

EXECUTIVE SUMMARY

INTRODUCTION

This Integrated Natural Resources Management Plan (INRMP) sets the agenda for managing natural resources for the next five years (2002-2007) on Marine Corps Base (MCB) and Marine Corps Air Station (MCAS) Camp Pendleton (hereafter referred to collectively as Camp Pendleton, or the Base, unless otherwise specified). This INRMP was produced to meet requirements established by the Sikes Act Improvement Act (Public Law 105-85, Div. B Title XXIX, November 18, 1997, 111 Stat. 2017-2019, 2020-2033) and the implementing directives of the Department of Defense (DoD), the Secretary of the Navy, and the Commandant of the Marine Corps.

The integration of natural resources management with training and mission support requirements and responsibilities helps to ensure that Camp Pendleton continues to provide sustained support for the military mission and fulfill stewardship and regulatory requirements. This INRMP reflects Camp Pendleton's approach to natural resource management and natural resource related recreation. Presented in this document are natural resource management drivers (including regional laws, regulations, and drivers unique to circumstances at Camp Pendleton), goals and objectives, and course of action. The natural resource management course of action consists of projects, programs, and initiatives, with associated planned actions.

Camp Pendleton's INRMP is not intended for use by military personnel operating in the field nor does it replace existing Base Orders, policy, range and training operations guidance, or military management plans. Similarly, this INRMP does not replace existing natural resource related regulatory agreements, or management programs. Just as the Sikes Act Improvement Act is viewed as an "umbrella" law with regard to management of natural resources on military installations, this INRMP represents an "umbrella" document that encompasses all elements of natural resources management applicable to the installation, including compliance with the Terms and Conditions of relevant USFWS Biological Opinions and ongoing stewardship activities.

CAMP PENDLETON MISSION AND LOCATION

The mission of Camp Pendleton is "to operate an amphibious training Base that promotes the combat readiness of operating forces by providing facilities, services, and support responsive to the needs of Marines, Sailors, and their families" (MCB Camp Pendleton 2002). Camp Pendleton is the Marine Corps' premier amphibious training Base and its only west coast amphibious assault training center. The Base has been conducting air, sea, and ground assault training since World War II, providing a unique combination of natural and military resources for the training of Marines and other DoD personnel. For almost 60 years, Camp Pendleton has served as one of the nation's most important training bases and has contributed substantially to the success of our national security forces in conflicts and missions worldwide.

Camp Pendleton occupies approximately 125,000 acres of coastal southern California in the northwest corner of San Diego County. Aside from nearly 10,000 acres that is developed, most of the Base is largely undeveloped land that is used for training. Camp Pendleton is situated between two major metropolitan areas: Los Angeles, 82 miles to the north, and San Diego, 38 miles to the south. Nearby communities include Oceanside to the south, Fallbrook to the east, and San Clemente to the northwest. Aside from a portion of the Base's border that is shared with the San Mateo Wilderness Area and the Fallbrook Naval Weapons Station, surrounding land use is almost inclusively urban development, rural residential development, and agricultural farming and ranching.

NATURAL RESOURCES

Camp Pendleton's semiarid Mediterranean climate, varied topography (coastal plains, valleys, and rolling mountain foothills), diverse soil types, and high fire frequency are reflected in the type and distribution of plant communities and wildlife species present. Among the plant communities that characterize Camp Pendleton are oak woodlands, a range of chaparral and sage scrub communities (including the largest remaining contiguous Diegan coastal sage scrub), coastal bluff scrub, native and nonnative grasslands, coastal dunes, riparian communities, and wetlands (including isolated ephemeral wetlands unique to this region).

The diversity of habitat types contributes to the rich flora and fauna of Camp Pendleton. Over 800 plant species, hundreds of invertebrates, and more than 50 mammalian, 30 reptilian, 10 amphibian, 300 avian, and 60 fish species have been identified on Camp Pendleton. Most of the species on Base are considered native to the region, but as many as 20% of the plants and several wildlife species are exotic (nonnative) and, in some cases, invasive and may be causing the decline or local extirpation of native species (e.g., as a result of competitive exclusion, habitat alteration, predation, nest parasitism, etc.).

