proposed as a  
13 project under the 2010 INRMP. This alternative would have temporary project-related  
14 impact and would be less than significant.

## 15 4.6 Land Use

16 Potential land use impacts resulting from the Proposed Action are based on the level of  
17 use and sensitivity of areas affected by the action. In general, land use impacts would be  
18 significant if they:

- 19 • are inconsistent or noncompliant with applicable land use patterns or policies;
- 20 • preclude the viability of existing land use activities;
- 21 • preclude continued use or occupation of an area; or
- 22 • are incompatible with adjacent land use to the extent that public health or safety is  
23 threatened.

1 **NMCS D Master Plan**

2 The Master Plan establishes a logical and functional land use plan to maximize  
3 utilization of real estate, improve efficiency and circulation, promote land use  
4 compatibility, and permit future expansion if necessary. The goal of the master plan is  
5 also to comply with all applicable federal and, insofar as possible, state and local  
6 planning directives to guarantee public safety, conservation of energy, and protection of  
7 environmental resources.

8 **City of San Diego Multiple Species Conservation Plan/Multiple Habitat**  
9 **Planning Area (MHPA)**

10 The City of San Diego MHPA was established in 1997 and is one of 11 planning  
11 subareas encompassing 206,124 acres within the 582,000-acre MSCP. The MHPA  
12 covers 85 species of plants and animals and 23 vegetation types. The City of San  
13 Diego's MHPA lands total approximately 56,831 acres and include Florida Canyon in  
14 and adjacent to NMCS D.

15 **Proposed Action:** The activities outlined in this alternative are similar to the 2001  
16 INRMP and will not conflict with NMCS D's military mission nor will there be any net loss  
17 of available land and operational carrying capacity. Land currently used for NMCS D  
18 functions will continue to be utilized in a similar manner. The development of the Golden  
19 Eagle Native Landscape Tribute or a nature trail may slightly increase foot traffic in an  
20 area or change the vegetation in those areas, but the changes would be negligible. This  
21 alternative would have no impact on land use.

22 **No-Action Alternative:** No activities outlined in this alternative will conflict with  
23 NMCS D's military mission, and there will be no net loss of available land and operational  
24 carrying capacity. Land currently used for NMCS D functions will continue to be utilized in  
25 a similar manner. New landscaping practices may change the appearance of an area,  
26 but will not change its use. The 2001 INRMP recommends coordinated regional planning  
27 including cooperative work with the City of San Diego on neighboring property.  
28 Personnel trained in natural resource management would make land use decisions, and  
29 guidelines are described for evaluating land use changes. This alternative would have  
30 no impact on land use.



## 1    **4.7    Cultural Resources**

2    No archeological sites are currently known to exist. No resources which meet National  
3    Register criteria for historical significance have been identified on NMCS D. While the  
4    vast majority of buildings on NMCS D have been built since 1988, several buildings are  
5    over or approaching 50 years old and therefore may qualify as an historic property. An  
6    evaluation of the buildings over 50 years of age is currently in progress.

7    **Proposed Action:** This alternative recommends maintaining a list of the buildings and  
8    structures located within the NMCS D boundary and the year they were constructed. This  
9    alternative specifies that a building evaluation to determine eligibility for listing on the  
10   National Register of Historic Places shall be conducted by an archeologist before a structure  
11   reaches 50 years of age. It states that if a building reaches 50 years of age, and a  
12   building evaluation has not yet been completed, it shall be treated as a significant  
13   resource until such an evaluation determines otherwise. Any construction projects taking  
14   place on NMCS D must go through the Section 106 process. This alternative would impact  
15   cultural resources by identifying them through the Section 106 process. Cultural resources  
16   that are identified can be adequately protected; therefore the impact would be less than  
17   significant.

18   **No-Action Alternative:** This alternative does not outline procedures for the evaluation  
19   and conservation of structures that may qualify for the National Register of Historic Places.  
20   Proposed projects would be delayed if Section 106 evaluations were done on a project-  
21   by-project basis. This alternative would impact potential cultural resources by not  
22   identifying them through the Section 106 process. Cultural resources that are not  
23   identified cannot be adequately protected; therefore the impact would be significant.

## 24   **4.8    Socioeconomics**

25   More than 6,000 military and civilian personnel are employed at NMCS D (NMCS D  
26   2008), and the majority obtain support (e.g., housing and food) from the local  
27   community.

