

CHAPTER 1

INTRODUCTION

1.1 Background

Marine Corps Base (MCB) Camp Lejeune, NC is the Marine Corps' largest amphibious training base and is home to 47,000 Marines and Sailors; the largest single concentration of Marines in the world. Its tenants include the II Marine Expeditionary Force, 2nd Marine Division, 2nd Marine Logistics Group, United States Coast Guard, and U.S. Naval Hospital, Camp Lejeune. Camp Lejeune encompasses an estimated 143,000 acres, including the onshore, near shore, and surf areas in and adjacent to the Atlantic Ocean and the New River. The installation includes:

- 11 nm of ocean coastline, including 1.4 nm of amphibious landing beach, 1.6 nm of recreational beach and 4 nm of buffer/impact area beach.
- 246 square miles of land area with over 101,000 acres of usable training area
- 74 live fire ranges and training facilities
- A Military Operations in Urban Terrain (MOUT) Facility with 31 buildings and a Combat Town with 14 buildings
- Shallow ocean areas (less than 100 fathoms) and the New River
- 200 square miles of Special Use Airspace, restricted for military use from sea level to 17,999 feet.
- Three impact areas that support munitions from 5.56 mm to 155mm delivered by direct fire, indirect fire, Fixed Wing and Rotary Wing aircraft and Naval Gunfire
- 48 Tactical Landing Zones, 12 Ground and 5 Water Drop Zones, 34 Gun Positions, 8 Mortar Positions and 12 Observation Posts
- An LHA Deck for helicopter pilot training and an Air Field Seizure Facility, with a Mock Airport and 2 runways

In order to train and maintain combat-ready troops for expeditionary deployment, MCB Camp Lejeune must provide a variety of environmental conditions and ecosystems in which to train Marines. This objective must be met in a way that provides for sustainable, healthy ecosystems, complies with all applicable environmental laws and regulations, and provides for no net loss in the capability of military installation lands to support the military mission of the installation.

Integrated Natural Resources Management Plans (INRMPs) help installation commanders manage natural resources more effectively so as to ensure that installation lands remain available and in good condition to support the installation's military mission. Camp Lejeune published its first INRMP in October 2001 to guide resources management on the installation for the years 2002-2006. Significant changes in military readiness and environmental requirements have occurred since that publication was released.

There are three principal reasons for this revision of the 2001 INRMP. First, the US Fish and Wildlife Service (USFWS) revised the Red-Cockaded Woodpecker (RCW) Recovery Plan.

Second, Camp Lejeune has completed its Military Impact Study as detailed in the 1999 RCW Plan. Finally, the 2004 National Defense Authorization Act made specific amendments to the Endangered Species Act (ESA) regarding INRMPs and critical habitat on military installations.

In the aftermath of the September 11, 2001 terrorist attacks, links between sustaining homeland security, ecosystem health, bio-terrorism, and combat readiness have taken on an added and more urgent meaning at military bases across the United States. A more dynamic military mission for Marine combat forces, increased training demand, and new weapons systems have created a need to revise the 2001 INRMP so that it better supports the changing military mission while complying with laws and regulations.

This revised INRMP is intended to meet these challenges and whenever possible, integrate natural resource conservation and the military mission such that the goals of each are supported by the other. In this light, conservation programs become valuable tools in sustaining and enhancing the military mission.

1.2 Integrated Natural Resources Management Plans

1.2.1 Purpose

The primary purpose of this INRMP is to guide the natural resource management program at Camp Lejeune for the next 5-year period (2007 through 2011) in accordance with the Sikes Act Improvement Act (SAIA) of 1997 (Public Law 105-85, 111 Statute 1629 (codified and amended at 16 U.S.C. § 670a (2000))); Department of Defense (DOD) Conservation Instruction 4715.3; Marine Corps Order (MCO) P5090.2A (Environmental Compliance and Protection Manual); and the Endangered Species Act (ESA) (16 U.S.C. 1531 et. seq.) as amended by the National Defense Authorization Act of 2004 (NDAA) (Public Law 108-136, 117 Statute 1392, 1433 (codified at 16 U.S.C. §1533)). The INRMP will also respond to the 2003 USFWS guidelines for managing RCW, a federally-listed endangered species.

1.2.2 Scope

This INRMP outlines conservation efforts for MCB Camp Lejeune and establishes procedures to ensure compliance with related environmental laws and regulations for fiscal years 2007 through 2011. The INRMP considers resources on installation and regional levels. National Historic Preservation Act requirements will be addressed as site specific management actions are identified (annual forest prescription plan) consistent with Camp Lejeune's Integrated Cultural Resource Management Plan.

Camp Lejeune and Marine Corps Air Station (MCAS) New River share a Logistics Support Agreement that outlines several functions for shared operational support and facilities management and maintenance. This understanding also includes management of natural resources at MCAS New River and Marine Corps Outlying Landing Field Oak Grove (As a result of regionalization, Marine Corps Outlying Landing Field (OLF) Oak Grove is scheduled to transfer to Camp Lejeune from MCAS Cherry Point.). For this reason, the INRMP addresses MCAS New River, and MCOLF Oak Grove, as part of the overall MCB Camp Lejeune landscape and not as a stand-alone section of the INRMP. A representative of MCAS New River participated in development of this INRMP.