Eighteen (18) federally listed threatened or endangered species are found on, or transit through, Camp Pendleton. Included in this count is the southern steelhead trout (*Oncorhynchus mykiss*), which was recently rediscovered upstream of the Base on the San Mateo Creek and is pending listing for the Camp Pendleton area. Following is a list of the 18 federally listed threatened and endangered species on Base:

- Bald Eagle (*Haliaeetus leucocephalus*) - Known to occasionally transit the Base.
- Brown Pelican (*Pelecanus occidentalis*) - Known to frequently transit the Base.
- California least tern (*Sterna antillarum browni*)
- Coastal California Gnatcatcher (*Polioptila californica californica*)
- Least Bell's Vireo (*Vireo bellii pusillus*)
- Light-footed Clapper Rail (*Rallus longirostris levipes*)
- Southwestern Willow Flycatcher (*Empidonax trailli extimus*)
- Western Snowy Plover (*Charadrius alexandrinus nivosus*)
- Pacific Pocket Mouse (*Perognathus longimembris pacificus*)

- Stephens' Kangaroo Rat (*Dipodomys stephensi*)
- Southern Steelhead Trout (*Oncorhynchus mykiss*)
- Tidewater Goby (*Eucyclogobius newberryi*)
- Arroyo Toad (*Bufo californicus*)
- Riverside Fairy Shrimp (*Streptocephalus woottoni*)
- San Diego Fairy Shrimp (*Branchinecta sandiegonensis*)
- San Diego Button-Celery (*Eryngium aristulatum* var. *parishii*)
- Spreading Navarretia (*Navarretia fossalis*)
- Thread-Leaved Brodiaea (*Brodiaea filifolia*)

CAMP PENDLETON LAND USE

A variety of land uses occur at Camp Pendleton, however, the priority of Camp Pendleton is and will continue to be military training and support of that military training. The predominate types of land uses and activities on Base are military training and training support facilities, Base infrastructure (including roads, cantonment areas, and recreational facilities), and mission support activities.

Camp Pendleton provides training facilities for active duty and reserve Marine, Navy, Army, Air Force, and National Guard units, as well as other national, state, and local agencies. Nearly 60,000 personnel train at Camp Pendleton every year, with over 35,000 service members actually assigned to the Base.

Training exercises on Base are diverse and range from relatively small, isolated activities involving a few personnel to large, integrated operations of several thousand personnel engaging in multiple actions simultaneously. Training routinely consists of infantry operations, amphibious landings, live fire operations, field maneuvers using wheeled and tracked vehicles, rotary and fixed wing aviation exercises, and engineering and command post operations.

Designated areas, infrastructure, and facilities that support training operations include 31 training areas, impact areas for receipt of dud- and non dud-producing ordnance, more than 100 live-fire facilities, 4 amphibious assault landing beaches, and Special Use Airspace. In addition, Camp Pendleton supports ground based training exercises with two Combat Training Towns, one Military Operations in Urban Terrain facility, 19 obstacle courses, a Crucible course, rappel towers, aircraft mock-ups, two heavy equipment training sites, etc.

Similar to local municipalities, the Base provides military service members and their families with support facilities and services, including housing, water and sewage service, solid waste disposal, medical and dental services, schools, child care, employment assistance, and recreation opportunities. Camp Pendleton currently has more than 5,000 buildings and structures, 500 miles of roads, and nearly 1,000 miles of utility lines basewide.

Mission support activities on Camp Pendleton include natural resources management; fire management; infrastructure, facilities, and grounds maintenance; and morale, welfare, and

recreation community services. Included in the recreational services provided on Base are natural resources related recreational opportunities such as beach usage, hunting, fishing, hiking, camping, etc. Most of these services are also available to the general public.

Additional land use on Camp Pendleton occurs in the form of leases, easements, and other real estate agreements. Existing real estate agreements cover approximately 28,500 acres of the Base and include agricultural leases for row crop production and sheep grazing, San Onofre State Park, public utilities (including San Onofre Nuclear Generating Station) and transit corridors (including Interstate 5).

REGIONAL LAND USE

The region surrounding Camp Pendleton has been shaped by rapid population growth and increasing urbanization and development. Consequences of these trends include a decrease and displacement of agricultural acreage and open spaces, an increase in habitat fragmentation and isolation, and an increase in the number of native and endemic species and habitats that are becoming threatened with extinction. Studies have shown that San Diego County is leading the continental United States in the number of rare and federally listed threatened and endangered species.

Camp Pendleton and the adjacent Cleveland National Forest occupy some of the last significant open space and wildlife habitats in the coastal areas of southern California. With the exception of the Ocean and the Cleveland National Forest, urbanization is expected to eventually completely surround Camp Pendleton.

