REP109

READINESS AND ENVIRONMENTAL PROTECTION INITIATIVE

THIRD ANNUAL REPORT TO CONGRESS APRIL 2009

Submitted by the Deputy Undersecretary of Defense for Installations & Environment On behalf of the Secretary of Defense



REP 09 TABLE OF CONTENTS

01

)2

INTRODUCTION

PROGRAM ROLE AND CONTEXT ... 4

PROJECT IMPLEMENTATION

PROGRAM SUMMARY ... 9 PROJECT EFFECTIVENESS ... 10 FY 2007 PROJECT HIGHLIGHTS ... 16 SERVICE-FUNDED PROJECTS ... 21 CUMULATIVE PROJECTS: FY05-09 ... 24

03

INTEGRATION AND INSTITUTIONALIZATION

SUPPORTIVE EFFORTS ... 25 PROGRAM OVERSIGHT ... 30

04

Α

RECOMMENDATIONS AND CONCLUSION

FUTURE LEGISLATIVE CONSIDERATIONS ... 33 CONCLUSION ... 34

APPENDIX A: LEGISLATIVE REPORTING REQUIREMENTS

Cover Photo: EA-6B Prowler, Naval Air Station Whidbey Island, Wash.

The EA-6B's primary mission is to protect fleet surface units and other aircraft by jamming hostile radars and communications. REPI funding is protecting NAS Whidbey Island, the home of the Prowler, from incompatible development under flight corridors.

See REPI project highlights, p. 17

01

By conserving non-military public and private land near installtions and ranges for environmental, agricultural, and community uses, partners work with the military to protect areas **critical to the national defense**.

INTRODUCTION

The purpose of this report is to inform Congress, the public, stakeholders and interested parties on the progress of the Readiness and Environmental Protection Initiative (REPI), a program that helps fund military installations' work with conservation groups as well as state and local governments to support defense readiness by acquiring real property interests to preserve or encourage land uses that are compatible with the military's training, testing, and operational requirements. By conserving non-military public and private land near installations and ranges for environmental, agricultural, and community uses, partners work with the military to protect areas critical to the national defense.

REPI is the most visible part of a larger effort within the **Department of Defense** (DoD) to implement Congressional authority given to the **Office of the Secretary of Defense** (OSD) and the Military Services—Army, Navy, Air Force and Marine Corps—to partner with outside organizations to conserve land near military installations. Figure 1-1, right, shows the relationship between this Congressional authority, REPI, and the Services' individual programs. OSD oversees the implementation of this authority between DoD and the Services in a process described in Chapter 3.

This document is the third annual report to be submitted in response to Congressional requirements. It describes DoD's conservation and compatible land use efforts utilizing authority under **Section 2684a of Title 10, United States Code** (10 U.S.C. § 2684a) with **Fiscal Year** (FY) 2007 funds, including projects funded by REPI and directly by the Services. Although REPI and 10 U.S.C. 2684a are powerful tools to prevent or minimize mission restrictions, they do not always represent the ideal solution for such issues. For this reason, DoD developed a full range of tools—some of which are highlighted later in this report—as part of the Sustainable Ranges Initiative.

In addition to fulfilling the Congressional requirements transcribed in Appendix A, this report also serves as a status report for interested parties and stakeholders.

In 2002, as part of the National Defense Authorization Act (NDAA) for FY 2003, Congress authorized 10 U.S.C. § 2684a. REPI was created to help implement and administer funds for this authority, which allows the Services to enter into agreements with private conservation organizations and state and local governments. These agreements allow the Services to <u>share the cost of obtaining conservation or</u> restrictive-use easements and other interests in land from willing sellers through our partners on a voluntary basis for the purpose of protecting military readiness. Whether preserving high-value habitat, water resources, working lands, or open space, these agreements ensure that development surrounding military installations is compatible with the military mission.

Congress amended the 10 U.S.C. § 2684a authority in § 2822 of the NDAA for FY 2006 to establish an annual reporting requirement for DoD. The requirement directs the Secretary of Defense, in coordination with the Secretaries of the Military Departments and the Director, Test Resource Management Center, to report on projects executed under the authority provided by 10 U.S.C. § 2684a. A second reporting requirement, set out in the NDAA for FY 2008, directs the Secretary of Defense to report on the steps taken, or planned to be taken, to address the conclusions and recommendations that make up Chapter 6 of the initial REPI Report submitted in 2007. This requirement was fulfilled in last year's Report.

IMPLEMENTATION OF CONGRESSIONAL AUTHORITY Figure 1-1



These agreements allow the Services to share the cost of obtaining conservation or restrictive-use easements through our partners to **ensure that development surrounding military installations is compatible with the military mission.**

THE PROBLEM: ENCROACHMENT

The United States military is called upon to maintain a constant state of readiness for increasingly complex and constantly evolving operations around the globe in support of national policy. This mission demands sophisticated and flexible single-Service, multi-Service, and joint training and testing capabilities among the Services, combatant commands, and other DoD and non-DoD organizations. Realistic training and effective weapons systems testing measurably increase the survivability and success of our military forces in combat by ensuring the reliability and effectiveness of weapons systems and maintaining the proficiency of the armed forces with realistic, hands-on experience.

Many military training and testing ranges were established over sixty years ago as the nation prepared for World War II. These ranges were generally located in remote, rural areas, but over the years urban and suburban development began to encroach upon military ranges, creating conflicts in the use of land, sea, airspace, and frequency resources. New residential and commercial development can be incompatible with many training and testing activities, and loss of viable habitat from such land use changes increases the relative burden on installations to serve as a last refuge for threatened and endangered species.

Intensifying development and growing competition for land, air, and water resources, if left unchecked, will inhibit training and testing activities, thereby <u>degrading military readiness</u>. As population growth and resulting development increase near and around military bases, so do potential land-use conflicts between mission activities and local communities. Development near military installations can affect low-altitude flight operations, live-fire activities and electronic warfare operations. Development near military airfields can force changes to takeoff and approach patterns or require other mission "workarounds" that degrade the quality and realism of flight training. In other situations, night training exercises may become impractical when the lights of encroaching development inhibit the use of night vision equipment.

While some land uses around the edges of military ranges can degrade the ability of those ranges to carry out their mission, other land uses well away from the ranges' boundaries can also have an impact on the military's ability to test and train. Examples include wind towers that physically obstruct air routes, frequency spectrum uses that can interfere with the operations of military radar or communications equipment, or large-scale development that eliminates important habitat for populations of endangered species. Changes in land use patterns near or far from installations can affect animal and plant habitats, often limiting species to the remaining open spaces available on military

Intensifying development and growing competition for land, air, sea, and frequency spectrum resources, if left unchecked, will **inhibit training and testing activities**, thereby degrading military readiness. installations for survival. The encroachment challenge will only grow as residential development and other more intensive land uses expand near military installations.

At the same time, DoD is gaining understanding that encroachment, rather than simply being an external threat, can also come from within in the form of selfencroachment — new construction within an installation, for example, can affect the ability to train or test on that installation. Likewise, new weapons systems and tactics may call for a larger area to operate safely, free from noise and electronic interference concerns, increasing the strain on limited and irreplaceable training and operating areas. Encroachment can also be a two-way street: training and testing can also present burdens on nearby communities. Working with its neighbors, DoD addresses these concerns concurrently.

All of these factors occur in an atmosphere of ever-increasing understanding of the interconnected nature of our built environment as it relates to the natural world. Working within this framework to mitigate encroachment impacts, DoD and its partners are counteracting competition for scarce resources with a renewed dedication to finding lasting solutions that find the proper balance between mission capability, <u>economic</u> benefits, quality of life, and environmental stewardship. This approach produces multiple benefits for the military, nearby communities, the environment, and the economy. Section 2684a and REPI are leading the way in implementing these efforts that are the result of a profound change in thinking for DoD that goes "beyond the fence line" in addressing readiness concerns and engaging partners to achieve common goals.

In the News

"With the assistance of multiple state of Florida awarded grants, the Northwest Florida Greenway has evolved into an unprecedented partnership of military, government, and non-profit organizations that will protect the military mission in Northwest Florida while enhancing the Panhandle's economy and conserving critical ecosystems in one of the most biologically diverse regions in the United States,"

"A Unique Partnership Protects
 Defense Economy & Ecosystems," Economic Development Journal, Summer 2008

"Santa Rosa County commissioners made the right decision in rejecting a rezoning request (and tabling another) that would drastically increase residential density near the Eglin Air Force Base ... The recent turmoil in the stock market and what many believe is an impending economic recession underscore the importance of the military to the local economy."

"Protecting Eglin Range Makes
 Sense" (Editorial), Pensacola
 (Fla.) News Journal, Jan. 2008

VARIOUS ENCROACHMENT FACTORS Figure 1-2



Ranges and installations are as much a part of the landscape and fabric of the nation as the habitats and communities that surround them. They rely on each other for economic, environmental, and social benefits that serve their needs and interests: military readiness on one hand, and sustainable community growth on the other. Collaborative planning at all levels—local, state, and regional—provides these benefits. This effort is the cornerstone of the Sustainable Ranges Initiative, developed by DoD to ensure the sustainability of military ranges and installations by protecting the environment and assuring the future availability of resources for Service and joint training and testing.