28   **Proposed Action:** This alternative would have no effect on local population,  
29   employment, or income contributions, as no increase or decrease in NMCS D personnel  
30   are expected under proposed measures. Although there are two construction projects  
31   proposed, i.e. development of the Golden Eagle Native Landscape Tribute and a nature  
32   trail, these projects are small in scope and would not provide long-term employment.  
33   This alternative would have no impact on socioeconomics.

34   **No-Action Alternative:** This alternative would not change current conditions. Although  
35   the construction of a nature trail is proposed, this project is small in scope and would not

1 provide long-term employment. This alternative would have no impact on  
2 socioeconomics.

### 3 **4.9 Transportation and Circulation**

4 Impacts to transportation and circulation are assessed with respect to the potential for  
5 disruption or improvement of current transportation patterns, reduction in parking  
6 spaces, or changes in existing levels of transportation safety.

7 **Proposed Action:** This alternative would have no effect on current levels of  
8 transportation and circulation as no road closures or new roads are proposed. Any  
9 increase in traffic or decrease in parking spaces resulting from general maintenance or  
10 proposed measures, such as construction of a nature trail or the Golden Eagle Native  
11 Landscape Tribute, would be temporary and not significant. This alternative would have  
12 less than significant impact on transportation and circulation.

13 **No-Action Alternative:** This alternative would have no effect on current levels of  
14 transportation and circulation, as no road closures or new roads are proposed. Any  
15 increase in traffic or decrease in parking spaces resulting from proposed measures,  
16 such as during construction of a nature trail, would be temporary and not significant.  
17 This alternative would have less than significant impact on transportation and circulation.

### 18 **4.10 Aesthetics**

19 **Proposed Action:** This alternative would improve the local aesthetics by enhancing  
20 natural habitats and the human environment through updated measures for habitat  
21 management, landscaping, and erosion control as described in Section 2.2. The  
22 additions of an interpretive nature trail and the Golden Eagle Native Landscape Tribute  
23 would also enhance the aesthetics of NMCS D. This alternative would impact aesthetics  
24 through the enhancement of natural habitats and human environment and therefore  
25 would be considered less than significant.

26 **No-Action Alternative:** This alternative would improve the local aesthetics by  
27 enhancing natural habitats and the human environment through measures of habitat  
28 management, landscaping, and erosion control as described in Section 2.3. Using  
29 landscaping to moderate environmental influences (e.g. solar heat gain, glare, dust, and  
30 wind), unify exterior spaces, and enhance formal/ceremonial activities would also  
31 improve the environment of NMCS D. This alternative would impact aesthetics through  
32 the enhancement of natural habitats and human environment and therefore would be  
33 considered less than significant.

1 **4.11 Utilities**

2 **Proposed Action:** This alternative proposes no changes in utility use and will not impact  
3 any utility structures. This alternative would have no impact on utilities.

4 **No-Action Alternative:** This alternative would not change current utility conditions. This  
5 alternative would have no impact on utilities.

6 **4.12 Public Health and Safety**

7 Impacts to public health and safety would be considered significant, if implementation of  
8 an alternative would cause or potentially result in greater safety risks. Positive impacts  
9 could also result from an alternative by minimizing or significantly reducing certain health  
10 and safety issues.

11 **Proposed Action:** The health and safety impacts resulting from this alternative will be  
12 identical to the No-Action Alternative.

13 **No-Action Alternative:** This alternative would impact public health and safety through  
14 improvements discussed in section 2.2. Landscaping with non-allergenic plants will  
15 benefit patients and personnel with allergy problems or reduced immune systems.  
16 Measures for animal damage control will reduce the risk of disease on the property.  
17 Additional measures that could improve public health and safety include ensuring NEPA  
18 evaluation of projects that have the potential to impact the human environment, the use  
19 of BMPs for any new construction project, and controlling the use of rodenticides.  
20 Herbicide use could result in adverse health effects to the public or maintenance  
21 workers if not properly handled. However, impact from herbicide use would be avoided  
22 through proper handling, which is required under federal regulation. Improvements to  
23 public health and safety would be considered a less than significant impact.

