



FY 2016 Secretary of Defense

Environmental Awards

Natural Resource Conservation , Individual/Team, East Region INRMP Team

Introduction

The Integrated Natural Resource Management Plan (INRMP) is the primary tool used to ensure successful management of natural resources at Air Force installations and ranges. The Air Force Civil Engineer Center's (AFCEC) East Region INRMP Team is a group of career natural resources management professionals dedicated to the development and implementation of INRMPs that support both the military mission and Air Force environmental conservation and stewardship responsibilities. The East Region INRMP Team ensures installation compliance with Sikes Act and amendments, the Endangered Species Act, and other natural resources management laws and regulations and is responsible for the development, implementation, and maintenance of 18 INRMPs that guide the management of 825,000 acres of United States Air Force lands from Massachusetts to Florida.

The East Region INRMP Team was initially established to achieve the Office of the Secretary of Defense (OSD) 30 September 2015 deadline for all outstanding INRMPs to be signed by installation commanders. The Team provided weekly updates to commanders and AFCEC leadership, and delivered monthly updates to OSD on compliance progress. The East Region INRMP Team successfully led the East Region from 56% of INRMPs with Air Force signatures to 100% by the end of the reporting period. The Team accomplished major revisions and renewals for 13 INRMPs and maintained five more as current, assisting, or executing 100% of all required annual reviews for FY15, and

documenting with tripartite signatures from the Air Force, United States Fish and Wildlife Service (USFWS), and appropriate state fish and wildlife agencies.

Background

The East Region INRMP Team draws expertise from across the East Region to assist four joint bases, 15 active duty Air Force installations, four air-to-ground training ranges, and four major mission support properties with natural resources management. Additionally, the Team assists six Air Force Reserve Command bases, as requested. Collectively, the Team has more than 250 years of experience managing natural resources. Team members come from various backgrounds and Air Force levels. Members include installation natural resources program managers (NRPM), environmental flight chiefs from Major Commands, AFCEC Installation Support Team (IST) natural resources media managers (NRMM), section leads, and regional subject matter specialists.

The East Region INRMP Team consists of the following civilian professionals:

Angelia M. Binder, East Region Natural Resources Subject Matter Specialist and Team Lead; Teresa A. Jordan, Eglin IST Team NRMM; Thomas M. Paris, Eglin IST Section Chief; Alvaro E. Urrutia, Joint Base Charleston IST NRMM; Jonathan S. Davis, Joint Base McGuire-Dix-Lakehurst IST Section Chief; Miguel A. Mozdzen, Patrick IST NRMM; Mabel R. O'Quinn, Patrick IST NRMM; Robert M.



East Region INRMP Team Members

Top Row, from Left: Jon Davis, John Joyce, Mike Blaylock, Terrence Larimer, Miguel Mozdzen, Mabel O'Quinn, Robert Willard. Center: Al Urrutia, Angelia Binder, Teresa Jordan, Jason Kirkpatrick. Bottom: Becky Crader, Mark Summers, Ronnie June, Tom Paris, Robert Montgomery.

Willard, Patrick IST Section Chief; Rebecca S. Crader, Robins IST NRMM; Mark E. Summers, Robins IST Section Chief; Robert L. Montgomery, NRPM, 4 CES/CEIEC, Dare County Bombing Range; Michael A. Blaylock, Chief, Environmental Conservation, 45 CES/CEIE, Cape Canaveral Air Force Station; Ronald S. June, NRPM, 20 CES/CEIEA, Shaw Air Force Base (AFB); Terrance C. Larimer, NRPM, 628 CES/CEIE, Joint Base Charleston; John G. Joyce, NRPM, 787 CES/CEIEA, Joint Base McGuire-Dix-Lakehurst; and Jason W. Kirkpatrick, NRPM, 6 CES/CEIE, MacDill AFB.

Position Description

The East Region INRMP Team is responsible for the following:

- Accomplishing Sikes Act-compliant INRMP reviews, updates, and revisions.
- Planning, programming, budgeting, and executing (PPBE) conservation funds.
- Advocating for environmental quality funding.
- Coordinating Sikes Act partner acceptance and execution of environmental project funds.
- Facilitating grant and funding opportunities for installations.
- Assisting installation management of reimbursable budget programs for forestry, fish and wildlife, and agricultural outleasing.