DoD developed REPI as a key component of the Sustainable Ranges Initiative to implement the authority granted under 10 U.S.C. § 2684a (see Figure 1-1). Funding provided through the REPI program and other sources enables installations to enter into agreements with private conservation organizations and state and local governments to support compatible land use and habitat management projects important to mission sustainability. By pooling funds and resources, these agreements can accomplish more than each organization could individually accomplish.

Addressing the full range of encroachment pressures and ensuring the long-term sustainment of military testing and training capabilities can in some ways be as complex as the military mission itself. DoD installations, ranges, and operating areas are often confronted with multiple encroachment impacts, where efforts to address one issue may unintentionally exacerbate others. Recent actions under Base Realignment and Closure (BRAC), new policies to increase the force strength of the Army and Marine Corps, and other mission changes require careful planning to minimize their impacts on installation missions, neighboring communities, and the environment.

Because of this complexity, planning and action to mitigate the effects of <u>encroachment are required at all levels</u> — at installations and their neighboring communities, as well as state, regional, and national levels. Seeking to address the concerns of all affected stakeholders, DoD works not only internally but also engages with other federal agencies, tribal, state and local governments, non-governmental organizations (NGOs), and private landowners, industries and developers when and where their interests overlap.

Though still growing and evolving, REPI rests on a solid foundation of past performance and lessons learned while providing benefits to military missions, local communities, species and habitat recovery programs, regional planning efforts, and individual landowners. Whether addressing the impacts of new weapons, mission growth, suburban sprawl adjacent to installations, or the needs of a habitat or species,



Bringing Partners Together Around Common Interests

DoD engages with federal agencies, tribal, state and local governments, non-governmental organizations, private landowners, industries and developers when and where their interests overlap. For more information on DoD's regional partnering efforts, see p. 27. REPI and 10 U.S.C. § 2684a are critical for mitigating, eliminating or avoiding mission restrictions due to encroachment while providing mutual benefits to non-DoD partners.

DoD APPROACH: SUSTAINING THE MISSION

DoD's Sustainable Ranges Initiative supports military readiness while also protecting the environment and ensuring installations remain good neighbors to surrounding communities. Through comprehensive sustainment planning, policy development, education, and outreach, DoD works with a broad spectrum of stakeholders both within the Department and externally to promote understanding of its mission; ensure the long-term availability of necessary land, air, sea-space, and spectrum resources; and provide sound stewardship of the resources in the Department's care. Evolving operational demands make this a dynamic process, but one that DoD is fully committed to working on with Congress, states, local communities, NGOs and other stakeholders.

Sustaining the military mission means encouraging compatible land uses that avoid or reduce the impact of encroachment on ranges and installations while minimizing impacts on local communities and providing benefits in other areas as well. DoD's aim is not to inhibit growth, but to ensure that land uses and development remain compatible with the military activities at a particular installation, range, or military operating area. When DoD's neighbors consequently reap benefits to their quality of life, economy, and/or natural resources, such outcomes represent a "win" for everyone involved. Successful, sustainable outcomes require partnering to ensure that not only DoD's interests and mission needs are satisfied, but also those of its stakeholders and neighbors.

SERVICE APPROACHES

DoD's compatible land use policy, planning and outreach efforts are complemented and in large part implemented by the Services.

ARMY | Using its Army Compatible Use Buffer (ACUB) program, the Department of the Army enters into cooperative agreements (CAs) with partners who purchase land or interests in land or water rights from willing sellers. This is part of an allencompassing approach to protect installation accessibility, capacity and capability for testing and training. Together with its partners, the Army prepares an ACUB proposal, which includes a comprehensive encroachment analysis of the threat, risk and solution. The proposal details a long-term partnership approach to conserve prioritized buffer lands around critical at-risk training or testing areas while managing associated natural resources. The ACUB partner holds title to any real estate interest purchased. According to the CAs, the Army depends on the partner to provide necessary land management and easement monitoring and enforcement, with a right to monitor or enforce, or transfer interest to another eligible partner if the partner fails to meet the terms of the agreement. The Army also uses cooperative agreement authority under the Sikes Act to enter into ACUB partnerships that specifically protect natural resources.

NAVY AND MARINE CORPS | Under the Department of the Navy (DoN), the Navy and Marine Corps title their efforts Encroachment Partnering (EP), part of their overall encroachment management programs that involve short, medium, and long-term strategies for addressing encroachment at each installation. The Navy and Marine Corps seek out partners who share a vested long-term interest in the target properties and who are able to secure funding to participate in the transactions. In some cases, partners will obtain a perpetual conservation easement over a target property to preserve its environmental value while remaining in private ownership. In other cases, the partner will purchase the property outright and manage it for public benefit. In each case, the DoN obtains a real property interest in the form of a restrictive use easement or conservation easement, ensuring that the land use will be compatible with nearby military uses.

AIR FORCE | The Air Force is transforming traditional planning and encroachment prevention efforts into a single enterprise planning process that provides a holistic approach, from decision-making regarding mission changes to mission sustainment. Underpinning this process is collaboration and communication across and between organizations at all levels — Air Force Headquarters (HQ USAF), Major Command, and installations. This transformation will result in improved mission realignment decisions and continued mission sustainment. To further enhance their encroachment prevention efforts, the Air Force will be developing their own collaborative planning and partnering efforts and transforming its off-base encroachment efforts with a comprehensive strategy that will integrate a full range of tools, including REPI and 10 U.S.C. § 2684a efforts.

02

PROJECT IMPLEMENTATION

02-1 | PROGRAM SUMMARY

Through REPI, Congress funds compatible land use efforts that meet the requirements of 10 U.S.C. § 2684a. REPI has funded encroachment partnering for four years (2005-2008), with a fifth fiscal year now underway.





02-2 | PROJECT EFFECTIVENESS

REPI and the authority provided under 10 U.S.C. § 2684a are effective tools to protect military readiness, meet Service priorities, and leverage other public funds. The partnerships formed provide a broad range of secondary benefits for host communities, other stakeholders, the environment, and local economies. These partnerships are welcomed by stakeholders and partners as making an important contribution to national defense while also advancing important natural resource stewardship and land use planning goals and policies.

Examples of secondary benefits are exemplified by such projects as Merrimac Farm, outside Marine Corps Base Quantico in Virginia, which not only protects important training on the base, but is open for public hunting, fishing, wildlife viewing, and environmental education programs (see p. 23). A project outside Fort Sill, Oklahoma, protects prime agricultural soils and buffers a growing urban area from the noise and dust of artillery training while providing economic benefits to landowners and surrounding communities. Protecting training lands in Hawaii also protects the scenic views around the North Shore of Oahu, an important destination in Hawaii's multibillion dollar tourist industry.

These are just a few examples of how DoD is not only leveraging public funding, but also achieving positive outcomes for communities and individuals across America. Easements protect these lands in perpetuity, guaranteeing readiness and environmental benefits for generations to come.

SERVICES PROJECT QUESTIONNAIRE

This year, OSD conducted a survey among the Services for the first time to identify the impact of their FY 2007 projects based on factors related primarily to military readiness, followed closely by ancillary benefits provided to surrounding communities. These benefits, described on a per-project basis in Table 2-1, are closely linked. A more detailed discussion of readiness aspects will follow.

REPI projects primarily address incompatible land use, the prevention of which:

- Protects existing training or testing on-installation or offinstallation, including live-fire or maneuver capability;
- Reduces the number of workarounds necessary to continue testing or training, which may also increase the number of available training days during the year;

- Preserves the ability to conduct training or testing activities that generate **noise** (the prevention of noise conflicts is essential, for example, to protecting the ability to carry out **helicopter** training);
- Works to address future **safety** or security concerns;
- Preserves the ability to conduct **night flying** or other nighttime testing or training operations through the avoidance of nearby light sources;
- Provides flexibility for future or expanded missions (mission growth) including joint and multi-Service missions.

Ancillary benefits to the military, surrounding communities, and other stakeholders include:

- Engaging **new partners** in innovative ways, cooperating with communities and stakeholders to preserve quality of life and military readiness while enhancing public perception of the installation's role in the community;
- The preservation of **working lands** for agricultural and silvicultural (forest) production, the latter potentially aiding in the mitigation of global climate change, an emerging encroachment concern;
- Support of existing and planned conservation or **regional planning** efforts to manage growth and preserve biodiversity, such as **green corridors**;
- Improved and more integrated land use planning, using tools such as a **Joint Land Use Study** (JLUS), which encourages cooperative land use planning between military installations and surrounding communities;
- The protection of habitat and species (including threatened and endangered species);
- **Recreational** opportunities on natural lands that may have been previously unavailable to the public (e.g. hunting, fishing, hiking);
- **Water** resource protections that preserve water supplies and water quality for the military and communities alike.