24

25



# 1    **5.0    Other Considerations**

## 2    **5.1    Cumulative Impact**

3    Cumulative impacts are those effects resulting from the incremental impacts of an action  
4    when added to other past, present, and reasonably foreseeable future actions  
5    (regardless of which agency or person undertakes such actions). Cumulative impact can  
6    result from individually insignificant but collectively significant actions taking place over a  
7    period of time. Consideration must be given to the cumulative effects of management  
8    actions occurring on NMCS D and within the City of San Diego. Projects identified for  
9    NMCS D are described below, followed by regional projects, then a discussion of  
10   potential cumulative impact of these projects by impact topic.

### 11   **5.1.1   Projects on NMCS D**

12   The effects of the alternatives must be considered in conjunction with other projects on  
13   NMCS D to determine if they would produce conflicts or result in cumulative impact.  
14   Because of its relatively small size and unique military mission, there have been few  
15   recent projects at NMCS D that have required NEPA review.

16   **Pre-engineered Building (PEB).** A PEB was constructed in 2003. This building has  
17   solar panels to offset increased energy usage from the PEB and Healing Garden. The  
18   building is categorized as Building 35 Medical Waste, and is used to store medical waste  
19   prior to pickup and off-site treatment or disposal. The project received a categorical  
20   exclusion under NEPA.

21   **Patient Parking Facility, P001.** A patient parking garage in the A Lot was recently  
22   constructed. This project received a categorical exclusion under NEPA.

23   Other recent and proposed projects are smaller in scope and primarily involve general  
24   maintenance or structural and/or mechanical upgrades (e.g., elevators, ventilation  
25   systems, fire protection systems, roofing, etc.) to the buildings on NMCS D. A list of  
26   these projects is included as Attachment G, Description of Recent and Pending NMCS D  
27   Improvement Projects.

### 28   **5.1.2   Regional Planning Projects**

29   NMCS D does not have direct control over how adjacent landowners manage their  
30   property. However, actions on adjacent land could impact natural resources on the  
31   installation. For example, wildlife population management within Florida Canyon could  
32   affect the populations on NMCS D. Control of non-native plants, such as tamarisk, is also

1 a problem which is best approached from a regional perspective. The Proposed Action  
2 addresses regional planning and identifies cooperative projects (e.g., non-native species  
3 removal, erosion and sediment control) including a commitment by NMCS D to adopt  
4 practices outlined in the City of San Diego's MSCP Subarea Plan. The No-Action  
5 Alternative also identifies similar cooperative projects with regional landowners.

6 There are numerous management plans prepared for the San Diego region. The City of  
7 San Diego's General Plan and MSCP Subarea Plan, and the County of San Diego's  
8 General Plan all address the management of natural resources within the area. These  
9 projects are described below and are also addressed, by resource topic, in Section 5.1.

10 **General Plans.** California state law requires that all cities and counties prepare General  
11 Plans to address the long-term development within their jurisdiction. Each plan must  
12 address the following topics: land use, conservation, open space, safety, circulation,  
13 noise, and housing. The City of San Diego and San Diego County have both prepared  
14 General Plans.

15 The City of San Diego's General Plan is designed to determine how the city will  
16 accommodate future development by addressing concerns about growth, housing  
17 density and development patterns, and environmental protection. The most recent  
18 updated version was adopted in March 2008, and was guided with the "City of Villages"  
19 strategy (City of San Diego 2008).

20 The City of San Diego's General Plan includes a Conservation Element which contains  
21 conservation policies compatible with natural resource management on NMCS D (City of  
22 San Diego 2008). The 2010 INRMP's overall goal of conserving and rehabilitating  
23 natural resources on the installation supports these policies by protecting and enhancing  
24 the native plant and animal populations that inhabit this urban ecosystem.

25 **Balboa Park Master Plan and the Central Mesa Precise Plan.** NMCS D is surrounded  
26 by Balboa Park, which is owned by the City of San Diego and managed by the City  
27 Parks and Recreation Department. The Balboa Park Master Plan provides very general  
28 guidelines for park design. It was originally written in 1960. A new Master Plan was  
29 adopted for the park with extensive revisions in 1989, which provided planning guidance  
30 for the following 20 years. The Central Mesa Precise Plan was adopted in 1992 with the  
31 purpose of further defining the goals and objectives of the Balboa Park Master Plan (City  
32 of San Diego 2001). It provides additional guidelines for managing the Central Mesa  
33 portion of Balboa Park.