NATURAL RESOURCES MANAGEMENT COURSE OF ACTION

Camp Pendleton's stewardship and approach to natural resources management over its 60 years of operation has resulted in the maintenance of the last large contiguous area that reflects the rich diversity of species and habitat types formerly present in the region. Programs for stewardship, natural resource management, public access, and natural resource related recreation are presented in Chapters 4 and 5 of this INRMP. These chapters present program policies, goals, objectives, planned actions, and timelines for implementation of actions.

As defined by the SAIA, natural resource management programs on military lands should be consistent with the use of those lands to ensure the preparedness of the Armed Forces and should provide for: (1) the conservation and rehabilitation of natural resources; (2) the sustainable multipurpose use of the resources, which include hunting, fishing, trapping, and nonconsumptive uses; and (3) public access to military installations to facilitate the use of these resources, subject to safety requirements and military security. Camp Pendleton's natural resource management approach seeks to balance the twin goals of maximizing land use for military readiness and maintaining native habitats. Consistent with DoD and Marine Corps policy, the overriding focus of Camp Pendleton's natural resource management is to develop, promote, and refine a comprehensive, ecosystem based management program for

resource conservation. Such an ecosystem based approach is intended to facilitate maximum support for the Base's military training mission and infrastructure, while simultaneously promoting both the sustainability of native species and habitat diversity and compliance with applicable laws and regulations.

Planned actions that support the goals and objectives of the natural resources management course of action are presented as either Priority Planned Actions or Other Planned Actions. Priority Planned Actions are those projects and actions that Camp Pendleton has committed to accomplishing and/or are required by laws, regulations, or other agreement. Other Planned Actions are those projects and actions that the Camp Pendleton desires to accomplish, but due to restrictions and limitations on fiscal and personnel resources cannot commit to undertaking at this time. Camp Pendleton will seek appropriate funding and will set priorities based on the amount of funds actually received.

REGIONAL CONTRIBUTION AND ENVIRONMENTAL STEWARDSHIP

The Marine Corps views the management of natural resources on Camp Pendleton as one of its primary stewardship responsibilities to ensure the long term landscape diversity required to support the military training mission and regional biodiversity. Both Camp Pendleton and Headquarters Marine Corps continually invest significant resources (staff, time, and funds) to provide focused and high quality programs to manage the spectrum of environmental resources within its boundaries and regionally.

Camp Pendleton has developed a wide variety of management initiatives, several in collaboration with regional groups and other federal agencies, to manage the Base's natural resources. These initiatives include an Exotic Species Control Program, an Erosion Control Program, a Fire Management Program, an Environmental Education/Awareness Program, and a Long Term Ecological Trend Monitoring Program. In addition, Camp Pendleton supports numerous partnerships with other federal, state, local, and private resource groups to promote such programs as the North American Waterfowl Management Plan, Neotropical Migratory Bird Conservation, and Exotic Plant Species Control Program.

Along with Camp Pendleton's efforts to practice responsible stewardship of its lands and natural resources, the Base maintains an interest in regional planning. Camp Pendleton's interest is that, as regional development continues to encroach on natural habitats throughout southern California, Camp Pendleton lands will become increasingly important to sensitive species conservation in the region. Further, Camp Pendleton is required to ensure that its training lands do not become viewed as regional preserves within which training activities would then be prohibited or further limited. The Base does not want its land management efforts to protect open spaces on Camp Pendleton to be viewed by others as the "solution" for regional land use needs due to the perceived minimal economic and political cost of using land on the Base.

INTEGRATION, IMPLEMENTATION, AND ENFORCEMENT

While integration, implementation, and enforcement are a part of all the programs in this INRMP, several initiatives are geared specifically toward serving those functions, including: (1) the use of programmatic instructions; (2) environmental training, education, and awareness programs; (3) information management and Geographic Information Systems (GIS); (4) environmental planning and project support; (5) environmental inspection and compliance; and (6) enforcement mechanisms.

Integrated natural resource management and planning is an ongoing process at Camp Pendleton. This INRMP serves as a reference document and management tool that is expected to evolve as mission requirements, environmental and regulatory conditions, and natural resources management programs and initiatives evolve. In addition to revising the INRMP every five years, as required under the Sikes Act Improvement Act, Camp Pendleton is committed to more frequent (semiannual) document reviews to monitor progress of planned action implementation, make adjustments where necessary, and ensure the continued usefulness of this plan. The involvement of a cross section of land users and managers and resource agencies in the ongoing development, review, and implementation of this INRMP also helps ensure the continued integration and coordination of natural resources management programs with other Base and regional plans, programs, and decision making processes.