Projects may serve to provide one or more of these benefits; however, the type or number of benefits may not express the full measure of a project's effectiveness. The primary concern to DoD is the type and necessity of the military training or testing

NRPA Article on Recreation

The December 2008 edition of "Parks and Recreation" magazine, a publication of the National **Recreation and Parks Associa**tion, included an article authored by the REPI Team entitled "Defending Open Space and Recreation: Partnering with the Military to Create New Opportunities." This article described the benefits to local recreation and public access of natural resources made possible in several projects initiated under 10 U.S.C. § 2684a. The potential for trails, other outdoor recreation activities, protection of scenic vistas and other benefits at the same time DoD protects important military missions is yet another example of the value returned to the nation through REPI investments.

| ANALYSIS OF FACTORS | | | | | | | | |
|-------------------------|--|--|--|--|--|--|--|--|
| BENEFITTED BY FY 2007 | | | | | | | | |
| REPI PROJECTS Table 2-1 | | | | | | | | |

Factors are defined on the previous two pages (bold text in bullet points), and their relevance to a specific project was determined by the Services in response to a questionnaire. The tables indicate the benefits that were accrued thanks to the implementation of one or more FYO7 REPI projects at a given installation.

Readiness Factors

| | | Live-fire | Maneuver | On-Installation | Off-Installation | Workarounds | Training Days | Noise | Safety | Helicopter | Night Flying | Mission Growth | Multi-Service |
|------|--------------------|-----------|----------|-----------------|------------------|-------------|---------------|-------|--------|------------|--------------|----------------|---------------|
| ARMY | Fort AP Hill | | | ٠ | | ٠ | | ٠ | | ٠ | ٠ | ٠ | • |
| | Fort Benning | | | ٠ | | ٠ | | ٠ | | ٠ | ٠ | ٠ | ٠ |
| | Fort Bliss | ٠ | ٠ | ٠ | | ٠ | ٠ | ٠ | | | | ٠ | |
| | Fort Bragg | ٠ | ٠ | ٠ | | ٠ | ٠ | ٠ | ٠ | ٠ | ٠ | ٠ | • |
| | Fort Campbell | ٠ | ٠ | ٠ | ٠ | ٠ | ٠ | ٠ | • | ٠ | ٠ | ٠ | ٠ |
| | Fort Carson | ٠ | ٠ | ٠ | | ٠ | ٠ | ٠ | • | | | ٠ | ٠ |
| | Fort Huachuca | | | ٠ | | ٠ | | ٠ | ٠ | ٠ | ٠ | | ٠ |
| | Fort Knox | ٠ | ٠ | ٠ | | ٠ | | ٠ | ٠ | ٠ | ٠ | | |
| | Fort Lewis | ٠ | ٠ | ٠ | | ٠ | | | | | | ٠ | ٠ |
| | Fort Polk | ٠ | ٠ | ٠ | | ٠ | ٠ | | | | | ٠ | |
| | Fort Riley | ٠ | ٠ | ٠ | ٠ | ٠ | | ٠ | ٠ | ٠ | ٠ | ٠ | |
| | Fort Sill | ٠ | ٠ | ٠ | | ٠ | ٠ | ٠ | ٠ | | | ٠ | ٠ |
| | Fort Stewart | ٠ | ٠ | ٠ | ٠ | ٠ | ٠ | ٠ | ٠ | ٠ | ٠ | ٠ | |
| | USAG-Hawaii | | | ٠ | | ٠ | ٠ | ٠ | ٠ | ٠ | ٠ | | |
| NAVY | NAES Lakehurst | | | • | | | | ٠ | ٠ | | ٠ | ٠ | ٠ |
| | NAS Fallon | ٠ | | | | | | ٠ | ٠ | | ٠ | | |
| | NAS Whidbey Island | | | | | | | ٠ | ٠ | | ٠ | ٠ | |
| USMC | MCAS Beaufort | | | ٠ | ٠ | ٠ | | ٠ | ٠ | | ٠ | ٠ | |
| | MCAS Cherry Point | ٠ | | | | | | | | ٠ | | | |
| | MCB Camp Lejeune | ٠ | ٠ | ٠ | | | | | | | | | |
| USAF | Warren Grove Range | | | ٠ | | | ٠ | | | | | | |

Environmental Factors

| | | New Partners | Working Lands | Regional Planning | Green Corridor | JLUS | Habitat | Species | Endangered | Recreational | Water |
|------|--------------------|--------------|---------------|-------------------|----------------|------|---------|---------|------------|--------------|-------|
| ARMY | Fort AP Hill | ٠ | | ٠ | ٠ | | | | | ٠ | ٠ |
| | Fort Benning | ٠ | ٠ | ٠ | ٠ | | ٠ | ٠ | ٠ | ٠ | ٠ |
| | Fort Bliss | ٠ | ٠ | | | | | | | | |
| | Fort Bragg | | ٠ | | | | | | | | |
| | Fort Campbell | ٠ | ٠ | | | ٠ | | | | | |
| | Fort Carson | | ٠ | | | | | | | | |
| | Fort Huachuca | | ٠ | | ٠ | | ٠ | ٠ | ٠ | ٠ | ٠ |
| | Fort Knox | • | ٠ | ٠ | | ٠ | ٠ | ٠ | ٠ | | |
| | Fort Lewis | | | ٠ | ٠ | | ٠ | ٠ | | ٠ | |
| | Fort Polk | | ٠ | | | | ٠ | ٠ | ٠ | | |
| | Fort Riley | | • | | ٠ | ٠ | ٠ | | | | |
| | Fort Sill | | ٠ | | | | | | | | |
| | Fort Stewart | | ٠ | | | ٠ | ٠ | | | | |
| | USAG-Hawaii | • | | ٠ | | | | | | ٠ | |
| NAVY | NAES Lakehurst | ٠ | | ٠ | | | ٠ | | | | |
| USMC | NAS Fallon | • | • | ٠ | | | | | | | |
| | NAS Whidbey Island | ٠ | | ٠ | | | | | | | |
| | MCAS Beaufort | ٠ | ٠ | ٠ | ٠ | ٠ | ٠ | | | ٠ | ٠ |
| | MCAS Cherry Point | | | ٠ | | | | | | | ٠ |
| | MCB Camp Lejeune | ٠ | | ٠ | ٠ | ٠ | ٠ | ٠ | ٠ | | ٠ |
| USAF | Warren Grove Range | | | | | ٠ | ٠ | ٠ | | ٠ | |

Legend

JLUS = Joint Land Use Study MCAS = Marine Corps Air Station MCB = Marine Corps Base NAES = Naval Air Engineering Station NAS = Naval Air Station USAF = U.S. Air Force USAG = U.S. Army Garrison USMC = U.S. Marine Corps

• Benefit provided

capability preserved.

Additional benefits to surrounding communities may include enhanced land values that result from the preservation of quality of life; communities may also benefit from a positive means of economic development that preserves military capability while ensuring economic opportunity for surrounding residents. In many of these communities, the continued ability of the installation to provide economic benefits to the community may be a primary concern.

READINESS FACTORS EXPLAINED

The ability to protect and sustain live-fire and maneuver capabilities on military ranges and associated airspace is the single most important justification for the REPI program. The survey results show that a significant majority of the projects address ground maneuver activities, which are often conducted near the boundaries of military ranges where encroachment and development adjacent to the fence line can inhibit needed flexibility and freedom of movement. For fixed-wing aircraft and helicopters that need to maneuver over a range, or fly in and out of military airfields on the way to or from a range, managing nearby incompatible growth is equally important. Finally, live-fire testing and training (involving the firing and impact of munitions, whether from the ground or air) can generate noise and safety concerns if neighbors are close by. Well-designed REPI projects can protect these critical capabilities and provide the flexibility to test and train effectively into the future.

Rather than an expansion of capability, however, it should be noted that DoD's primary concern is maintaining existing capability. The prospective readiness benefits REPI projects provide, as previously noted in Table 2-1, include the following:

 MINIMIZING WORKAROUNDS | This is a critical and often little-understood impact of encroachment on DoD ranges. Military commanders must find ways to fulfill training and testing requirements and will not send their troops into combat without being fully prepared. When such venues are compromised by nearby development or other encroachment challenges, alternate ways to test and train must often be devised. Substitute approaches are usually not as realistic or complete as the original approach, and can increase costs, time or the distances participants must travel to make use of the space they need. "Workarounds," therefore, can decrease event realism, take money from other important priorities, and further stress our military men and women's limited home-station time. REPI projects that protect an installation's or range's integrity and the ability to use them as intended, therefore, reduce the need for workarounds and







Light pollution can inhibit night training. Top: NASA satellite image of North America at night

the secondary problems they create, thus supporting the commander's imperative to have the unit ready for combat under any circumstances.