The INRMP includes input from diverse stakeholders including federal, state and local agency representatives, conservation organizations and interested individuals. As required under SAIA,

this INRMP reflects mutual agreement of the US Fish and Wildlife Service (USFWS) and the heads of each appropriate state fish and wildlife agency concerning conservation, protection and management of fish and wildlife resources. It does not replace or affect any federal laws, or state responsibility and authority for protecting fish and wildlife resources.

In accordance with existing authorities, Camp Lejeune has a number of properties leased by commercial interests. This INRMP addresses all of Camp Lejeune's property, including these leased lands. However, all of the leased properties are of such a small scale (i.e.: ATM machines) or of such a developed nature (residential neighborhoods), that Camp Lejeune has not identified any natural resource management objectives for these leased lands. Camp Lejeune will comply with all applicable federal, state, and local laws and regulations on these leased lands.

1.2.3 Authority

Development and implementation of this INRMP will fulfill the statutory requirements under SAIA. The SAIA states, "The Secretary of Defense shall carry out a program to provide for the conservation and rehabilitation of natural resources on military installations. To facilitate the program, the Secretary of each military department shall prepare and implement an integrated natural resources management plan for each military installation..."

SAIA requires that, consistent with the use of military installations to ensure the preparedness of the Armed Forces, each INRMP shall, where appropriate and applicable, provide for:

- Fish and wildlife management, land management, forest management, and fish and wildlife-oriented recreation;
- Fish and wildlife habitat enhancement or modifications;
- Wetland protection, enhancement, and restoration where necessary for support of fish and wildlife;
- Integration of, and consistency among, the various activities conducted under the INRMP;
- Establishment of specific natural resources management objectives and time frames for proposed action;
- Sustained use by the public of natural resources to the extent such use is not inconsistent with the needs of fish and wildlife resources management;
- Public access to the military installation that is necessary or appropriate for sustained use by the public of natural resources to the extent that the use is not inconsistent with the needs of fish and wildlife resources, subject to requirements necessary to ensure safety and military security
- Enforcement of natural resource laws and regulations;
- No net loss in the capability of military installation lands to support the military mission of the installation; and
- Such other activities as the Secretary of the military department considers appropriate.

SAIA is viewed as an "umbrella" law with regard to management of natural resources on military lands. Thus, this INRMP helps ensure that Camp Lejeune complies with other federal

and state laws, such as the Endangered Species Act, the Migratory Bird Treaty Act, and the Clean Water Act that require military installations to manage and protect sensitive biological and other natural resources.

DOD Conservation Instruction 4715.3 requires protection and enhancement of natural resources for multiple use, sustainability, and biological integrity. INRMP requirements include inventory of significant or sensitive natural resources; restoration or rehabilitation of altered or degraded landscapes; provisions for outdoor recreational activities; and application of the principles of ecosystem management.

Chapter 11 of MCO P5090.2A describes Marine Corps policies on natural resources management, including land management, fish and wildlife management, forest management, outdoor recreation, and environmental restoration. Appendix A of MCO P5090.2A summarizes all relevant federal environmental statutes, regulations, executive orders, and military mandates for environmental compliance.

The Handbook for Preparing INRMPs for Marine Corps Installations (Headquarters, Marine Corps, May 2004) was also utilized as guidance for this INRMP revision. The 2004 Handbook provides the most current information on the requirements of the Sikes Act, the purpose of natural resources management on Marine Corps lands, and general guidance on preparation and revision of INRMPs for Marine Corps installations.

1.2.4 INRMP Development

A core working group on Camp Lejeune, consisting of Environmental Conservation (ECON) Branch staff and key staff from Training and Operations, composed the Interdisciplinary Team (ID Team) that was primarily responsible for coordinating the development of this revised INRMP. This core group obtained focused input and guidance from individuals representing the various critical interests of Camp Lejeune.

The Conservation Working Group (CWG) includes representatives from the following base staff sections: Environmental Compliance, Environmental Quality, Installation Development, Range Control, Range Development, Eastern Area Counsel Office, New River Air Station, and Marine Corps Community Services. The CWG helped identify issues and data needs that the ID Team needed to consider; reviewed and commented on statements and objectives developed by the ID Team; and used the information developed by the ID Team to formulate recommendations and proposals that are included in this INRMP.

1.2.5 INRMP Resource Agency Coordination

The SAIA requires that INRMPs be prepared in cooperation with, and reflect the mutual agreement of, the USFWS and appropriate state fish and wildlife agencies. In this case the North Carolina Wildlife Resources Commission (NCWRC) and the North Carolina Division of Marine Fisheries (NCDMF) are the appropriate state agencies. Cooperation for this INRMP revision began early on: a kickoff meeting and discussion were held on November 2, 2004 with representatives of the USFWS and the NCWRC in attendance. The NCDMF was unable to attend; however discussions were held with that agency on December 15, 2004.

A Preliminary Draft INRMP was submitted to the cooperating agencies for their review and comment on July 6 2005, and a meeting was held on July 27 2005 to discuss their concerns. A Draft INRMP was submitted to the agencies on January 6, 2006. Agency comments on the

preliminary Draft and Draft INRMP have been addressed in this INRMP. Agency comments can be found in Appendix A.

