



Department of Defense Legacy Resource Management Program

PROJECT NUMBER (08-395)

Maintaining and Implementing Sustainable INRMPs Course Offerings

Booz Allen Hamilton

JANUARY 28, 2010

Introduction



Maintaining & Implementing Sustainable INRMPs:

Introduction



Introduction



Course Objectives

- Understanding of Sikes Act
- Knowledge of roles and responsibilities
- Tools to implement sustainable INRMPs
- Approaches for working together

Introduction



Agenda: Day 1

- History of the Sikes Act & the Tri-Party MOU
- Maintaining & Implementing Sustainable INRMPs
- US FWS Roles, Responsibilities and Activities
- State Agencies Roles, Responsibilities and Activities

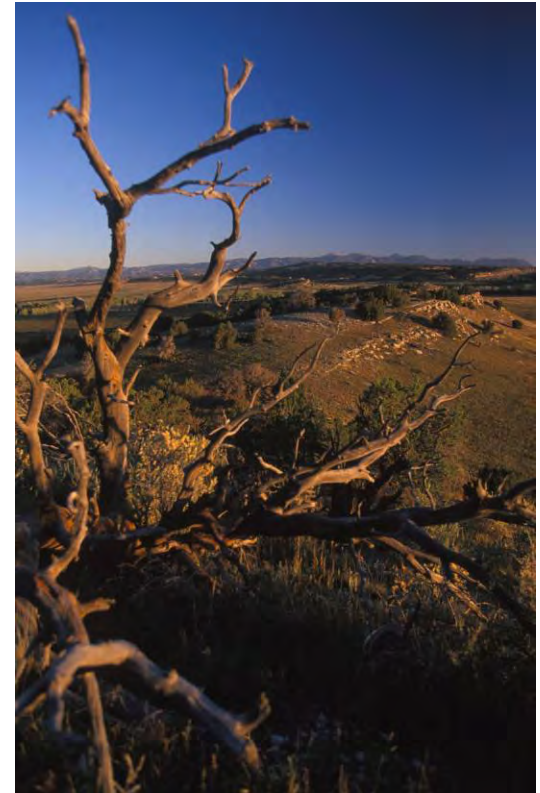


Introduction



Agenda: Day 2

- Keeping INRMPs Current
- Major Natural Resource Issues
 - Threatened and Endangered Species
 - Migratory Bird Management
 - Wetlands
 - Invasive Species
 - Encroachment



Introduction



Agenda: Day 3

- Public Review and Involvement
- INRMP Project Funding
- Final Questions
- Course Critique



History of the Sikes Act and Tri-Party Agreement



Maintaining & Implementing Sustainable INRMPs:

History of the Sikes Act



History of the Sikes Act and Tri-Party Agreement



Sikes Bill of 1949

- Limited to Eglin Field Reservation, Florida
- Authorized installation to issue hunting & fishing permits and retain fees for restocking
- Directed fish & game be managed in cooperation with USFWS
- Required state hunting & fishing licenses

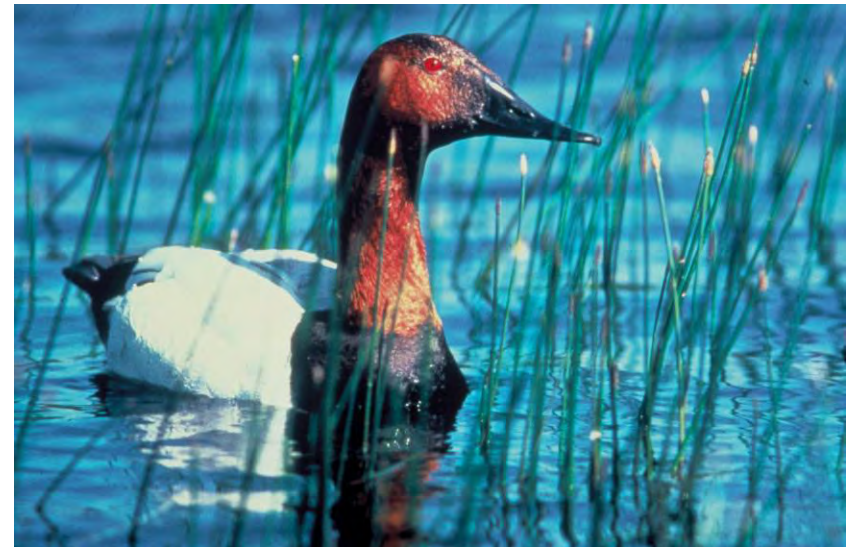


History of the Sikes Act and Tri-Party Agreement



Engle Act of 1958 (10 U.S.C. § 2671)