34 These plans have frequently been amended, and two recent topics of discussion about  
35 park management have been the expansion of the zoo into Florida Canyon and/or the  
36 closing of Florida Drive. Zoo expansion has been discussed for many years and often  
37 meets resistance from city residents. One of the goals of both plans is to reduce  
38 automobile traffic through the park. As indicated, the closing of Florida Drive has also

1 been suggested, though no studies have been performed to determine the feasibility of  
2 this idea. Both of these suggestions would have impacts on NMCS D. Zoo expansion into  
3 Florida Canyon would most notably alter the plant and wildlife populations present in the  
4 canyon. The closing of Florida Drive could benefit the native habitats of Florida Canyon,  
5 especially if the road were removed. However, significant circulation questions on  
6 NMCS D would need to be addressed. The Proposed Action recommends working with  
7 the Park to solve problems which cross property boundaries including erosion control,  
8 invasive weed control, and an ecosystem approach to wildlife and plant management.

9 **Multiple Species Conservation Program.** The San Diego MSC P is a comprehensive  
10 habitat conservation planning program that encompasses 582,000 acres and  
11 establishes a 172,000-acre preserve system in southwestern San Diego County. The  
12 MSC P is a plan and a process for the local issuance of permits under the federal and  
13 state Endangered Species Acts for impacts to threatened and endangered species. Also  
14 included in the MSC P are implementation strategies, preserve design, and management  
15 guidelines. Rather than focusing preservation efforts on one species at a time, the  
16 MSC P is designed to preserve native vegetation and meet the habitat needs of multiple  
17 species.

18 Under the MSC P, local jurisdictions will implement their respective portions of the MSC P  
19 through subarea plans, which describe specific implementing mechanisms for the MSC P  
20 (City of San Diego 1998). The City of San Diego adopted its MSC P Subarea Plan in  
21 1997 to guide implementation of the MSC P within its corporate boundaries, 206,124  
22 acres within the MSC P Subregion (City of San Diego 1997).

23 MHPA lands are areas within the MSC P planning area to be preserved and managed for  
24 biological resources. The City of San Diego's MHPA lands total approximately 56,831  
25 acres and include Florida Canyon in and adjacent to NMCS D.

26 NMCS D falls within the Urban Subarea section of the MSC P. In this Subarea "the  
27 optimum future condition... is a system of canyons that provide habitat for native species  
28 remaining in urban areas, 'stepping stones' for migrating birds and those establishing  
29 new territories, and environmental educational opportunities for urban dwellers of all  
30 ages." Urban habitats are to be managed for a variety of uses ranging from sensitive  
31 species protection to outdoor education. See Appendix B for the general planning  
32 guidelines of the MSC P and for the specific recommendations for the Urban Subarea.  
33 NMCS D is not required to comply with the guidelines in the MSC P; however, managing  
34 the native plant community on NMCS D, in a similar fashion as all of Florida Canyon, will  
35 benefit NMCS D's natural resources. The 2010 INRMP recommends using guidelines in  
36 the MSC P and coordinating management of the coastal sage scrub habitat on NMCS D  
37 with the City of San Diego. The cumulative effects of managing habitats on NMCS D in  
38 conjunction with the MSC P would be beneficial to the natural resources in the area.  
39 Wildlife population management, sensitive species management, weed control, and  
40 erosion control will benefit from cross-jurisdictional management.

1 **5.1.3 Cumulative Impact Discussion**

2 Cumulative impact resulting from the alternatives in combination with the on-site and  
3 regional projects described above are discussed below. Prior to approval, projects  
4 occurring on NMCS D (including those in the 2001 INRMP) have been or would be  
5 reviewed for conflicts with existing natural resource management procedures.

6 The Proposed Action would not result in cumulative impact with other on-site or regional  
7 projects. It was designed to protect and enhance the natural resources on NMCS D,  
8 while helping preserve the natural habitats of Florida Canyon.

9 The No-Action Alternative would have a significant impact on erosion, jurisdictional  
10 waters, and cultural resources due to management and implementation occurring under  
11 outdated or insufficient planning measures (see Chapter 4). The No-Action Alternative  
12 would likely have significant cumulative impact to jurisdictional waters and cultural  
13 resources when combined with other proposed projects. Although the No-Action  
14 Alternative was also designed to protect and enhance the natural resources on NMCS D,  
15 the lack of adequate protections for jurisdictional resources and cultural resources could  
16 lead to future projects impacting these resources.