Involvement with the USFWS, NCWRC, and NCDMF is expected to continue indefinitely during implementation of the revised INRMP. Planning and coordination sessions will be ongoing, specifically during annual INRMP reviews by providing comments, recommendations, and input on the status of regional processes, surveys, and species.

1.2.6 INRMP Scoping and Public Involvement

Section 2905(d)(1) of SAIA mandates that the public be provided a meaningful opportunity to comment on the Camp Lejeune INRMP. This opportunity was provided via the National Environmental Policy Act (NEPA) process.

NEPA is an essential component of ecosystem management on federal lands. Not only does it require extensive review of environmental impacts of all federal actions, it encourages interdisciplinary thinking and processes among Base offices. Enhanced coordination between the Environmental Conservation Branch staff and Camp Lejeune's Environmental Impact Working Group (EIWG) contributes to an interdisciplinary, ecosystem management approach. NEPA requirements also encourage consideration of environmental issues by staff sections that have traditionally not considered conservation issues in their business process. This interdisciplinary approach helps ensure that each action is thoroughly considered and reviewed.

Externally, the public was afforded a 30-day review and comment period. In addition, State of North Carolina agencies including the Department of Environment and Natural Resources and the a-95 clearinghouse in the Governor's office were invited to comment. External stakeholders, including non-governmental organizations such as the North Carolina Chapter of the Nature Conservancy, Endangered Species Coalition, North Carolina Coastal Land Trust, and others, were also afforded an opportunity to comment during that time period.

The public comment period for the revised INRMP began in January 2006. Copies of the INRMP were placed in libraries throughout Onslow County, North Carolina. It was also made available on the Camp Lejeune web site at www.lejeune.usmc.mil/emd. Notifications of the availability of the INRMP and the public review and comment period were made by letter mailed to state, federal, and local agencies, as well as individuals and organizations who had expressed an interest in natural resources management on Camp Lejeune. In addition, a legal notice was published in the Jacksonville daily newspaper, the Base's "newspaper of record" for NEPA purposes. A news release was also sent to the Globe, the Base's weekly newspaper, for publication. Copies of all comments received during the 30-day comment period are documented in Appendix A. Comments have been addressed in the final environmental assessment and final INRMP as appropriate. Upon final approval, the final environmental assessment and the final INRMP will be posted on the Camp Lejeune web site.

1.2.7 INRMP Review and Revision

Section 101(b)(2) of SAIA requires that each plan be reviewed "on a regular basis, but not less often than every five years." Camp Lejeune recognizes that natural resource management is a dynamic process and that this INRMP will need to be evaluated and revised frequently. Consistent with Marine Corps and DOD guidance, Camp Lejeune intends to review the INRMP annually in cooperation with the USFWS, NCWRC and NCDMF and revise the INRMP when necessary. The continuous involvement of the USFWS, NCWRC, NCDMF and the public

(through ongoing availability of this INRMP on the Base's web site) is expected to assist in future reviews and revisions.

The Environmental Conservation (ECON) Branch is responsible for conducting the annual reviews and acts as the liaison with cooperating wildlife agencies. During these annual reviews, natural resource management objectives, planned actions, and proposed actions will be reviewed with the appropriate managers to document progress, identify additional actions required or desired, and revise implementation schedules and priorities. As part of these reviews the USFWS, NCWRC, and NCDMF will be involved in the evaluation of processes, results, and implementation of established milestones and timelines for specific projects and programs and a review of ecosystem, species, and habitat goals established in conservation management plans. New projects, data, understanding of natural processes and species, and lessons learned from completed and ongoing projects and practices will be incorporated as appropriate following these INRMP reviews.

1.2.8 Environmental Compliance

This revised INRMP, once implemented, will help ensure that Camp Lejeune complies with federal, state, regional and local statutes, regulations and initiatives. Most notable are those associated with wetlands (e.g., Clean Water Act, Executive Order 11990, North American Wetlands Conservation, etc.), water quality (e.g., Clean Water Act), and fish and wildlife management (e.g., Endangered Species Act, Fish and Wildlife Coordination Act, Lacey Act, and Migratory Bird Treaty Act). Coastal Area Management Act (CAMA) consistency is addressed in the Environmental Assessment in Appendix B.

1.2.9 INRMPs and the NEPA

INRMPs are action-forcing documents that trigger compliance with NEPA requirements. An INRMP and an environmental assessment (EA) share similar contents. Both describe a course of action, describe the existing environment, and predict the outcome of actions being taken. An EA is an analysis of the environmental effects of a proposed action and any alternatives to the proposed action. It provides sufficient evidence and analysis for determining whether or not to prepare an environmental impact statement (EIS). It is anticipated that an EA will suffice for this INRMP. The public was afforded an opportunity to comment on the INRMP through the NEPA process. An EA for this INRMP is found at Appendix B.