- ADDRESSING NOISE ISSUES | Noise complaints are directly related to the proximity of civilian populations to military installations, ranges, or operating areas. By the time noise complaints become prevalent, it may already be too late to resolve such conflicts. Better buffering minimizes such proximity, allowing the Services to test and train how and when they need to, while also maintaining the quality of life in surrounding communities.
- PROTECTING NIGHT-VISION TRAINING AND TESTING | When operating at night, aircraft pilots, vehicle drivers, infantry units, and special operations forces all routinely use night-vision goggles. Weapons systems must be tested at night to gauge and improve their effectiveness. These technologies are an important element of military strategy and give our troops a vital edge in combat. It is critical that they be able to train and test in this way. However, incompatible development can bring bright lights to formerly dark landscapes that reduce night-vision range, and in extreme cases can temporarily blind pilots or others during such operations. To protect DoD's remaining training and testing venues where night vision devices can be effectively used, REPI provides a valuable tool to ensure that dark-sky conditions are protected.
- ACCOMMODATING NEW AND FUTURE RANGE DEMANDS | Ranges are not static, unchanging places. New missions and changing force structures are constantly stressing DoD ranges' capabilities, posing challenges to range planners and commanders even without the challenges posed by surrounding growth and development. Recent decisions to increase the size of the Army and Marine Corps, combined with returning forces from overseas, shifts in force locations due to BRAC, and new testing and training requirements associated with the way fighting is being conducted in Iraq and Afghanistan are straining existing range capabilities. By increasing flexibility to use more of the space already under military control, REPI plays an important role in helping to satisfy new and future operational demands.

An additional key readiness benefit of REPI is the minimizing of delays or rescheduling of test events. Test ranges are increasingly impacted by incompatible off-range elements interfering with or creating hazards for effective test program planning. These various interfering elements can include increases in the amount of Endangered Species Act restrictions on test ranges; encroachment on areas once free of significant frequency interference; and the need for new land or air corridors between ranges and installations due to increased local area energy or transportation needs. The impact of these overlapping demands can reduce or negate a range's ability to support sophisticated testing and development of critical weapons systems. As a result, such programs may be forced to delay critical tests, assume increased risk in its development efforts, or be forced to seek less-capable test venues within the U.S. or, in some cases, beyond its borders. Furthermore, elongating the test program or assuming increased risk can add major unplanned costs to a program and delay its delivery to the warfighter.

ENVIRONMENTAL FACTORS

REPI's benefits also apply to the environment. Habitat and open space protections support the environmental quality of life for all Americans, be they residents of communities near military bases, military members and their families, or the American public at large. Species protection, broader habitat integrity, water quality preservation, and the sustainability of working farmland and forests are some of the environmental values REPI projects are helping to uphold.

Many environmental and community benefits can also serve to enhance readiness by enhancing public goodwill and building community relationships with military installations. New and innovative partnering methods can lead to further land deals in the future to support military objectives, as in the case of Naval Air Engineering Station Lakehurst (see p. 18). New to REPI Fiscal Year 2007 are projects that deal with water issues, notably Fort Huachuca in southeast Arizona, surrounded by the Sonoran Desert. Fort Huachuca is also the first project that involves coordinating efforts with the Bureau of Land Management.

DoD ranges and installations play an important role in preserving biodiversity, with these areas of land hosting more federally listed species than those found in areas managed by the National Park Service. According to a 2008 study by NatureServe, an information clearinghouse for biological and conservation data, the density of threatened and endangered species on DoD land is up to three times as high as that found on lands managed by any other federal agency. The study noted that "encroachment of private development along the edge of military installations is now recognized as a threat not just to wildlife habitat but to military operations as well," with "the maintenance of natural habitats and native biodiversity ... increasingly viewed as important for providing realistic military training experiences."

DoD is aware of its stewardship responsibilities and in 2008 cooperated with NatureServe to release a handbook for DoD land managers on preserving biodiversity, available online at http://www.dodbiodiversity.org>.

In the News

"This not only helps prevent encroachment that could restrict Fort Huachuca from accomplishing its vital missions, but is also a great example of the extraordinary lengths that Fort Huachuca and the Army are taking to reduce groundwater pumping in the area and protect the future of the San Pedro River ... This partnership and the resulting easements will have great benefit to the Babocomari and San Pedro rivers and will preserve these natural treasures."

Col. Jonathan Hunter,
 Former Huachuca Garrison
 Commander, quoted in The
 Arizona Daily Star, July 5, 2007

02-3 | FY 2007 PROJECT HIGHLIGHTS

ARMY PROJECTS

FORT STEWART | GEORGIA

"[The Fort Stewart buffer] will safeguard our ability to train Soldiers over the long term — training that can have life and death consequences."

– Col. Todd Buchs, Fort Stewart
 Garrison Commander



Camp Ripley Future Considerations

In addition to airfields (tactical, paved, and those for unmanned aircraft), the REPI program will secure 63 independent ranges that enable all Soldiers to achieve the maximum level of readiness in the current operational environment.

On the forefront of improving and constructing ranges to enhance Soldier readiness, Camp Ripley will construct seven new ranges totaling \$60 million over the next five years that will augment existing and future training operations. Currently, 162 interested landowners are awaiting participation in the Camp Ripley program, representing about 20,000 acres of land requiring about \$19.7 million in REPI funding. Home of the 3rd Infantry Division, Fort Stewart is the largest installation east of the Mississippi. Encompassing 280,000 acres, the installation is able to train up to 50,000 Soldiers annually. In October 2007, the Trust for Public Land closed on a 825-acre parcel located along the southeastern boundary of

Key Fact

Open space supports agriculture, forestry and water resources while ensuring continuity of military training that produces noise, dust, and smoke.

Fort Stewart within the installation's Priority One focus area. A total of approximately \$2.6 million in REPI funds were used to secure a conservation easement on the Collins tract. Preservation of the Collins tract (pictured at left) supports efforts to avoid encroachment and other interferences that could hinder ongoing training operations at Fort Stewart/Hunter Army Airfield. In addition to upland agricultural and forested lands, the Collins tract also contains lowland areas which support a variety of plant and animal species. On adjacent Fort Stewart lands, the pine forest supports Red-cockaded woodpeckers, Flatwoods salamanders, and other rare species. Protection of the Collins tract safeguards opportunities for conservation of these same species off post. The conservation easement will protect the land's agricultural, forestry, and water resources in perpetuity. Preventing incompatible development will also safeguard the installation's controlled airspace lying above the property, especially important for unmanned aerial vehicle operations out of Evans Field lying to the north. Protection of the Collins tract will help create an open space buffer that will allow the installation to conduct activities that produce noise, dust and smoke.

CAMP RIPLEY | MINNESOTA

Located in central Minnesota just west of a wildlife management area (WMA) along the Mississippi River, Camp Ripley is an important Army National Guard range which supports maneuver training, weapons familiarization, and aviation gunnery and armor gunnery qualification. Since 9/11, units from the Minnesota Army and Air National Guard have served in 33 countries with a total mobilization of over 17,000 Soldiers and Airmen.

Key Facts

- Working with nearby landowners and the state natural resources board to secure noise impact areas for realistic training while protecting habitat
- Nearby wildlife area also open to public for recreational purposes

Camp Ripley's primary range complexes impact lands to the east, as well as unestablished artillery firing points. Because the noise zones generated from the established ranges extend into the Little Nokasippi WMA and surrounding lands, implementing buffers that prevent incompatible development in these areas is extremely critical. There is also ecological value in the Little Nokasippi River Watershed area that has been protected by buffers.

Recent land transactions near the Camp Ripley airfield will ensure that surrounding open space is maintained to protect ongoing operations. The **Minnesota Board of Water and Soil Resources** (BWSR) used FY 2007 REPI funds to acquire conservation easements on approximately 500 acres of land. In addition, the National Guard Bureau contributed funding to secure conservation easements on about 700 acres of land nearby. BWSR intends to complete more parcels as funding is made available. The airfield is critical to the mission of Camp Ripley, and development within the flight path could severely limit operations due to the impacts of noise and safety conflicts. Fortunately, the landowners within the flight path recognize the importance of buffers and are willing to participate in the program.

The Little Nokasippi WMA is open to the public for non-motorized uses such as hunting, hiking and bird-watching, adjoining about 1,500 acres of Crow Wing County public land that was forever dedicated by the county in the name of Camp Ripley. In addition to the public uses on the WMA, the county land also accommodates motorized recreational vehicles.

To date the Camp Ripley program has already had a positive impact on the Camp's mission, having permanently protected about 21,500 acres of land surrounding Camp Ripley by leveraging \$43 million in partner funds.

NAVY PROJECTS

NAS WHIDBEY ISLAND | WASHINGTON STATE

The Navy acquired a restrictive easement of approximately 18 acres of commercially zoned land that lies within accident potential zones at **Naval Air Station** (NAS) Whidbey Island. Island County and the State of Washington acquired a further restriction on the property, virtually eliminating future development, while the City of Oak Harbor acquired the fee simple title. The acquisition prevented a proposed 4.5-acre shopping pavilion from being developed in these newly designated zones.