17 **5.1.3.1 Geology, Seismicity, and Erosion**

18 The Proposed Action and No-Action Alternative would not have significant cumulative  
19 impact on this resource. Although the No-Action Alternative would likely have a  
20 significant impact on erosion (see Chapter 4), it would not have a cumulative impact  
21 since no other impact to this resource are expected from other projects or planning  
22 documents in the foreseeable future.

23 **5.1.3.2 Hydrology**

24 **5.1.3.2.1 Jurisdictional Waters**

25 The Proposed Action would not have a significant cumulative impact on this resource.  
26 No other impact to jurisdictional waters are expected from other projects or planning  
27 documents in the foreseeable future.

28 The No-Action Alternative would likely have a significant cumulative impact on  
29 jurisdictional waters (see Chapter 4). Due to the lack of protection measures for this  
30 resource, no new or on-going project would go through the adequate permit process to  
31 identify any possible impact to the resource. The cumulative effects of projects not  
32 considering impact to this resource would be significant.



1 **5.1.3.2.2 Water Supply and Quality**

2 The Proposed Action and the No-Action Alternative would not have significant  
3 cumulative impact on water supply and quality. The proposed water conservation  
4 measures in both alternatives, combined to similar measures in the planning documents  
5 described above, would cumulatively reduce water consumption. There are also no  
6 actions on-site or in the planning documents that would impact water quality.

7 **5.1.3.3 Biological Resources**

8 The Proposed Action and the No-Action Alternative would not have significant  
9 cumulative impact to biological resources. Both alternatives outline habitat and individual  
10 species protection and enhancement measures (see Chapter 4). Regional planning  
11 documents also focus on habitat and individual species protection. Both alternatives  
12 specify cooperation with local and regional plans for the protection and enhancement of  
13 biological resources.

14 The impact of habitat and species protection described above for both alternatives,  
15 along with the protection measures in the planning documents, would lessen cumulative  
16 impact to be less than significant.

17 **5.1.3.4 Noise**

18 Air and vehicle traffic noise is not anticipated to decrease in the near future, and present  
19 noise levels will either be unaffected by or increased by the alternatives. Projects  
20 affecting noise levels proposed in the alternatives are temporary in nature. The closing  
21 of Florida Drive or the expansion of the zoo may either decrease or increase noise  
22 levels, but the alternatives would not have a cumulative effect on these projects. The  
23 Proposed and No-Action Alternatives would not have significant cumulative impacts to  
24 noise.

25 **5.1.3.5 Air Quality**

26 Ambient Air Quality Standards will not be exceeded by any actions within the Proposed  
27 Action or No-Action Alternatives, and there would be no measurable change to health  
28 risks for any person from emissions produced by actions in either alternative. Any  
29 emissions from activities outlined in the alternatives would be temporary and not  
30 significantly reduce air quality. Implementation of the alternatives would not result in any  
31 major new air emission sources. There are no other new emission sources proposed in  
32 the region. Neither alternative would have significant cumulative impact on air quality.

33 **5.1.3.6 Land Use**

34 The Proposed Action and the No-Action Alternative do not recommend the change in

1 use of any NMCS D property and would not conflict with any land use plans or policies.  
2 Neither alternative would have a significant cumulative impact on land use.

### 3 **5.1.3.7 Cultural Resources**

4 The Proposed Action would not have a significant cumulative impact on this resource.  
5 No other impact is expected from other projects or planning documents in the  
6 foreseeable future.

7 The No-Action Alternative would have a significant cumulative impact on cultural  
8 resources (see Chapter 4). Due to the lack of protection measures for this resource, no  
9 new or on-going projects would go through the adequate permit process to identify any  
10 possible impact to the resource. The cumulative effects of projects not considering and  
11 addressing impact to this resource would be significant.

### 12 **5.1.3.8 Socioeconomics**

13 The Proposed Action and the No-Action Alternative would not have cumulative impact to  
14 socioeconomics. Although there are construction and maintenance projects proposed in  
15 the alternatives, these projects are small in scope and would not provide long-term  
16 employment. These actions would not cumulatively affect the region.