1.2.10 INRMPs, the 2004 National Defense Authorization Act (NDAA), and Critical Habitat Designation

The NDAA of 2004 made a significant revision to the Endangered Species Act. NDAA stated that,

“The Secretary [of the Interior] shall not designate as critical habitat any lands or other geographical areas owned or controlled by the Department of Defense, or designated for its use, that are subject to an integrated natural resources management plan prepared under section 101 of the Sikes Act (16 U.S.C. 670a), if the Secretary determines in writing that such plan provides a benefit to the species for which critical habitat is proposed for designation.”

Under the 2004 NDAA, a military installation may have its INRMP obviate the need for critical habitat designation if the INRMP provides a benefit to listed species, and manages for the long-term conservation of the species. To do so, if a Marine Corps installation has federally listed

threatened or endangered species, proposed federally listed threatened or endangered species, and/or candidate species on the installation, or unoccupied habitat for a listed species where critical habitat may be designated, the INRMP must specifically address the benefits of management of these actions for these species or habitats in the document. The benefit should be clearly identified in the document and included in the table of contents. The Course of Actions and Monitoring Table found at Appendix C lists all the actions, along with applicable units of measure and measures of success, for this INRMP. The Benefits to Species are found in Appendix D, which provides a summary by species, of benefits provided by this INRMP to listed, proposed, or candidate species. This INRMP is intended to provide a benefit to, and gain a critical habitat exemption for, the following species: red-cockaded woodpecker (*Picoides borealis*), loggerhead sea turtle (*Caretta caretta*), green sea turtle (*Chelonia mydas*), leatherback sea turtle (*Dermochelys coriacea*), bald eagle (*Haliaeetus leucocephalus*), piping plover (*Charadrius melodus*), rough-leaved loosestrife (*Lysimachia asperulaefolia*), sea-beach amaranth (*Amaranthus pumilus*), Hirsts' panic grass (*Dicanthelium hirstii*), and coastal goldenrod (*Solidago villosicarpa*).

For more information concerning Camp Lejeune's critical habitat exemption, see Chap 15, section 15.2.

1.3 Camp Lejeune Military Mission and Operations

1.3.1 Mission

The Marine Corps mission is national defense. The mission of Camp Lejeune is to train and maintain combat-ready units for expeditionary deployment anywhere in the world.

1.3.2 Tenants aboard Camp Lejeune

MCB Camp Lejeune

MCB Camp Lejeune controls all real estate, operates entry-level and career-level formal schools and provides support and training for resident commands. The Mobilization Support Battalion at Camp Lejeune has assisted in the mobilization of thousands of Marines for duty in numerous locations around the world including Afghanistan and Iraq. Tenants aboard Camp Lejeune include:

- School of Infantry (SOI). Located at Camp Geiger, SOI provides infantry and Marine combat training to more than 18,000 Marines annually.
- Marine Corps Service Support Schools (MCSSS). Located at Camp Johnson, MCSSS is the primary training site for Marines in the fields of personnel administration/legal services, logistics operations, financial management, and ground supply.
- Field Medical Service School (FMSS). Located at Camp Johnson, FMSS trains Navy Medical Department and Religious Ministry personnel.
- Marine Corps Engineer School (MCES). Located at Courthouse Bay, MCES is the primary training site for combat engineer Marines and heavy equipment engineer Marines.
- Coast Guard Special Missions Training Center, also located at Courthouse Bay.
- II MEF (see below)

II Marine Expeditionary Force (MEF)

The war-fighting arm of MARFORLANT (Marine Forces – Atlantic) is II MEF. II MEF is comprised of four basic components: (1) II MEF Command Element which contains personnel and equipment necessary for effective planning and execution of operations; (2) the 2nd Marine Division (2nd MARDIV); (3) the 2nd Marine Aircraft Wing (2nd MAW); and (4) the 2nd Marine Logistics Group (2nd MLG). With more than 47,000 personnel, II MEF is the Marine Corps largest and most powerful Marine Air/Ground Task Force (MAGTF).

The 2nd MARDIV consists of a headquarters battalion, three infantry regiments, an artillery regiment, an amphibious assault vehicle battalion, a tank battalion, a light armored reconnaissance battalion and a combat engineer battalion. The total strength of the 2nd MARDIV is about 16,000. The 2nd MARDIV conducts regular deployments to the Mediterranean as landing forces for the U.S. Sixth Fleet. They have participated in operations in Grenada, Panama, the Persian Gulf, Afghanistan and Iraq, as well as multinational peacekeeping efforts in Somalia, Haiti, Bosnia, and Liberia.

The 2nd MAW is headquartered at MCAS Cherry Point with subordinate units located at MCAS New River and MCAS Beaufort, SC. The 2nd MAW includes a Marine Wing Headquarters Squadron, and air control group, a support group, one combined fighter-attack and all weather fighter-attack group, one light attack group and two helicopter groups. The 2nd MAW also has aerial refueling and air defense capabilities. In total, 2nd MAW has nearly 400 aircraft.

The 2nd MLG consists of a Headquarters and Support Battalion, Maintenance Battalion, Military Police Battalion, Transportation Support Battalion, Engineer Support Battalion, Medical Battalion, Dental Battalion, Supply Battalion and Brigade Service Support Group 2. The 2nd MLG is comprised of nearly 8,000 Marines and Sailors.