NAS Whidbey Island is currently home to the Navy's EA-6B Prowler and the P-3C Orion aircraft. The mission of Whidbey Island is to train air crews in electronic warfare simulation and low-level flight operations. This project will also protect the air station's transition to new aircraft missions — the EA-18G Growler Electronic Attack aircraft, and the P-8A Poseidon Multi-Mission Maritime Aircraft.

This project took advantage of funding from the Washington State Military Sustainability Program, a state initiative and public-private partnership providing funding for local projects to protect military missions located in the State of Washington while balancing environmental concerns. The Navy worked closely with the local

Key Facts

- Successful protection of training with new electronic attack aircraft technology
- Working closely with local governments to update local zoning codes to protect public safety and ensure military training capability





Above: Little Nokasippi River flowing through buffer land

Top: Agricultural lands on approach to Camp Ripley Airfield





The first C-17, piloted by Col. Balan Ayyar, 305th Mobility Alr Wing, lands May 19, 2008, on the new C-17 Northeast Landing Zone at NAES Lakehurst. The short takeoff and landing (STOL) runway's operational capability is protected by buffering.

A Joint Accomplishment

In a ceremony held Dec. 4, 2008, in Princeton, N.J., the military leaders of the soon-to-be formed Joint Base McGuire-Dix-Lakehurst were presented with the New Jersey Governor's 2008 Environmental Excellence Award.

The award was given to the bases as a result of their proactive efforts at collaborative planning, compatible development and land conservation in the central New Jersey region. Together, McGuire AFB, NAES Lakehurst and their partners have preserved more land since 2007 than in the previous 50 years.

More information: <http://www. state.nj.us/dep/eeawards> government, who adopted new accident potential zones in the local zoning code.

This project is leading to multiple projects for FY09 in the same area to remove commercial development threats to the mission.

NAES LAKEHURST | NEW JERSEY

The State of New Jersey's Department of Environmental Protection wanted to purchase about 250 acres of land just to the South of **Naval Air Engineering Station** (NAES) Lakehurst in order to Key fact

Establishing a good working partnership may lead to future buffering opportunities.

conserve the land and expand the Manchester Wildlife Management Area. Consistent with Base Realignment and Closure (BRAC) recommendations, Fort Dix, McGuire Air Force Base, and NAES Lakehurst form part of a three-base "megabase" with joint training and operational capability.

The Manchester property included a cranberry bog, and its natural resources were highly valued by the State. With the current owners looking to sell and the pressure for development growing near the installation, this became a target of opportunity. For less than 20% of the fee simple value (\$1.8 million), the Navy was able to obtain permanent protection south of the Station. DoD's active role in this successful acquisition demonstrated benefits to both parties.

Goodwill established in this transaction will help facilitate the partnership for the larger and more complex land purchase of nearly 1,800 acres to the north of the Station that, if developed, would be incompatible with the Navy's and Air Force's mission. New Jersey and its counties are strong supporters of conservation, and each is well-funded to preserve land. The Navy currently has an Encroachment Protection Agreement with Ocean County and is pursuing buffering acquisitions.

MARINE CORPS PROJECTS

MCB CAMP LEJEUNE | NORTH CAROLINA (ALLEN TRACT)

Key fact

Perseverance through difficult negotiations has its benefits.

The completion of the project at **Marine Corps Base** (MCB) Camp Lejeune is a tribute to the perseverance and cooperative attitude of the

partners involved. The owner of the land wanted to ensure the land was protected from development, but he had a unique approach to dealing with conservation agencies and the military.

After long and complicated negotiations, the North Carolina Coastal Land Trust was able to conserve 148 acres of buffer land adjacent to maneuver and live-fire range areas of Camp Lejeune. The area also possesses habitat suitable to support endangered species.

The landowner's interest in land conservation continues on — his will provides for the conservation of an additional 91 acres of land adjacent to the original tract. The Coastal Land Trust, MCB Camp Lejeune, NAVFAC, and the State of North Carolina are now pursuing phase two of the project. Lesson learned: for programs that depend on willing sellers, patience is key.

MCAS CHERRY POINT | NORTH CAROLINA

Coastal rivers, estuaries, and marshes are vital to the health and balance of coastal ecosystems. Piney Island, Carteret County, N.C., home to **Marine Corps Air Station** (MCAS) Cherry Point's Piney Island Bombing Range, is a vast coastal wetland that supports significant breeding populations of wading birds, serves as essential fish habitat for many economically important fisheries stocks, and is

Key Facts

- Unique mix of land and water ranges provides special warfare training capabilities.
- Buffer supports essential fish habitat for economically important fisheries stocks.

recognized as a Natural Heritage Site by the North Carolina Department of Environment and Natural Resources.

Piney Island is a unique training asset whose land and water ranges provide airto-surface, electronic warfare, and special warfare training capabilities. Managed by MCAS Cherry Point, the range serves all four Services. Partnering efforts including the REPI buffer at Piney Island are part of a larger effort to conserve 25,000 acres around the Cherry Point range complex involving the N.C. Coastal Land Trust, the Marine Corps, the State of North Carolina, and other public and private partners. To date, in this part of North Carolina, rich in cultural heritage surrounding the rivers and estuaries of Pamlico Sound, the retention of passive recreational use privileges by current landowners has been a key to the success of this effort. Preservation of the working landscapes in this area will retain the rural character of the region that is so prized by its residents.

Since the closing of the range at Vieques Island in Puerto Rico, Navy and Marine Corps mission capabilities have been relocated to ranges across the United States. Loss of capability at Vieques increases the importance of the remaining ranges in the DoD inventory. The strategic location of the Piney Island Range in relation to the Cherry Point Operating Area enhances combined arms and multi-service capabilities due to the combination of this range with off-shore operating areas. Currently, Navy Special Boat Teams travel from San Diego to train and would have difficulty meeting training criteria if capabilities at Piney Island were diminished. Creation of a new live-fire range of this magnitude would be problematic, if not impossible, in today's regulatory and budgetary climate. Residential development in low-level airspace inevitably results in restrictions on hours of operations, avoidance of sensitive areas, and reduction in training capability, or can even lead to range closure. Experiences at Warren Grove and the former Vieques Range are examples of the severity of this threat.



Buffering at Camp Lejeune protects longleaf pine habitat such as that seen above.





Ratten Bay, circled above and pictured below, is home to a mining exercise area.







Wildfires reduce visibility, inhibiting military readiness.

Photos: J. Douglas Ripley

AIR FORCE PROJECT

WARREN GROVE PARTNERSHIP | NEW JERSEY

In addition to protecting the viability of continued training missions, the project at Warren Grove Range provides an opportunity to accommodate inertially aided munitions and future weapon systems training with buffer lands surrounding range property. Buffer projects near the range are intended to manage the amount of underbrush that grows on the forest floor. Without buffer lands properly managed to address this concern, the military mission at the range is endangered due to the potential threat of wildfire. In fact the range shut down entirely in May 2007 for more than a year due in part to the excessive buildup of dense underbrush, which directly contributed to the severity of the wildfire there and the resultant inability to control it. This is a prime example of how

Key Facts

- Buffer projects near Warren Grove focus on preventing wildfires.
- Wildfire prevention involves managing forest undergrowth that if allowed to grow out of control makes wildfires stronger and harder to contain.
- While promoting military readiness, wildfire prevention also benefits nearby species.
- Warren Grove was closed for more than a year following a forest fire in May 2007.

a land management concern can also directly become a military readiness concern.

The project protects the Pinelands Federal Reserve, which consists of the rare and sensitive upland pitch pine forest of the New Jersey Pine Barrens. This habitat is historically fire-prone. The project permits the management of undergrowth to protect this habitat from uncontrolled wildfire danger. The project protects over 80 federally and state-listed threatened, endangered, and special concern animal species and over 20 vegetative species as identified in the December 2006 Warren Grove Range Integrated Natural Resource Management Plan. Species of note include the Bald eagle, Bog turtle, and *Helonias bullata* (Swamp Pink, an herb), as well as the state-listed Northern Pine snake, Timber rattlesnake, Barred owl, Pine Barrens treefrog, and many other species of state-listed endangered birds with breeding populations.

The Warren Grove Partnership supports FY08 NDAA Section 359 (Reports On Safety Measures And Encroachment Issues And Master Plan For Warren Grove Gunnery Range, New Jersey). Under House Report 110-447, Congress established reporting requirements for the Secretary of the Air Force to submit to Congress reports detailing measures taken to ensure safety and mitigate encroachment at Warren Grove Range. Part (b) of Section 359 requires the SAF to submit to Congressional committees a master plan for Warren Grove Range. The Master Plan was to include measures to mitigate encroachment of the Range, taking into consideration military mission requirements, land use plans, surrounding community, economy of the region, and protection of the environment and public health, safety, and welfare. This project is instrumental in meeting the Range's Master Plan objectives required by the NDAA outlined above.

02-4 | SERVICE-FUNDED PROJECTS

Many projects are undertaken at the initiative of the various Services invoking 10 U.S.C. § 2684a authority but not requesting REPI funding (see Figure 1-1, p. 3). These are projects that the Services consider so important to their readiness, they are willing to execute their own funds to ensure the project is completed. In addition to funding their own projects, the Services may also choose to add their own funding to REPI projects beyond what DoD provides.