- Requires hunting and fishing on military installations to comply with state laws
- Requires that appropriate state licenses be obtained
- Ensures access to installations by state fish and game officials



History of the Sikes Act and Tri-Party Agreement



Sikes Act of 1960

- Extended provisions of 1949 Sikes Bill to all military installations
- Implemented Engle Act
- Authorized tripartite cooperative plans
 - Voluntary, but mutually agreed upon
 - Focus on fish & game propagation
 - Funded through user fees, not appropriations
- IAGFCC primary proponent for bill



History of the Sikes Act and Tri-Party Agreement



Amendments to Sikes Act: 1968 – 1986

- 1968:
 - Appropriations authorized for first time
 - Habitat enhancement & public outdoor recreation programs added to scope
- 1974:
 - By 1974, DoD had 237 cooperative plans in effect
 - Habitat management, range rehabilitation, ORV control made mandatory

History of the Sikes Act and Tri-Party Agreement



Amendments to Sikes Act: 1968 – 1986 (continued)

- 1982:
 - Scope expanded to include all T&E species
 - Congress expressed continued frustration over DoD's failure to request authorized funds
- 1986:
 - Multiple-use natural resources management required
 - Requirement to employ professionally trained natural resources managers
 - Regularly review fish & wildlife plans

History of the Sikes Act and Tri-Party Agreement



Sikes Act Improvement Amendments

- Efforts to effect reform began in 1993
- Spurred on by IAFWA and NMFWA



History of the Sikes Act and Tri-Party Agreement



Key Elements of Proposed Amendments

- Program to be mandatory
- Management through INRMPs mutually agreed on by the three partners
- INRMPs to be consistent with “essential military requirements”
- Notice of Violation enforcement feature requested (\$!)
- Commitment to biodiversity conservation
- Requirement for sufficient professional staff to comply with Act

History of the Sikes Act and Tri-Party Agreement



Maintaining & Implementing Sustainable INRMPs:

Sikes Act Improvement Act

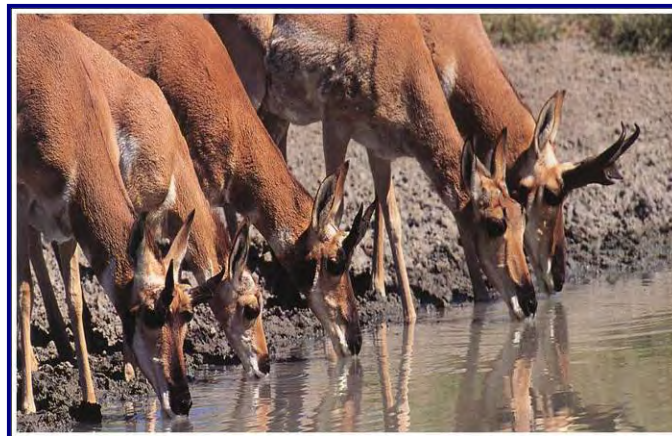


History of the Sikes Act and Tri-Party Agreement



Sikes Act Improvement Act of 1997

- Enacted 18 November 1997
- Product of three-plus years of discussion
- Agreed to by DoD, USFWS, AFWA



History of the Sikes Act and Tri-Party Agreement



Overarching Requirements

- Sec. of Defense directed to carry out a natural resources program
 - Previous program discretionary
 - Previous program focused on fish & game conservation



History of the Sikes Act and Tri-Party Agreement



Overarching Requirements (continued) *Which Installations Must Prepare INRMPs*

- All within the US, its territories and possessions, unless
 - Significant natural resources absent
- Bases are closed or closing
- DoD provides FWS with list of INRMP-required installations



Mare Island NSY

History of the Sikes Act and Tri-Party Agreement



Overarching Requirements (continued)

- INRMP shall reflect “mutual agreement” of the parties
 - Goal: agreement on entire plan
 - Requirement: agreement on elements of plan within scope of USFWS’ and State’s legal authority
- Sikes Act neither enlarges nor diminishes parties’ legal authorities



History of the Sikes Act and Tri-Party Agreement



State Authority on Federal Lands

- Management of fish & resident wildlife historically a state prerogative
- Congress may expressly preempt state law
- Sikes Act does not manifest such an intent
- States have concurrent authority to manage unless:
 - Actions discriminatory; or
 - Obstacle to accomplishing military mission



History of the Sikes Act and Tri-Party Agreement



Maintaining & Implementing Sustainable INRMPs:

Tri-Party Agreement



History of the Sikes Act and Tri-Party Agreement



Tri-Party Working Group: Background

- National Level Working Group formed – January 2001
- Initial focus – November 2001 deadline
 - Tracked progress
 - Identified and resolved issues
 - Prepared reports to Congress



History of the Sikes Act and Tri-Party Agreement



Tri-Party Memo of Understanding: Key Provisions

- Lead role: DoD
- National-level program review
- Reaffirm Sikes Act responsibilities
- Encourage INRMP Development and Implementation Teams
- Provide for Regional Sikes MOUs



History of the Sikes Act and Tri-Party Agreement



Tri-Party MOU: Key Provisions (continued)

- Encourage use of Economy Act
- Cooperatively build research and management proposals
- Encourage information exchange



History of the Sikes Act and Tri-Party Agreement



Tri-Party Memo of Understanding: Goals

- MOU signed on January 31, 2006
- Institutionalize HQ cooperation and review processes
- Ensure availability of necessary tools and policies

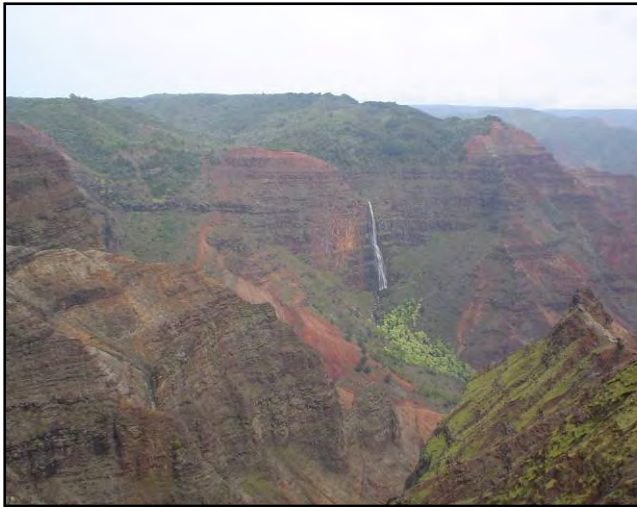


History of the Sikes Act and Tri-Party Agreement



Maintaining & Implementing Sustainable INRMPs:

Recommendations to Improve Sikes Act Coordination



History of the Sikes Act and Tri-Party Agreement



Improve Communications

- Institutionalize this course
- Add DoD information to NCTC courses
- Continue INRMP-SWAP regional workshops
- Adopt DoD-wide conservation metrics



History of the Sikes Act and Tri-Party Agreement



Streamline the INRMP Review Process

- Expand use of INRMP template
- Improve and use INRMP status matrix
- Hold regional reviews when possible
- Designate field offices sign-off authority
- Develop new INRMP tools



History of the Sikes Act and Tri-Party Agreement



Related Improvements

- USFWS issue updated Sikes guidelines
- Joint management guidelines on airfield management and BASH
- DoD migratory bird guidelines



History of the Sikes Act and Tri-Party Agreement



Questions & Answers



Maintaining and Implementing Sustainable INRMPs



Maintaining & Implementing Sustainable INRMPs:

Sustainable INRMPs

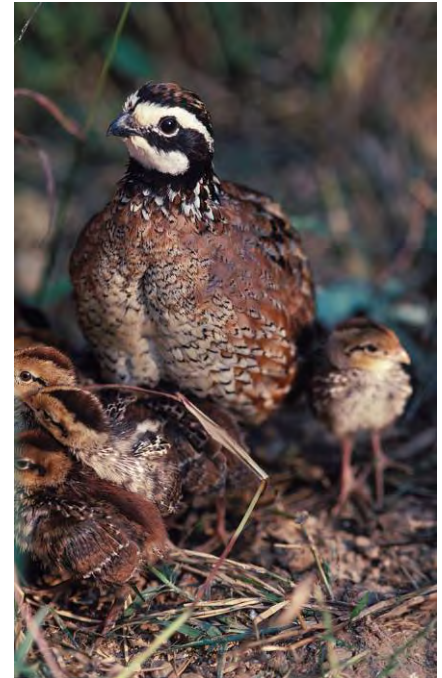


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INRMP Required Elements

- Resource management and fish and wildlife-oriented recreation
- Habitat enhancement or modifications
- Wetland protection, enhancement, and restoration
- Integration and consistency among activities
- Specific natural resource management goals



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INRMP Required Elements (continued)

- Public use of natural resources
- Public access consistent with safety, security, & mission
- Enforcement of natural resource laws
- Other activities determined by the Secretary