Other notable command elements within II MEF are the II MEF Augmentation Command Element (II MACE), 2nd Marine Expeditionary Brigade (MEB), and the 22nd, 24th, and 26th Marine Expeditionary Units (MEU). II MACE mission is to provide pre-trained Marines in support of, or to reinforce, the Command Element of II MEF. II MACE is staffed by 16 active duty Marines and approximately 200 Selected Marine Reservists. 2nd MEB provides scalable, task-organized force capable of rapid response. 2nd MEB provides expeditionary intervention forces with the ability to rapidly organize for combat operations in virtually any environment.

MCAS New River

MCAS New River is located on the west bank of the New River. The mission of MCAS New River is to maintain and operate aviation facilities and provide services and material to support ground combat forces located at MCB Camp Lejeune and perform such other air operations as requested. The air station is under the command of the Commanding Officer, MCASNR. Further information regarding MCAS New River can be found on the worldwide web at www.newriver.usmc.mil.

Naval Hospital

The Naval Hospital at Camp Lejeune supports USMC personnel by providing clinical and hospital services for active duty personnel, their dependents, and retirees. Activated May 1, 1943, the Naval Hospital Command has grown with the needs of the installation and now manages a modern 186-bed hospital that can be expanded to 236 beds if needed. It also includes the Health Promotion Education Center, and six general and specialty care outpatient clinics. In

addition, the hospital works closely with Naval and Tri-Service Regional Health Care Systems and cooperates with military and civil agencies during disasters and other emergencies. Their mission is to “advance force protection through operational readiness and quality health services” Further information regarding the Naval Hospital can be found on the worldwide web at www.med.navy.mil.

1.3.3 Current Operations and Training

To accomplish the national security mission, Marines, Sailors and Coast Guard personnel must be trained in all requirements for responding to national security threats. Training activities include, but are not limited to: amphibious/expeditionary operations, employment of combined arms, use of tracked vehicles, infantry and vehicle maneuvers, artillery and small arms firing, aerial weapons delivery, engineer support operations, logistics support, field combat service support, communications, airlift support for troops and weapons, equipment maintenance and field medical treatment and harbor/port security. Camp Lejeune units train with some of the most modern and sophisticated weapon systems and equipment available to the U.S. military. This technology is constantly evolving, and oftentimes requires large land areas for training use.

The training at Camp Lejeune must directly support the anticipated missions of units preparing for deployment. Such recent missions include:

- Combat operations in Iraq
- Horn of Africa
- 2nd MAW & 24th MEU Hurricane Katrina Efforts
- Combat operations in Afghanistan
- Security, counter intelligence, and engineer operations in Haiti
- Counter drug radar and communications support in South America
- Tactical Recovery of Aircraft and Personnel (TRAP) operations in the former republic of Yugoslavia (24th and 26th MEU (SOC))
- Strike mission support through combat sorties by the MAG-31 FWD, 332 and 533 in Taszar, Hungary
- Refugee assistance and security operations in Albania
- Peacekeeping and diplomatic observer operations in Kosovo
- Humanitarian assistance after a severe earthquake and tsunami in Indonesia
- Domestic support, in the form of wildfire suppression, humanitarian assistance/disaster relief support for victims of hurricanes, and security for 50th NATO Summit
- Anti-terrorism and Force Protection, and port/harbor security

Range and Impact Areas

Camp Lejeune has 74 active range areas and 3 active impact areas, as defined in the Range Control SOP (BO P3570.1A). For a summary of weapons accommodated and ammunition authorized at each active range and impact area on Camp Lejeune, refer to Appendix E. Most of the ranges and impact areas aboard Camp Lejeune are scheduled for daily training exercises.

Maneuver and Training Areas

There are 97 training areas on Camp Lejeune. These areas are subdivided into:

- Maneuver areas (located near cantonment areas) that are used for ground training including bivouacking and foot travel
- Tactical maneuver areas that support both mechanized and ground training
- Special training areas including Combat Town, and MOU facilities

The Range Control SOP (Chap 6) outlines environmental requirements for ranges, impact areas, and maneuver and training areas on Camp Lejeune. Requirements cover threatened and endangered species; wild land fire conditions; off road vehicles; fighting positions; laying cable and field wire; cutting brush and trees; wetlands; designated natural areas; archeological and historic sites; waste disposal; hazardous materials; beach operations; stream crossings; and environmental assessments.

Onslow Beach

Camp Lejeune also maintains 11 nautical miles of Onslow Beach to support amphibious operations. Operations at the beach range from daily exercises by 2nd Amphibious Assault (AA) Battalion and Joint Armed Services training to periodic, large-scale training such as the quarterly Capability Exercises (CAPEX) which include: explosives on the beach, inland artillery fire, and three Landing Craft Air Cushioned (LCAC) and 10-12 AAV landings. Appendix E includes a comprehensive list of military training on Onslow Beach activities.

New River

The USMC has a mission requirement to conduct combat and combat support operations in shallow-water and riverine environments. Training on the New River includes activities by two USMC commands and one U.S. Coast Guard unit.