ARMY PROJECTS

From FY07 to the present, 28 non-REPI-funded Army projects have closed at seven installations under 10 U.S.C. §2684a authority. Consistent with program objectives, these projects protect land from development that is incompatible with the military mission. The parcels' total cost was approximately \$23 million, paid for on a parcel-by-parcel basis with combined Army and partner funding. Using \$1.7 million in Army funds, for example, eleven parcels buffer **Fort Bragg** training activities while preserving valuable Red-cockaded woodpecker habitat.

Consisting of 1,484 acres, the **Camp Blanding** (Fla.) project's parcel was purchased in September 2007 by the Florida Department of Environmental Protection for a total of nearly \$6.4 million. The parcel, located directly within the ACUB priority area adjacent to the installation's eastern boundary, will help alleviate residential encroachment issues and will be managed for Endangered Species Act-protected species as well as the protection of valuable watersheds.

Also worth noting is the FY07 parcel closing near **U.S. Army Garrison–Hawaii** on the island of Oahu. The 3,716-acre parcel, which buffers training activities at the installation, provides valuable habitat for the endangered Elepaio bird. The Trust for Public Land acquired the parcel at a total cost of \$5.5 million, with the Army contributing \$900,000.

CAMP SAN LUIS OBISPO | CALIFORNIA

The **Camp San Luis Obispo** ACUB program received \$350,000 from the National Guard Bureau, which was directed to a partner agency, the Land Conservancy of San Luis Obispo, through a cooperative agreement. A draft conservation easement is currently under development for the 880-acre Glick Ranch, identified in the camp's ACUB program as a priority property. This property compliments the original purchase executed with FY06 REPI funds, and together these properties will provide a buffer against development along the eastern installation boundary. As a result, training areas X-Ray and Whiskey consisting of approximately 1,650 acres will continue to be used to their full capacity. These upland training areas are unique and used regularly for valuable truck driver/convoy instruction and dismounted exercises. In addition to protecting the camp's training site mission, these easements ensure future training

In the News

"'We enjoy a tremendous partnership with the state and it is important that we manage the growth around Whiting Field,' said Capt. Enrique 'Rick' Sadsad, commanding officer, Naval Air Station Whiting Field. 'We look forward to this partnership and future partnerships that help preserve habitat and reduce encroachment on military operations.'"

– "Land Deal to Protect
 Coldwater Creek," Pensacola
 (Fla.) News Journal, Dec. 2008

"A bit of ranching history has been preserved in Churchill County with the permanent protection of the Cushman-Corkill Ranch in Fallon ... 'By contributing funds to purchase a restrictive use easement on this property, the Navy is helping to protect the agricultural and historical values that have contributed so much to Fallon's heritage and frontier spirit.'"

"Centennial Ranch in Fallon
 Protected by Nevada Land
 Conservancy with Conservation
 Easement," Lahontan (Nev.)
 Valley News, Aug. 2008



Land around Camp Lejeune is home to various rare plant species, such as the Yellow pitcherplant seen here.

Photo: Melissa McGaw

opportunities for the California Army National Guard as well as other federal, state, and local agencies.

From the partner's perspective, the properties add to the City of San Luis Obispo's Greenbelt Protection Program, preserving open space as well as the flora and fauna associated with native California chaparral and coastal shrub communities. The Glick Ranch conservation easement is valued at \$1 million, with \$350,000 from NGB, \$500,000 from the City of San Luis Obispo and \$150,000 provided by the landowner as a charitable donation.

NAVY PROJECTS

Since FY07, Navy has added additional Service funding to three long-term encroachment partnering agreements to augment OSD's REPI funding including:

- NAS FALLON, NEVADA | Navy added \$1 million to its agreement with two NGOs (Nevada Land Conservancy and Lahontan Valley Land and Water Alliance) to acquire interests in land primarily within the Navy's noise contours and accident potential zones.
- NAS OCEANA, VIRGINIA | Navy added \$322,000 to the agreement with the City of Virginia Beach to limit development in the interfacility traffic area between NAS Oceana and Navy's Outlying Landing Field Fentress in the City of Chesapeake.
- NAS WHITING FIELD, FLORIDA | Navy added \$2 million to its agreement with Santa Rosa County to protect lands within the overflight areas and accident potential zones surrounding NAS Whiting Field.

MARINE CORPS PROJECTS

MCB CAMP LEJEUNE | NORTH CAROLINA (KASAAB TRACT)

In September 2007, the Department of the Navy received a restrictive easement from The Nature Conservancy on the 55.17-acre Kasaab Tract, the fourth project there to be completed using § 2684a authority. The Nature Conservancy utilized \$375,000 of Service funding and was matched by a grant to the North Carolina Wildlife Resources Commission from the North Carolina Natural Heritage Trust Fund. The fee title to the land is held by the commission. The land is now part of the Stones Creek Game Lands and is available for public recreation.

(PADGETT ROAD TRACT)

In January 2008, the Department of the Navy received a restrictive easement

from The Nature Conservancy on the 130-acre Padgett Road tract held by the RMK Management Corporation. Located adjacent to MCB Camp Lejeune's Greater Sandy Run Training Area, the project utilized \$135,000 in Service funding. Lejeune's partners in this project included The Nature Conservancy and the North Carolina Division of Parks and Recreation, while the North Carolina Natural Heritage Trust Fund and the North Carolina Parks and Recreation Trust Fund provided \$330,000 toward the project in grant funding. The fee title to the land is held by the North Carolina Division of Parks and Recreation. Available for public recreation, the land is now part of the Sandy Run Savannas State Natural Area.

MCB QUANTICO | VIRGINIA

In April 2008 the Department of the Navy received a restrictive easement from the Virginia Department of Inland Game and Fisheries on the 302-acre Merrimac Farm, located in Prince William County, Virginia, adjacent to MCB Quantico. The acquisition involved the United States Marine Corps, the Prince William Conservation Alliance and the Virginia Department of Game and Inland Fisheries. The Marine Corps contributed \$1,429,750, a contribution matched by the county and state governments. The Prince William Conservation Alliance secured \$820,773 in grant funds from the Virginia Land Conservation Foundation, and the Virginia Department of Game and Inland Fisheries provided \$608,997. In exchange for its contribution, the Marine Corps received an easement to protect against incompatible development that could impact current or future military operations occurring within installation boundaries, as well as supporting local land conservation efforts. The Marine Corps also obtained the right to construct and preserve 115 acres of wetlands, and incorporate the wetlands into a mitigation bank — a first for the Marine Corps. The property is now operated as a wildlife management area and is open to the public.

The fate of Merrimac Farm had been in question for some years while the owner needed to sell the property. The farm was previously a popular fishing and hunting reserve, and now the farm can be preserved for its originally intended purpose while benefiting the mission at MCB Quantico. Preservation of the land also serves Virginia's statewide goal to reduce development of forests and farms by 30 percent.



In addition to hunting and fishing, the land is enjoyed for its stock of Virginia bluebell flowers.

Photo: Prince William Conservation Alliance

In the News

"Merrimac Farm, the long foughtover 300-acre Prince William property, will be permanently conserved for public hunting and fishing ... Conservationists have tried to protect the space and were able to finalize the agreement late last month with the partnership of state. federal, local nonprofit groups and private individuals, including the [Virginia Department of Game and Inland Fisheries], the Prince William Conservation Alliance and the Marine Corps ... It is the first acquisition of its kind in Virginia, say those involved, and [it] expands the department's statewide network to 37 areas."

– "A Wildlife Preserve In Prince William," The Washington Post, Feb. 2008

O2-5 | CUMULATIVE PROJECTS: FY05-09 As seen in Figure 2-2 below, between fiscal years 2005 and 2009, REPI funding supported projects at 53 installations and ranges in 23 states across the country.

CUMULATIVE REPI-FUNDED PROJECTS: FY05-09 Figure 2-2



03

INTEGRATION AND INSTITUTIONALIZATION

03-1 | SUPPORTIVE EFFORTS

DoD oversees and administers REPI and 10 U.S.C. § 2684a in conjunction with other supportive and complementary initiatives that in unison serve to advance DoD's compatible land use and outreach efforts. Policy and tool development, planning and execution of local, state, regional and national-level partnering, and stakeholder involvement and outreach are all essential underpinnings for a successful REPI program and implementation of 10 U.S.C. § 2684a. A robust REPI program generates goodwill with key partners and enables effective sustainable ranges outreach, thereby enhancing DoD's ability to sustain military testing and training activities. As previously noted, these efforts are referred to collectively as the **Sustainable Ranges Initiative** (SRI).

To advance this broader framework, DoD is institutionalizing effective local, state, and regional collaboration and planning, while fostering productive relationships with key stakeholders who have interests in lands around bases and ranges. By providing installation-level personnel with the appropriate policy, training, and tools needed to work collaboratively with those outside the installation fence line, DoD is fostering compatible land use planning. By providing outside stakeholders with an improved understanding of military readiness needs as well as available cooperative planning processes and tools, DoD is opening up new partnership opportunities.