- Collaborating with the Air Force Wildland Fire Center to ensure prescribed fire is implemented for natural resources management.
- Facilitating regulator interactions and conducting negotiations that benefit the mission and natural resources in accordance with applicable laws, regulations, and agreements.
- Collaborating and providing comment on Air Force Instructions and programming guidance.
- Providing scientifically sound advice and methodology for installation natural resources managers in compliance with applicable laws, regulations, policy, and instructions.

Accomplishments

Natural Resources Management

The East Region INRMP Team clarified and streamlined conservation programming for the accomplishment period, realizing a cost savings of \$500K. The Team accomplished this savings by refocusing projects to INRMP goals and objectives, eliminating duplicate efforts, realigning responsibilities to the newly formed Air Force Wildland Fire Center, and eliminating unnecessary expenditures that did not support the military mission or meet natural resources stewardship goals. Additionally, the East Region INRMP Team programmed 1,320 projects worth \$114M for nine fiscal years to support INRMP implementation, of which 342 were for the accomplishment period and totaled \$27.9M. Significant efforts to control invasive species, accomplish prescribed burns, and fulfill legal obligations to manage endangered species were achieved.

Within the PPBE planning phase is the identification of natural resources requirements. The East Region INRMP Team excelled by identifying and programming 100% of projects required to implement the INRMP. The Team assisted installations with capturing required projects based on INRMP goals and objectives, and ensuring all regulatory required conservation actions, from Terms and Conditions of Biological Opinions to mitigation measures from National Environmental Policy Act decisions, are included in the INRMP and implemented. With the standup of the Wildland Fire

Center, the Team ensured installation requirements for prescribed fire were identified, programmed (56 projects over eight fiscal years), and executed by the Center to support achievement of each installation's goals and objectives, within sound scientific practice for fire-dependent ecosystems and species, and to comply with legal commitments. 276,082 acres of controlled burns were conducted during the accomplishment period at 11 East Region installations.

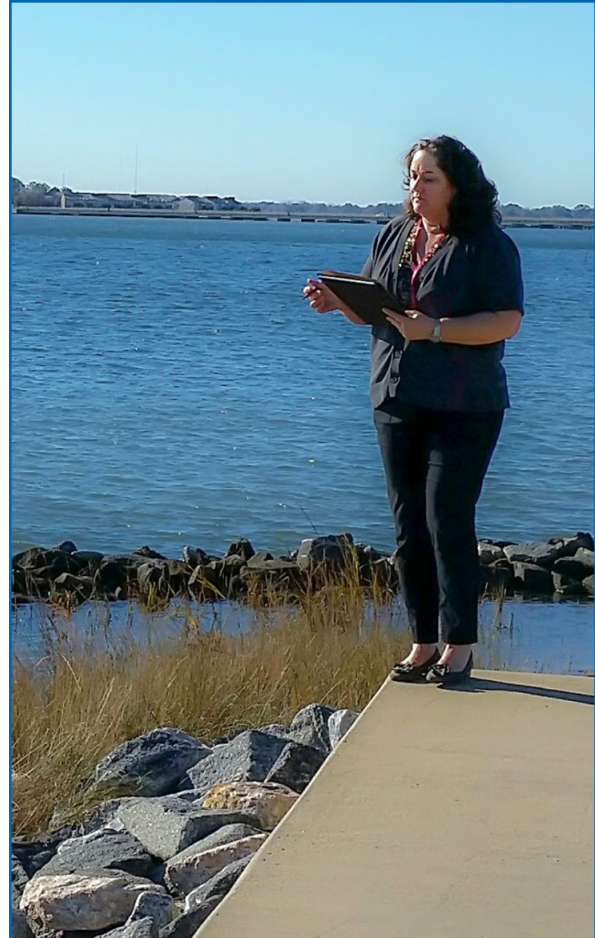
The East Region INRMP Team successfully reduced contractor support in compliance with Department of Defense (DoD) guidance issued in FY14 and FY15 with an overall goal of 10% reductions per year. Prior to the accomplishment period, conservation contractor support was programmed for \$2.9M annually. During FY14 and FY15, contractor support was trimmed to \$1.7M and \$1.0M, respectively, saving \$2.9M over the baseline. The Team stepped up to accomplish the workload in-house, and identified requirements that could be better managed as project work.