### 17 **5.1.3.9 Transportation and Circulation**

18 The Proposed Action and the No-Action Alternative would not have cumulative impact to  
19 transportation and circulation. Although there are construction and maintenance projects  
20 proposed in the alternatives, these projects are small in scope and would not impede  
21 traffic or circulation in the long term. Although the closing of Florida Drive and the  
22 expansion of the zoo would impact transportation in the vicinity of the NMCS D, the  
23 actions proposed in alternatives would not affect these projects.

### 24 **5.1.3.10 Aesthetics**

25 The Proposed Action and the No-Action Alternative both outline habitat protection and  
26 enhancement measures (see Chapter 4). These measures would impact aesthetics by  
27 vegetating barren areas and eradicating non-native species. Regional planning  
28 documents also focus on habitat protection through similar activities. This cumulative  
29 impact to aesthetics would be less than significant.

### 30 **5.1.3.11 Utilities**

31 The Proposed Action and the No-Action Alternative would not have cumulative impact to  
32 utilities. The Proposed Action and the No-Action Alternative do not propose changes in

1 utility use or affect any utility structures.

### 2 **5.1.3.12 Public Health and Safety**

3 Neither of the alternatives in conjunction with other projects would have a significant  
4 cumulative impact on the local public's health and safety. Projects outlined in the  
5 alternatives aimed at reducing the use of herbicides and rodenticides, as well as  
6 landscaping with non-allergenic plants, would reduce impact to public health and safety.  
7 There are no other projects planned in the foreseeable future that would affect public  
8 health and safety.

## 9 **5.2 Irreversible and Irretrievable Commitments**

10 Analysis of significant irreversible and irretrievable effects of a proposed action and  
11 alternatives is required by NEPA (42 USC 4321-4370e[1994]). *Irreversible commitments*  
12 are damages to the environment that cannot be reversed even after the life of the  
13 project. *Irretrievable commitments* are resources that are lost for a long period of time.  
14 This includes the use of non-renewable resources such as metal, fuel, and other natural  
15 or cultural resources. Resources are considered committed, if they were to be used for a  
16 proposed action or alternatives when they could be conserved or used for other  
17 purposes. Also included in *irreversible* and *irretrievable commitments* of resources is the  
18 unavoidable destruction of natural resources that could limit the range of potential uses  
19 of that particular resource.

20 Implementation of the 2010 INRMP would result in a minor irreversible and irretrievable  
21 commitment of certain non-renewable resources. Maintenance and minor construction  
22 activities associated with the INRMP, including the construction of the Golden Eagle  
23 Native Landscape Tribute or nature trail would result in an irretrievable commitment of  
24 building materials and fossil fuels for construction vehicles and equipment. The long-  
25 term benefits to natural resources of the measures described in the 2010 INRMP  
26 outweigh the small amount of resources used in their creation.

## 27 **5.3 Short-term Use versus Long-term** 28 **Productivity**

29 This section provides a discussion of the relationship between local short-term uses of  
30 the human environment by the Proposed Action, and the maintenance and  
31 enhancement of long-term environmental productivity. As described in this EA, any small  
32 construction project, such as constructing the Golden Eagle Native Landscape Tribute,  
33 building a nature trail, installation of a drainpipe, or repair of retaining walls proposed in  
34 the 2010 INRMP, would result in long-term benefits to natural resources on NMCS D.

1 These projects would result in a greater appreciation for NMCS D's natural resources or  
2 directly improve conditions for native plant and wildlife communities. As a result, the  
3 Proposed Action would result in minimal short-term impacts; it would not result in any  
4 environmental impacts that would permanently narrow the range of beneficial uses of the  
5 environment or pose long-term risks to health, safety, or the general welfare of the public  
6 communities surrounding NMCS D. In fact, the Proposed Action would have primarily  
7 beneficial impacts to the resources on NMCS D and within the City of San Diego.

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## 1 **7.0 Persons and Agencies Contacted**

2 During the preparation of this EA, the following agencies, organizations, and individuals  
3 were contacted:

### 4 **California Department of Fish and Game**

- 5 • Meredith Osborne

### 6 **U.S. Fish and Wildlife Service**

- 7 • Sandy Vissman





## 1    **8.0    References**

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