2nd MARDIV supports II MEF with 17 Riverine Assault Craft (RAC), 65 Rigid Raider Craft (RRC), and 100 Combat Rubber Raider Craft (CRRC). Many of these boats are deployed in various locations around the world and are not simultaneously training on the New River. These boats include jet and propeller-driven boats designed for high speed military operations in shallow water and riverine environments. The RAC is an aluminum hull, 35' boat driven by a twin Hamilton jet drives powered by two 300 Cummins diesel engines. The RRC is an 18' fiberglass boat driven by twin 70 horsepower outboards. The CRRC is a 15' rigid inflatable boat, driven by twin 35 horsepower outboards.

Day and night training exercises include insertion and extraction of personnel, re-supply and refuel between vessels, waterborne refueling, formation traveling and live-fire of medium and heavy machine guns. Current exercises occur at a rate of approximately 635 per year and are expected to increase to 830 per year.

The 8th Engineer Support Battalion (ESB), who use boats to transport and build floating bridges, has 21 Bridge Erection Boats (BEB) in their inventory. Bridge Erection Boats are 27' long and are driven by twin hydro-jet propulsion units powered by two diesel engines. The boats have

traditionally been used to transport and build expeditionary-type bridging and to ferry equipment across areas too wide to bridge. The recent acquisition of GSRA has also required an increase in military training traffic on New River. Sixty-seven-ton M1A1 tanks belonging to the 2nd Tank Battalion (TKBN) are now ferried across the river to reach training areas and firing ranges in GSRA. 2nd TKBN conducts approximately 8 training operations per year in GSRA requiring 15 tanks for each operation. 8th ESB supports this operation by using BEBs to raft the tanks across the river (one at a time) on six Bay Ribbon Bridges (several sections of pontoon-type bridging are joined together to form a raft large enough to support a tank).

In addition to the 8th ESB, the 2nd AAVBN conducts maneuvers with tracked, amphibious vehicles on the New River. These vehicles are track and water propulsion system driven, and enter and exit the river at designated earth and concrete splash points. Various Navy and Army landing craft utility (LCU) units also support training on the river.

Finally, the U.S. Coast Guard Port Security Unit located at Courthouse Bay currently uses 11 vessels (eight 25-foot outboard-driven Boston Whalers and three 22-foot outboard-driven Boston Whalers) and conducts 8-10 training exercises a year on the New River and surrounding waterways.

1.3.4 Future Operations and Training

The Marine Corps will continue to build on its foundation by doing those things that served it well in the past, while exploring new opportunities to enhance future capabilities. In this regard, the Marine Corps is focusing on four areas:

- 1) Primacy of the Marine and his rifle
- 2) Enhancing MAGTF utility and combat power
- 3) Modernizing with advanced technologies
- 4) Strengthening the partnership with the Navy

Modernization of the Marine Corps is especially important. New technologies are leading to new weapons systems and platforms, which in turn may lead to the need for new or improved training ranges for these weapons and systems. Modernization may include expanded use of:

- **MV-22 Osprey**, a joint, multi-mission, vertical/short take off and landing tilt rotor aircraft
- The new **Expeditionary Fighting Vehicle (EFV)**
- **Expeditionary Strike Groups (ESG)**. Formation of 12 groups to meet forward presence, contingency and war fighting requirements.
- **Joint Strike Fighter (JSF)**, the next generation aircraft (Short Take Off Vertical Landing);
- **New non-lethal weapons**, weapons technology designed to stun and incapacitate without causing permanent injuries or gross physical destruction;
- **Unmanned Aerial Vehicles (UAV)** to assist with surveillance, communication, and reconnaissance, providing near-real time data;
- **New artillery**. Advanced cannon artillery weapons such as the Light weight 155mm Howitzer, a replacement for the M198 155mm Howitzer, the 120mm mortar and rockets such as the HIMARS, High Mobility Artillery Rocket System; and

- The **Grizzly**, a new Engineer Assault Breacher Vehicle (ABV)

1.3.5 Encroachment and Adjacent Land Use

Development adjacent to the boundary of Camp Lejeune is continuing to increase, especially since the early 90's. Areas of predominant growth continue to be High Hill Road (north of Greater Sandy Run Area), Dixon/Sneads Ferry vicinity, Piney Green, Bear Creek and Hubert. This increasing development has the potential to constrain military training due to noise complaints, as well as confining protected species, including RCW, to habitat within installation boundaries. Where endangered species are confined to military installations due to habitat loss in surrounding non-federal lands, significant restrictions on future military training flexibility may result from critical habitat designations and increased interest group advocacy.

In 2000, Onslow County adopted a Land Use Plan (LUP). An update is expected to occur once the new Coastal Area Management Act (CAMA) regulations are approved. According to the LUP, land development surrounding Camp Lejeune is classified in six categories: urban transition, limited transition, community, rural with services, rural, conservation and outstanding resource waters. The majority of land adjacent to Camp Lejeune is classed as limited transition (controlled development with services), except for the portions of the Camp Lejeune boundary that abut the city of Jacksonville. The land use in this area is moderate density residential

Residential construction has been on the increase since 1995. Growth is expected to continue. Onslow County does not have mandatory zoning, except in the Chadwick Acres subdivision in Sneads Ferry. However, zoning may become mandatory based on the new CAMA regulations.