The East Region INRMP Team provided critical INRMP support and dramatically reduced environmental quality funding for INRMP updates and revisions. The Team reduced funding from \$490K programmed for FY13, during which time only 56% of INRMPs were compliant, to an all-time low of \$10K programmed for FY15. By the end of FY15, 100% of INRMPs had annual reviews and all major revisions had Air Force signatures. The Team successfully eliminated \$735K over two years by completing INRMPs in-house.

The East Region INRMP Team worked closely with installations to ensure natural resources plans and permits were up-to-date. They assisted with coordination, consultation, and plan and permit application submittal. The Team successfully avoided natural resources violations, prevented injunctions filed for military training, and contributed to achieving 100% compliance with Sikes Act, Endangered Species Act, and other conservation laws.

Mission Enhancement

The East Region INRMP Team's quick action to review, revise, and negotiate INRMP content to benefit the species was essential for preventing pending critical habitat designation for Atlantic



Supporting Installation Natural Resources Management

Team Lead, Angelia Binder, inspects an erosion control project on Langley AFB, VA. The Team accomplished consultation with the National Marine Fisheries Service on the Chesapeake Bay Distinct Population Segment of Atlantic sturgeon in order to renew a necessary construction permit. The permit was required to repair and construct a shoreline revetment to correct mass wasting of the shoreline and impacts to water quality.

Sturgeon at Joint Base Charleston; Rufa Red Knot at Eglin AFB; loggerhead sea turtle at Eglin AFB, Cape Canaveral Air Force Station, Patrick AFB, and Tyndall AFB; and Florida brickell-bush and Carter's small-flowered flax at Homestead Air Reserve Base (ARB). Precluding critical habitat designations through INRMP adjustments provided better management of the species, reduced time and resources required to consult on actions that may modify a federally protected habitat, and avoided delays or stoppage of mission-essential training and support functions while the necessary consultation is underway.

The East Region INRMP Team successfully negotiated a completion strategy for the Joint Base McGuire-Dix-Lakehurst INRMP. The INRMP was due to be completed in 2012, but inconsistencies between Air Force flight safety recommendations and resources management compliance requirements resulted in a stalemate, with no clear way forward. The East Region INRMP Team met with the installation command team and Air Force Bird Aircraft Strike Hazard team, and charted a course to complete the INRMP, comply with safety recommendations, and conduct compliant natural resources management. Due to the Team's efforts, the INRMP was signed by the Air Force prior to the 30 September 2015 deadline.

Land Use Management

Prescribed burning is the single most efficient method of habitat restoration for multiple federal and state listed species. During the accomplishment period, the East Region INRMP Team identified \$764K in natural resources management activities to be executed annually by the



Grasshopper Sparrow

Two species of Grasshopper Sparrow are some of the many protected bird species found in the East Region. Grasshopper Sparrows inhabit prairies and grasslands, a unique habitat in the mostly wooded East Region. The East Region INRMP Team enabled recent increases in prescribed burning, invasive species control, and feral hog removal to improve Grasshopper Sparrow habitats.

Air Force Wildland Fire Center; eliminated East Region installation duplication of effort; and enhanced 276,082 acres of Air Force-managed land through prescribed burning activities that involved the coordinated efforts of the Wildland Fire Center, USFWS, United States Forest Service, Colorado State University, multiple state wildland fire agencies, and base natural resources managers. By ensuring protection and preservation of sensitive natural resources, the partnering efforts allowed for uninterrupted access to natural infrastructure and enhanced mission capability. The prescribed burning program is a win-win for both the Air Force and the environment by creating a landscape that reduces the frequency and intensity of munitions-caused wildfires while maintaining the integrity of natural fire dependent ecosystems. The net result was that prescribed fire acres increased dramatically on many bases, setting annual records at Eglin AFB, New Boston Air Force Station, Moody AFB/Grand Bay Range, and Avon Park Air Force Range. Shaw AFB/Poinsett Electronic Combat Range and Joint Base Charleston accomplished double the previous average prescribed burn acreage, removing a backlog of unburned acres, and significantly reducing the number and size of wildfires that had negative effects on mission essential training and threatened and endangered species. MacDill AFB did not previously employ a prescribed burning program but with the assistance of the East Region INRMP Team and the Wildland Fire Center utilized prescribed burns to enhance gopher tortoise habitat. Partnering with the Wildland Fire Center resulted in meeting or exceeding East Region installation INRMP prescribed fire goals.