Maintaining and Implementing Sustainable INRMPs



But Military Bases Are NOT Wildlife Refuges

- Program and INRMP must
 - Be consistent with the use of installations to ensure military preparedness; and
 - Ensure no net loss in capability of installations to support military mission
- Obvious tension intentionally left unresolved



Maintaining and Implementing Sustainable INRMPs



Installation Plans Integrated into INRMPs

- Holistic approach to resource management
- Other plans may be incorporated into an INRMP
 - Installation master plans and range ops plans
 - Integrated Cultural Resources Management Plans
 - State wildlife management plans
 - Fire management plans
 - BLM/Forest Service plans



Maintaining and Implementing Sustainable INRMPs



Procedural Requirements

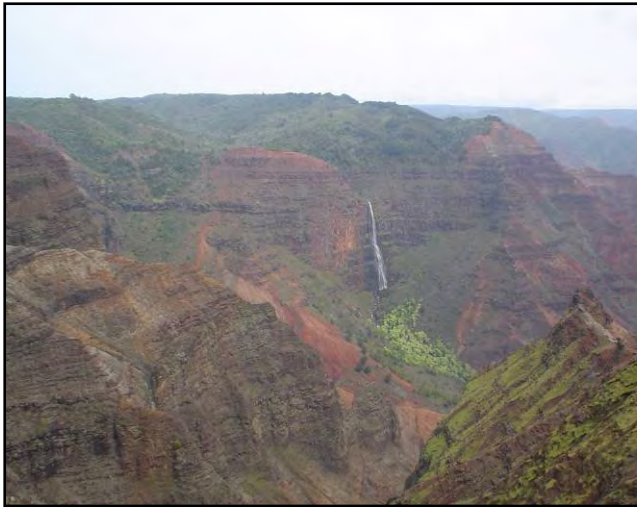
- Must provide opportunity for public comment on (at least the initial) INRMP
 - NEPA as means for soliciting?
- All parties must review no less often than every five years
- Defense and Interior must report annually to Congress



Maintaining and Implementing Sustainable INRMPs



Maintaining & Implementing Sustainable INRMPs: Cooperative Management



Maintaining and Implementing Sustainable INRMPs



Ground Rules

- Roles of DoD, USFWS and State Wildlife Agencies
- Adopt and use metrics
- Utilize tri-party participation in all phases
- Build partnerships to manage “outside the fence”



Maintaining and Implementing Sustainable INRMPs



Pitfall: Excluding the Community

- A DoD installation exists as an economically and ecologically integral part of the local community
- The installation offers value that must be taken into account in:
 - Economic, ecological, health, security benefits
- Current BRAC criteria includes as part of military value an installation's community support
- Community support considered a BRAC criterion

Maintaining and Implementing Sustainable INRMPs



Consistent Tri-Agency Cooperation Recommendations

- Led by Installation Management
- Pre-review meeting
 - Agree upon POC's, Timeline, Roles and Responsibilities
- Partnering meetings
- Tri-Agency teleconference check-ins



Maintaining and Implementing Sustainable INRMPs



Consistent Tri-Agency Cooperation Recommendations (continued)

- Submit plan in sections
- Review and return plan in sections
- Schedule final signature date, stick to timeline
- Maintain open lines of communication to:
 - Base Commanding Officer
 - All Three Agencies



Maintaining and Implementing Sustainable INRMPs



Adaptive Management

- INRMPs designed for complexity and uncertainty
- Build adaptability into the INRMP and know how to leverage it
- DoD biodiversity handbook provides guidance



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Benefits of Cooperative Management

- Accomplish INRMP goals and objectives
- Obtain funds
- Build relationship and gain advocates



Maintaining and Implementing Sustainable INRMPs



Readiness and Environmental Protection Initiative (REPI)

- Partnerships with NGOs, state and local governments, and federal agencies
- Projects aimed to:
 - Protect military training lands
 - Preserve open space or natural habitat
- Conservation easements acquired



Maintaining and Implementing Sustainable INRMPs



Legacy Program Areas of Emphasis: Natural Resources

- Integrated Natural Resources Management
- Regional Ecosystem Management Initiatives
- Invasive Species Control
- Monitoring and Predicting Migratory Patterns of Birds and Mammals



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Legacy Program Areas of Emphasis: Cultural Resources

- Economics of Historic Preservation
- Cultural Resources Data Management
- Communication, Partnerships, and Public Awareness
- Context and Model Development



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Legacy Program Areas of Emphasis: Integrated Resources

- Readiness and Range Sustainment
- National and International Initiatives
- Cooperative Conservation
- Program Management