Information sharing between DoD and its partners and the pursuit of specific collaborative planning projects present valuable opportunities to further the goals of REPI. DoD's Sustainable Ranges Initiative public Web site at <http://www.denix.osd.mil/sustainableranges> helps increase public awareness of the program, while news articles also reflect a growing interest in the program.

Enhancing public outreach and improving collaboration and partnering at all levels are critical to the success of DoD's mission sustainment efforts. For additional information on Sustainable Ranges Initiative efforts, please see the Sustainable Ranges Report to Congress.

Outreach and stakeholder involvement efforts provide a fundamental basis for strong REPI partnerships. Direct engagement with interested stakeholders through partnerships and dialogue form part of a robust outreach initiative. To enhance these efforts, the program draws on broader DoD Sustainable Ranges Initiative outreach activities. These include extensive efforts at information exchange through a variety of printed and electronic media and formats (including a series of informational "primers" about various aspects of partnering efforts), range tours to provide stakeholders with firsthand knowledge of the military mission, investment in research and education concerning DoD's mission sustainment needs, and participation in partner conferences and events. DoD's overall outreach approach is depicted in Figure 3-1 below.

PARTNERSHIPS

FEDERAL AGENCIES

The REPI program and broader Sustainable Ranges Initiative are aggressively developing partnerships with federal agencies through many different avenues. Active engagement with similar funding programs through the Federal Land Protection Programs Working Group provides a forum for discussion of common issues and solutions, and insight into how programs can work together to provide multiple benefits to communities. The Federal Green Infrastructure Community of Practice provides similar opportunities in an expanded venue with multiple regulatory and land management agencies. Expanded use of **Memoranda of Understanding** (MOUs) and interagency agreements offers an excellent way for DoD to tap into the expertise of our sister agencies through sharing personnel, such as the second year of a successful detail

OUTREACH APPROACH Figure 3-1



from the National Park Service.

LOCAL, STATE AND REGIONAL GOVERNMENTS

While national-level partnerships can produce top-level policy solutions, more targeted partnering is needed to address specific problems or implement solutions at a state or multi-state level. DoD is therefore encouraging the development of regional partnerships among state, county and local governments in areas where DoD has significant testing and training activities, such as in the Southeast and Southwest, two of the fastest-growing regions of the U.S. These partnerships support multi-jurisdictional collaboration on planning and land-use issues from a broader perspective, enhancing range sustainment and preventing incompatible land use around military installations.

The **Southeast Regional Partnership for Planning and Sustainability** (SERPPAS) brings together senior leadership from southeastern states (currently Alabama, Florida, Georgia, North Carolina, and South Carolina) and federal agencies to work collectively on regional planning, conservation, economic, and sustainability issues. SERPPAS leverages its members' problem solving and encroachment prevention efforts, providing mutual benefits to its many partners. In particular, this effort works to promote improved regional, state and local coordination to identify and address shared land use and mission accomplishment issues in the region. SERPPAS is carrying out a number of trainings, workshops, and collaborative land management projects throughout the Southeast.

Beginning to emerge from its formative stages, the **Western Regional Partnership** (WRP) continues to advance toward the eventual goal of bringing a robust partnership to the Southwest bearing similarities to the benefits reaped by the SERPPAS approach. This partnership brings together DoD, federal and state agencies, tribal entities, and NGO stakeholders to identify and address regional issues of mutual concern, and to advance shared strategic planning, land management and policy goals. Partnership workgroup topics include land use, wildlife corridors, alternative energy, land management, and disaster preparedness. These workgroups bring stakeholders together around common interests, providing a needed mechanism to address these emerging challenges. A successful WRP will contribute to the sustainment of test and training in the rapidly growing western region of the country.

Leveraging the success of these two regional efforts is critical to DoD's future plans to institutionalize effective state, local, and regional collaboration and planning. Existing military Commanders' Councils in Arizona, Nevada, and North Carolina have proven very valuable, allowing DoD to more fully present its overall land, air and sea space requirements and provide a more unified voice in regional partnering. These bodies will serve as analogs to state military planning commissions, and provide communications venues for state and regional agencies to discuss broad issues with key DoD leaders. They will also become conduits of information concerning state economic development, environmental, transportation, and other policy and planning efforts that inform installation plans for mission growth and protection.

NONGOVERNMENTAL ORGANIZATIONS (NGOs)

NGO support is a fundamental building block of the program's success. The Land Trust Alliance, The Trust for Public Land, The Nature Conservancy, International City/ County Management Association, the Conservation Fund, National Association of Counties, American Farmland Trust and other national groups contribute to the effort through development of outreach pieces such as primers, support and participation in regional partnering efforts, and on-the-ground conservation projects. Equally important, many regional and local groups are in the lead in resource conservation and compatible land use projects. Land Legacy in Oklahoma, Oahu Conservation Partnership in Hawaii, Kansas Land Trust, North Carolina Coastal Land Trust, Sandhills Area Land Trust in North Carolina, and the Georgia Land Trust are just of few of the vital partners who turn program funding into both protection of the DoD mission and conservation successes for their communities. REPI and the Services reach out to a multitude of stakeholders and interest groups through participation in events like the annual Land Trust Alliance Rally, building partnerships that provide broad-based benefits to the Services, communities, and the environment.

EXAMPLES OF OUTREACH

LMI PARTNER SURVEY | In the spring of 2008, LMI Government Consulting conducted a survey designed to assess partner understanding of the REPI program and satisfaction with Service-specific buffer program implementation. Results were positive, with 81 percent of partners reporting program satisfaction, and more than half reporting an improved opinion of military conservation interests. Partners cited a shared conservation interest in buffer lands and support for the military's conservation efforts as primary motivating factors for entering into partnerships with the Services.

Using the survey results, OSD is developing a manual for NGOs and local governments on how to partner with DoD entitled "DoD Conservation Partnerships to Support Military Training and Testing: A Manual for Partnering with the Military," the ninth in a series of primers developed by OSD to enhance partnership opportunities for partners and installations alike by promoting best practices and improving knowledgesharing. This primer was the first to follow a specific survey process to identify areas of potential misunderstanding and clarify the procedures used among the various Services.

LAND TRUST ALLIANCE TRAINING | OSD hosted a first-of-its-kind event at the 2008 Land Trust Alliance Rally, the National Conservation Conference, in Pittsburgh, Pennsylvania. Introducing the concept of the "webinar" for the first time to Rally participants, OSD leveraged a well-attended half-day seminar to provide training to land trusts and local governments on how to partner with DoD to accomplish buffering. Seventy-five additional participants joined in from across the country via the Internet in a lively exchange of ideas, tips, and knowledge. OSD is now working with LTA to leverage the success of that one-time event into an ongoing knowledge exchange. Under Title 10 of the United States Code, the Services are responsible for training and equipping forces as well as maintaining installations and ranges (see Service Approaches, Section 1). DoD Directive 3200.15 establishes policy and assigns responsibility given under Title 10 with regard to sustainment of test and training ranges and operating areas. Other related DoD directives and instructions address noise management; Air Installation Compatible Use Zones (AICUZ); the Joint Land Use Studies (JLUS) program; the use, management, assessment, and overall clearance of operational ranges; and the environmental and safety concerns of explosive hazards. DoD is also currently developing both an outreach and an overseas sustainment instruction, both to be deployed in late FY 2009.

The Services also develop their own policy directives and guidance on the sustainment of ranges and training areas within the general framework of the Sustainable Ranges Initiative. The Service approaches are defined by their overall strategy, current and future requirements, data collection and management systems, assessment tools and quantification of encroachment impacts, and documentation and implementation plans.

In the range sustainment effort, DoD deploys a number of tools, including the following:

- AIR INSTALLATION COMPATIBLE USE ZONE (AICUZ) AND RANGE AIR INSTALLATION COMPATIBLE USE ZONE (RAICUZ) | The military works with local governments and the community using zoning and local ordinances to reduce potential accidents and noise impacts to the community near airfields. The RAICUZ program specifically addresses range safety issues at air-to-ground ranges.
- JOINT LAND USE STUDY (JLUS) | Funded by the Office of Economic Adjustment, this program enables DoD to work with local government and the community to develop plans and guidelines for compatible land uses around installations, while promoting economic development.
- INTEGRATED NATURAL RESOURCE MANAGEMENT PLAN (INRMP) | Installations work with federal and state agencies to develop natural resources management plans that support mission requirements.

The authority provided by 10 U.S.C. §2684a, however, remains the most powerful tool, providing the most flexibility to address the most pressing encroachment threats.

03-2 | PROGRAM OVERSIGHT

OSD works collectively with the Services to coordinate REPI policy and implementation through a focused REPI Interservice Working Group (ISWG). This group pulls together and draws upon the expertise of the Services and OSD. The REPI ISWG meets regularly to track Program progress, discuss projects, and raise key issues for resolution. This group also actively supports the annual REPI project submission, review and allocation process, and assists in the development of the Annual Report to Congress. In addition to the REPI ISWG, a Legal Working Group led by the OSD Office of General Counsel convenes counsels from the Military Departments on a semiannual basis to provide a forum for legal interpretation, clarification and discussion of issues.