Forest Management

The East Region INRMP Team assisted in developing forestry management goals and objectives, resulting in the appropriate management of 550,000 forested acres in the East Region that produces \$1.9M in timber sales revenue annually, and provides important habitat for federally listed threatened and endangered species, state listed species, and species of concern. The Team ensured that longleaf pine forest creation, maintenance, and restoration goals were included in INRMPs for 11 East Region installations, seven of which support gopher tortoise and Eastern indigo snake,

and five of which support red-cockaded woodpeckers. The Team also ensured that one of the most rare forest types on the East coast, Atlantic white cedar, was maintained and improved at Dare County Bombing Range and Joint Base McGuire-Dix-Lakehurst.

The Team assisted in reimbursable forestry budget data calls, monitored expenditures, clarified what activities are appropriate for reimbursable funds and which are appropriate environmental quality expenditures, and provided technical guidance to 12 East Region installation forestry programs.

Fish and Wildlife

The East Region INRMP Team assisted installations with hunting and fishing program compliance through extended reviews of program operating instructions. The Team identified the need for conservation law enforcement for 10 installations and programmed a central, consolidated line item to streamline execution to Sikes Act partners.

The East Region INRMP Team reviewed INRMPs to ensure wildlife goals and objectives aligned with regulatory requirements, such as the Chesapeake Bay Program and Gopher Tortoise Candidate Conservation Agreement. The Team ensured carrying capacity was considered in harvest goals for game species, and encouraged progressive habitat improvements for listed or sensitive species, both in INRMP goals and objectives, and programming projects. An example is habitat improvements for wood stork that were considered in the USFWS determination to down-list the species from endangered to threatened range-wide.

Invasive Species Control

The East Region INRMP Team focused on a major effort to reduce invasive plant species that significantly degrade wildlife habitats across the East Region. The Team postured for, received, and executed \$7.4M in end of year funds to increase invasive species control. The Team quickly identified opportunities in coordination with installations, drafted statements of work, and prepared funding documents. Due to Team efforts, an additional 4,900 acres (7.7 square miles) of Air Force mission-essential lands received survey and monitoring, and herbicide and/or mechanical treatments, benefitting 29 federally listed threatened or endangered



Prescribed Fire at Avon Park Air Force Range

Prescribed fire supports mission objectives by reducing the risk and intensity of wildfires through reduction of hazardous fuels and supports threatened and endangered species recovery by creating optimal habitat. East Region installations rely on the newly formed Wildland Fire Center for prescribed fire to support natural resources goals.

species and more than 50 state listed species. This initiative resulted in successfully restoring ecosystem health, biodiversity, and overall ecological sustainability at East Region installations, which reduced mission and land use restrictions.

The East Region INRMP Team partnered with the US Department of Agriculture – Wildlife Services (USDA-WS) to control nuisance wildlife on six installations, including feral swine. Feral swine cause significant ecological and structural damage to Air Force training lands and habitats across many southeastern installations. Feral swine impacts on native ecosystems can lead to negative impacts on listed populations, endangered species, and critical habitat designations, which increase the need for inter-agency consultation, limit training land availability, and ultimately result in mission and land use restrictions. The Team’s goal was to find the expertise that could employ both cost-effective and environmentally sound alternative methods. The partnership with the USDA-WS resulted



Feral Hogs by Night

Feral hogs are a nuisance species that destroy native ecosystems and kill protected plants by excessive rooting. The East Region INRMP Team has assisted installations with feral hog eradication efforts by ensuring control projects are programmed and funded, and encouraging special hunts which increase community involvement in resource management and provide additional recreation opportunities.

in reduction of feral swine numbers, improved monitoring of populations, and reduced costs by utilizing USDA feral swine control federal grants.