Camp Lejeune participates in regional land use planning. The installation has an ex-officio seat on the Onslow County Planning Board. In response to the encroachment issue in the Verona area, Camp Lejeune has sought Onslow County support for noise disclosure requirements for persons selling land adjacent to the installation. Camp Lejeune has erected noise-warning signs along the northern portion of GSRA. Finally, Camp Lejeune is involved in a Joint Land Use Study facilitated by the Office of Economic Adjustment, DOD. The study will bring together community representatives and Base officials to discuss and find possible resolutions to encroachment issues.

DOD and the Marine Corps have established a program called "Encroachment Partnering". Authorized under 10 United States Code (USC) 2684a, military services may enter into cost-sharing partnerships with states, their political subdivisions, and/or conservation minded non-governmental organizations (NGOs) to acquire lands from willing sellers. This serves to limit development or use of the acquired property, or preserves habitat in support of military readiness requirements.

The primary objective of this cost-sharing program is to ensure encroachment does not threaten the ability of an installation to achieve its military mission. In 2003, Camp Lejeune, working with the Onslow Bight Conservation Forum, completed an encroachment-partnering project with the State of North Carolina to purchase 2,400 acres adjacent to the base for inclusion into the State Game Land system. Ownership of the land is vested with the State of North Carolina, with the Marine Corps retaining a perpetual restrictive easement that runs with the land. In 2005, Camp Lejeune completed three additional encroachment-partnering projects. Camp Lejeune continues to work with the Onslow Bight participating agencies to identify opportunities to

ensure compatible development in the vicinity of ranges and training areas and preserve habitat in the region.

1.4 Natural Resources Management on MCB Camp Lejeune

All natural resources management activities on Camp Lejeune support the military mission. Marines depend on sustainable natural resources to provide the proper environment for training and operations. Training restrictions implemented for threatened and endangered species living on Camp Lejeune demonstrate the effect declining natural resources can have on the military mission. One goal of this revised INRMP is to minimize future training restrictions (no net loss in the ability to train) by increasing integration between natural resources management planning, training, and operations.

SAIA defines the purposes of natural resources management on military lands as “the conservation and rehabilitation of natural resources on military installations; the sustainable multipurpose use of the resources, which shall include hunting, fishing, trapping, and non-consumptive uses; and subject to safety requirements and military security, public access to military installations to facilitate the use [of these resources].” Further, SAIA states that conservation on military installations shall be “consistent with the use of military installations to ensure the preparedness of the armed forces...”

It is clear that Congress intended that natural resources management on military installations support the installation mission, provide an opportunity to the public to have access to installation natural resources, and participate, as appropriate, in regional ecosystem initiatives. In particular, Congress intended each INRMP to support and be consistent with the mission of the installation.

1.4.1 Base Environmental Policy

Camp Lejeune is committed to environmental protection, continual environmental improvement and pollution prevention. Camp Lejeune’s environmental policy is to protect current and future training mission capabilities by respecting and maintaining the natural environment. This policy includes the following components:

- Conserving the air, land, and water resources as vital Marine Corps assets
- Protecting the environment to ensure current and future military readiness through sustained realistic training opportunities
- Maintaining and enhancing the biodiversity of the ecosystem through integrated natural resources management
- Reviewing all proposed activities for potential environmental impacts in accordance with NEPA
- Minimizing the impact on the environment through environmental quality assessment, education, pollution prevention, and use of Geographic Information Systems (GIS) technology
- Complying with all federal environmental requirements and promoting community outreach activities

- Fostering cooperation with surrounding communities by publicizing Camp Lejeune's environmental initiatives and supporting joint environmental protection programs

As technology improves and science expands, new information is provided for natural resources management. The professionals at Camp Lejeune respond to this information to ensure a natural resources management program that embraces the latest scientific data and continues to provide a sustainable environment in which Marines may train.

1.4.2 Ecosystem Management Approach

Management of installation natural resources will support sustainable military use through the application of an integrated approach to ecosystem management. An ecosystem, by definition, is a dynamic and natural complex of living organisms interacting with each other and with their associated non-living environment.

Ecosystem management is an interdisciplinary planning and management process that focuses on identifying, restoring and maintaining natural communities in support of the military mission and other sustainable activities. The principles of ecosystem management, which have been incorporated into DOD Conservation Instruction 4715.3, adopted in 1994, are as follows:

- **Maintain and improve the sustainability and native biological diversity of ecosystems.** Camp Lejeune sustains extraordinary species and community diversity that has been supported by a half century of sound natural resources management.
- **Administer with consideration of ecological units and timeframes.** Impacts of installation activities are considered in terms of spatial and temporal scales that are relevant to natural processes. Natural resources at Camp Lejeune are significant on a base level (providing land and resources for installation activities), on a regional level (the installation is one of many large state and federal landowners in the region and as such play a key role in regional initiatives), and on a national level, providing one of the most diverse ecosystems in the United States. While it is appropriate to consider many actions solely on an installation level (e.g., construction of new buildings, etc.), some activities need to be considered on a larger scale (e.g., impacts of installation management on recovering red-cockaded woodpecker (RCW) populations).
- **Support sustainable human activities.** Ecosystem management recognizes that people are an integral component of ecological systems, and it supports multiple-use of natural resources and sustainable development. Natural resources are managed on Camp Lejeune to support the military mission and to provide sustainable environments for training, education, and operations. Within the safety and operational constraints of military training and consistent with the needs of the Camp Lejeune region, the installation works to: (1) provide outdoor recreational opportunities consistent with demand from Base personnel, residents, and military retirees in nearby communities; and (2) promote natural resources management, general welfare, and the local economy by appropriately producing and marketing forest products on an environmentally sustainable basis.
- **Develop a vision of ecosystem health.** Ecosystem management depends upon participation by diverse stakeholders (federal, state, local, and tribal governments; non-governmental organizations; private organizations; and the public) and their ability to develop a shared vision of what constitutes a desirable future condition for the region of