Through this collective effort, the REPI Team reviews and refines further guidance for the REPI Program Guide that sets out the policies and procedures for the Program. A key component of REPI oversight, the Guide outlines to Services and installations the steps for requesting funding for a REPI project as well as the Program requirements set out by 10 U.S.C. § 2684a authority and OSD policy. The REPI Program Guide continues to be an important tool for ensuring a smooth and successful process of REPI proposal submission, selection, and implementation.

INTERNAL PROGRAM MANAGEMENT

OSD provides REPI program oversight, manages REPI funding allocation, and monitors REPI project execution. It also ensures communication and coordination between REPI and the rest of the SRI and other encroachment prevention programs (see figure below). An area of emphasis is the development of outcome-based protocols for identifying and communicating both the need for the program and the success

OVERSIGHT STRUCTURE Figure 3-2



Chain of Command

The Overarching Integrated and Working Integrated Product Teams (OIPT and WIPT) of the SRI report to the Senior Readiness Oversight Council (SROC), which includes the Joint Chiefs of Staff and Undersecretaries of Defense, who in turn report to the Secretary of Defense (SecDef) on matters pertaining to readiness.

The OIPT is the coordinating body, including the Services, for all issues of encroachment and is chaired by the Deputy Undersecretary of Defense for Readiness (DUSD-R); the Deputy Undersecretary of Defense for Installations & Environment (DUSD-I&E); and Deputy Director, Operational Test and Evaluation for Live Fire Test (DDOT&E-LFT). The WIPT implements the recommendations of the OIPT.

In short: SecDef → SROC → OIPT → WIPT of projects authorized under 10 U.S.C. § 2684a. RAND Corporation is currently conducting a survey of such protocols nationally, and OSD is working with similar federal programs to glean lessons that can be learned from those protocols' longer histories.

PROJECT MANAGEMENT

As described in last year's Report to Congress, OSD and the Services continue to refine the process for selecting projects. This process includes the submission of proposals by the Services and the application of tailored criteria that are used to score those projects. OSD worked with the Services throughout 2008 to build on this approach and further adjust the criteria and process used in FY09. OSD continues to work with the Services to refine guidance for FY10 and beyond.

Particular refinements include adding effective scoring measures and elevating the importance given to the threat posed by encroachment to military testing, training, and operations at the particular project installation. The general criteria used in evaluating proposals include the following:

- Threat to military training, testing, and operations;
- Benefit to DoD partners and the surrounding civilian community;
- Viability of the agreement/project; and
- Benefit of the project to multiple Services.

The key elements in the process are:

OSD SOLICITATION TO SERVICES AND SERVICE SUBMITTAL OF PROPOSALS TO OSD

OSD provides the Services with a detailed explanation that establishes the criteria used for selecting the projects and issues a memorandum soliciting project proposals based on Service priorities that address these criteria. OSD also provides consultation and training support to the Services to aid in understanding of the guidance and improve the quality of project proposals. The Services then develop and submit their annual REPI project proposals. Each Service, as described in last year's Report to Congress, has its own internal process for choosing its proposals. For Fiscal Year 2009, based on Service feedback, more time was given to the Services to submit their proposals.

PROPOSAL SCORING AND OSD/SERVICES MEET TO REVIEW THE SERVICE SCORES PROVIDED

Upon receipt of the project proposals from the Services, OSD distributes the proposals to the Services for scoring against the criteria developed. OSD also scores all proposals internally. The Services then score the proposals (except their own) and meet together with OSD to discuss the scores on a point-by-point basis and to add new information about the projects or correct any misimpressions; the scores can thus be

adjusted through this input.

BASED ON REVISED SCORES, PROPOSAL RANKING DEVELOPED WITH OSD/SERVICE JOINT REVIEW

OSD provides the list of scored proposals to the Services and allows the Services to review the draft ranking list and to provide the Services an opportunity for feedback with respect to the inclusion of any of their specific project proposals. This provides a final opportunity for Service leadership to express the impacts of policy, Base Realignment and Closure, force growth and restructuring, and other factors on the readiness and vulnerability to encroachment of installations.

REPI PROJECT PROPOSAL SELECTION COMMITTEE RECOMMENDATIONS

A final ranked list of recommended DoD REPI proposed projects is provided to the OSD leadership for final approval and allocation based on appropriated funds.

ANNUAL PROCESS EVALUATION

As part of the process, OSD works with the Services each year to learn lessons and improve upon the process. The process is continuously improved as REPI matures.

WEB-BASED DATABASE DEVELOPMENT

As a step toward further institutionalizing REPI and enhancing the tracking and maintenance of REPI project data, the REPI Team is developing an internally accessible Web database. The objective of the database is to provide a central repository for all 10 U.S.C. § 2684a project-related information. Such information includes fiscal year REPI funds utilized, obligation and execution of REPI funds, Service funds contributed, partner funds contributed, acreage, planned project acquisition and objectives and actual implemented acquisition details. The database will allow REPI and Service managers to access up-to-date project details, and to generate a variety of reports. The first two phases of the database are planned in FY09, and further refinements and capabilities are being added as additional development phases proceed.

04

RECOMMENDATIONS AND CONCLUSION

DoD remains fully committed to REPI and 10 U.S.C. § 2684a and welcomes Congressional interest and assistance in furthering Program goals and improving its implementation. As part of the 10 U.S.C. § 2684a Congressional reporting requirement, Congress has asked for any recommendations DoD may have to improve the efficiency and effectiveness of the Program. Discussed below are some potential legislative topics that could be further developed for future consideration and those actions that have taken place to address the issues raised in the 2008 Report.

4.1 | FUTURE LEGISLATIVE CONSIDERATIONS

DoD legislative proposals are developed and submitted to Congress through an established annual process. The following discussion, therefore, is not intended to convey official legislative recommendations, but could serve to identify potential topics for further development and consideration.

OSD is actively engaged in a new working group made up of federal agency representatives who are discussing the upcoming reauthorization of the Sikes Act. This working group is exploring existing authorities that may be used to develop multi-agency, landscape-level conservation and preservation projects, and considering legislative initiatives to authorize even greater interagency collaboration.

The ability to match REPI funds with other federal funding sources continues to be a topic of discussion in both the working group mentioned above and other venues. The partnership between REPI and the Farm and Ranchland Protection Program of the Natural Resources Conservation Service continues to reap great benefits for both programs, while attracting expanded local and state matching dollars. Streamlining the ability to focus all types of public and private funds on projects improves cost sharing across the board, increases the likelihood of success, and provides multiple benefits to communities. In light of its growing REPI experience, DoD continues to evaluate these and other prospective legislative or administrative initiatives and may develop new legislative proposals as part of the FY 2010 or later NDAA legislative processes. In addition to the tools described on p. 29, DoD advocates the development of a full range of tools to help Services meet the encroachment threat.

4.2 | CONCLUSION

The Congressional authority granted by 10 U.S.C. § 2684a is a critical tool for DoD and its partners in the ongoing effort to mitigate the effects of encroachment on testing, training, and operations. Concurrently, REPI remains a highly effective funding source to implement this tool. Through the end of FY 2008, 37 military installations and ranges in 23 states participated in the REPI program, putting in place permanent land use protections that will provide a long-term benefit to military readiness. The flexibility § 2684a authority provides is particularly useful in unexpected situations where other tools or strategies (see Section 3.1.3) fail to provide the necessary protection for the mission.

These same tools help DoD's neighbors, addressing important partner objectives related to habitat conservation, biodiversity and open space preservation, community land use planning, and economic development. Increasingly, REPI is attracting wide interest from other federal agencies, states, localities and NGOs. This interest is helping the Services establish new and beneficial relationships with others who share common land management interests and can help to preserve military readiness while also furthering their own goals.

APPENDIX A:

LEGISLATIVE REPORTING REQUIREMENTS

10 U.S.C. § 2684a (g) LANGUAGE

No later than March 1, 2007, and annually thereafter, the Secretary of Defense shall, in coordination with the Secretaries of the military departments and the Director of the Department of Defense, Test Resource and Management Center, submit to the Committees on Armed Services of the Senate and House of Representatives a report on the projects undertaken under agreements under this section.

Each report under paragraph (1) shall include the following:

- A description of the status of the projects undertaken under this section
- An assessment of the effectiveness of such projects, and other actions taken pursuant to this section, as part of a long-term strategy to ensure the sustainability of military test and training ranges, military installations, and associated airspace.
- An evaluation of the methodology and criteria used to select, and to establish priorities for, projects undertaken under agreements under this section.
- A description of any sharing of costs by the United States and eligible entities under subsection (d) during the preceding year, including a description of each agreement under this section providing for the sharing of such costs and a statement of the eligible entity or entities with which the United States is sharing such costs.