Conservation Education

The East Region INRMP Team focused on Sikes Act partnerships through multiple collaborations with two USFWS Regions and six USFWS offices, the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA NMFS), and 11 state fish, game, and wildlife departments. The Team further contributed to the national discussion in natural resources management by providing official Air Force comments on the following:

- Air Force-USDA Animal and Plant Health Inspection Services Cooperative Agreement
- Air Force memorandum of understanding with the Bureau of Land Management
- Multi-state, USFWS, and DoD Gopher Tortoise Crediting Strategy
- Five proposed Endangered Species Act listings and two proposed critical habitat designations

The East Region INRMP Team collected and validated annual data for the Chesapeake Bay Program, America's Longleaf Restoration Initiative, Gopher Tortoise Candidate Conservation Agreement, and the OSD Environmental Program Annual Report to Congress.

The East Region INRMP Team has proven effective by having monthly meetings, and leveraging the Air Force's electronic data management system, eDASH, to communicate, share information, routinely track natural resources plan and permit compliance, and communicate lessons learned to installation natural resources managers.

The Team authored and disseminated more than 75 official memoranda by email to ensure all East Region natural resources managers were aware of current regulatory developments, scientific advancements, funding and training opportunities, and were ready to respond to the latest changes in listing, laws, and resource management strategies. The Team distributed information on Atlantic sturgeon distinct population segments and loggerhead sea turtle proposed critical habitat designations, and provided comments to regulators which resulted in no Air Force property being included in critical habitat designations. Information on using environmental DNA to determine the presence/absence of rare species in aquatic environments resulted in installations considering using the new technique to survey for rare species.

Community Outreach

The East Region INRMP Team participated in a variety of volunteer and partnership programs, both advocating for funding and participating in activities such as Clean the Bay Day and Earth Day. One example is the ongoing MacDill AFB Oyster Reef Shoreline Stabilization project, for which the Team procured \$200K in FY15. The FY15 project built upon previous efforts and restored 1,262 linear feet of fragile coastal ecosystem residing along an eroded MacDill AFB shoreline, and benefitted Tampa Bay estuary system overall health. The community-based effort included Air Force partnerships with Tampa Bay Watch, Tampa Bay Estuary Program, Hillsborough County Environmental Protection Commission, USFWS, NOAA



MacDill Oyster Domes

Volunteers unload marine-friendly concrete oyster domes prior to being placed in the near-shore water along MacDill AFB's southeastern shoreline as part of a long running shoreline stabilization and restoration effort. The East Region INRMP Team facilitated negotiations with regulators and advocated for funding on the multi-year project.

NMFS, and the Estuary Restoration Council. The project relied on 208 volunteers from the community, local schools, and MacDill AFB groups and squadrons for oyster reef concrete dome and oyster bag placements, and vegetation plantings. Community involvement not only provided MacDill AFB a cost-effective way to protect mission-critical infrastructure, but also increased estuarine habitat diversity and improved water quality. Volunteer events provided the MacDill AFB natural resources conservation program the opportunity to conduct outreach and enhance environmental awareness.

The East Region INRMP Team was instrumental in publicizing grant opportunities and advocating for grant money to support natural resources programs. In 2014, the Team facilitated a \$6K DoD Legacy Award for National Public Lands Day projects on Homestead ARB. This award directly contributed to support a project that allowed critical habitat to be ecologically functional for many endemic imperiled butterfly species and critically endemic plant and animal species. The project included over 40 volunteers from base personnel, family, and local elementary schools. The volunteer effort provided the opportunity for many elementary

school children to learn the importance of protecting critical species and habitats.

Natural Resources Compliance Program

All natural resources subject matter specialists on the East Region INRMP Team have completed the DoD Natural Resources Compliance Course, enabling better policy and guidance support to East Region installations, and reducing hourly installation requests to the Air Force Subject Matter Specialist to approximately one per week.

The East Region INRMP Team increased Sikes Act compliance by reviewing installation natural resources projects and requirements and collaborating with agency partners to identify opportunities for mutual benefit. Prior to the accomplishment period, installations utilized Sikes Act partners to implement INRMP compliance projects infrequently. Most natural resources work was accomplished through contractor support. Only \$1.1M in natural resources projects annually was previously allocated to Sikes Act partners. In FY14 and FY15, the Team increased partnerships significantly. In both years, \$4.7M was executed by Sikes Act partners, achieving the Sikes Act intent to engage agency partners.