concern. At Camp Lejeune, this means considering the mission as well as the relationship of the installation to surrounding communities and regional environmental efforts.

- **Develop priorities and reconcile conflicts.** Installation objectives are established, prioritized, and revisited on a regular basis. This includes consideration of natural resources management to meet both installation (mission) and regional objectives. If there are any conflicts, they can be resolved through periodic regional workshops and stakeholder discussion.
- **Develop coordinated approaches to work towards ecosystem health.** Because ecosystems do not follow political and social boundaries, a coordinated approach on military installations must: (1) include early and regular participation by military operations personnel and regional stakeholders (to include other state and federal agencies); (2) incorporate ecosystem management goals into strategic, financial, and program planning and design budgets; and (3) seek to prevent duplication of effort and minimize inefficiencies. These efforts are ongoing on Camp Lejeune.
- **Rely on the best science and data.** Understanding of ecosystems and natural communities is constantly evolving through science and discussion. Camp Lejeune is committed to the collection, maintenance, and use of scientific data required for making sound natural resources and land use management decisions. For example, Camp Lejeune uses Ecological Classification System (ECS) to guide management actions (see Appendix F) and Geographical Information Systems (GIS) mapping technologies.
- **Use benchmarks to monitor and evaluate outcomes.** The ecosystem management approach depends on “specific and measurable objectives and criteria with which to evaluate activities in the ecosystem.” This revised INRMP will include specific, measurable goals and objectives, and task schedules for Camp Lejeune.
- **Use adaptive management.** Ecosystems are constantly changing. Management practices must accommodate changes in both the ecosystem and our understanding of these systems. This revised INRMP will be reviewed again as required in five years. The Camp Lejeune Environmental Management Division will adapt environmental management efforts when new information is available or significant changes to the ecosystem occur.
- **Implement through installation plans and programs.** Ecosystem management activities identified in an INRMP cannot stand alone. Instead, they must be incorporated into other planning and budgeting documents which help direct land management planning at Camp Lejeune.

1.4.3 Integrating Environmental Stewardship with Military Use On Board MCB Camp Lejeune

The training and natural resources management communities on Camp Lejeune share a common goal: a sustainable landscape that can accommodate continued training with minimal restrictions placed upon it. This shared value is attainable only through cooperation and collaboration between the two communities. Open communication and information sharing is crucial to their respective missions. Several forums exist to facilitate coordination. The Base Training Working Group (BTWG) convenes quarterly and provides an opportunity for frank discussion of training deficiencies, emerging natural resources issues and potential resolutions.

The Environmental Impact Working Group (EIWG) provides a regular opportunity to evaluate the compatibility of proposed projects between both training needs and natural resources management objectives. In addition to these group meetings, opportunities for coordinating training and natural resources activities are provided through the annual forest prescription process. Prescriptions are prepared by the timber management forester of the Forest Management Program, and presented to Directors of Training Support and Training Resource Management Divisions, Director Training and Operations, and program managers from the Environmental Conservation Branch.

The Conservation Working Group (CWG), chaired by the ECON Branch, utilized staff specialists to develop mission drivers and conservation goals and objectives for the INRMP, develop the list of projects (including “must fund” projects) included in this revised INRMP, as well as monitoring protocols to determine effectiveness of INRMP implementation. The CWG also provides oversight for the conservation component to Camp Lejeune’s Environmental Management System (EMS). They also ensure coordination and cooperative preparation of the document with the USFWS and state fish and wildlife agencies. CWG has working level representation from the following:

- Environmental Conservation Branch
- Range Control Division
- Range Development Division
- MCAS New River Environmental Affairs
- Eastern Area Counsel Office
- Marine Corps Community Services
- Environmental Quality Branch
- Environmental Compliance Branch
- Installation Development Division

1.4.4 Environmental Conservation Branch

The natural resources of Camp Lejeune have been under professional management since 1947. During this time, the forestry and fish and wildlife programs have developed into vital components of installation management. From forest protection to threatened and endangered species management, natural resources management programs support the military mission and enhance training opportunities for the Marine Corps.

Camp Lejeune’s forest management program provides a varied, safe and sustainable forest environment that meets the overall needs of the military mission, maintains and creates wildlife habitat, and provides a sustainable flow of timber products.

Other programs areas, including Threatened and Endangered Species, Game and Non-Game, Wetlands and Soil, Conservation Law Enforcement, Cultural Resources and NEPA, work together collaboratively to provide sustainable military training environments and meet legal and regulatory compliance requirements.