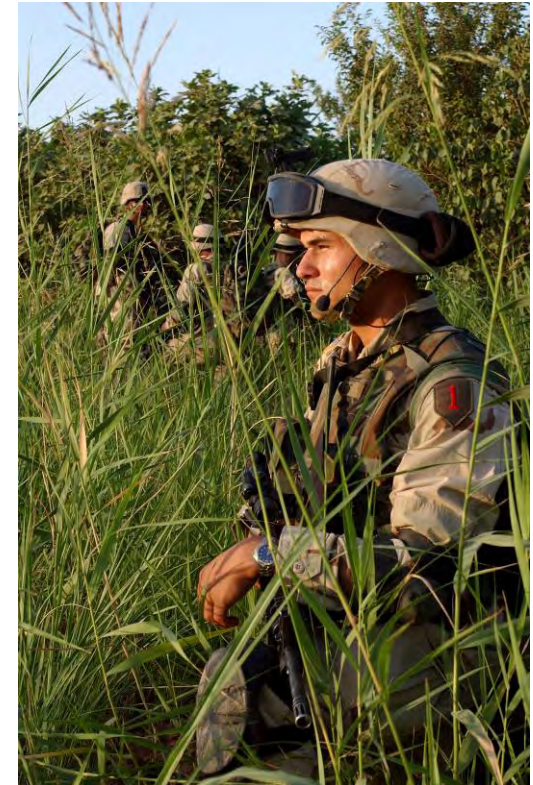


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INRMP-SWAP Integration

- Southeast – Atlanta (May 2006)
- Southwest – Phoenix (December 2006)
- Southern Plains – Albuquerque (May 2007)
- Mid-Atlantic – Washington, DC (December 2007)
- Northeast – Boston (June 2008)



Maintaining and Implementing Sustainable INRMPs



Projects from INRMP-SWAP Southeast Workshop

- Georgia Conservation Forum Project: Gopher Tortoise Support
- Florida SWAP-INRMP Regional Coordination
- Carolina Species At Risk Project
- Clear Zone Habitat Conservation on a South Carolina Airstrip (Invasives Control)



Maintaining and Implementing Sustainable INRMPs



Potential Projects from INRMP-SWAP Southwest Workshop

- Assessment and Prioritized Restoration of Seeps, Springs and Riparian Systems [NV]
- Partnering Workshop for Integrating SWAPs and INRMPs [Carlsbad Office]
- SW Burrowing Owl Symposium
- Bonneville Basin Integration Project



Maintaining and Implementing Sustainable INRMPs



Potential Projects from INRMP-SWAP Southern Plains Workshop

- Gray Vireo Coordination Effort
- Bat Coordination Effort
- Annual Wildlife Diversity Conference
- Southern NM Coordination Meetings
- Cooperative Conservation Incentives



Photo by Greg Lasley

Maintaining and Implementing Sustainable INRMPs



Potential Projects from INRMP-SWAP Mid-Atlantic Workshop

- Aquatic Invertebrates (Crustaceans) Surveys
- Northeast Region Natural Resources Database Coordination and Development
- NJ Species at Risk Project
- NJ Pinelands Ecosystem Management for Fire Control
- Regional BASH Toolkit/SWAP Integration
- Assessment of the Significance of Fire-Maintained Communities to Species of Greatest Conservation Need in the Mid-Atlantic Region
- Species at Risk Assessment for the Chesapeake Bay Region

Maintaining and Implementing Sustainable INRMPs



Potential Projects from INRMP-SWAP Northeast Workshop

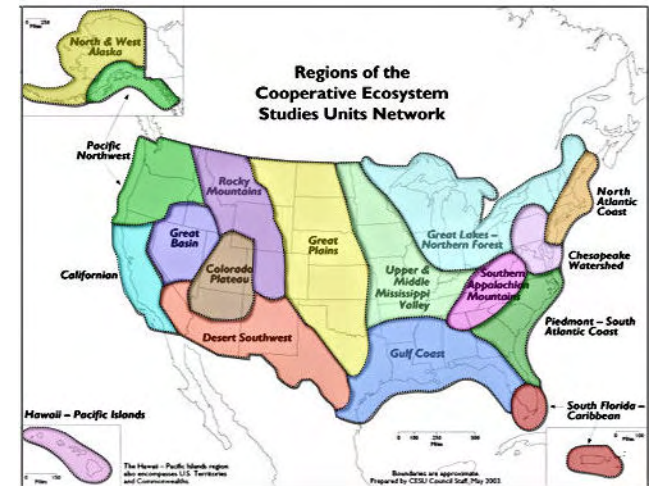
- Blandings Turtle Population Model
- Early Successional Habitat Management
- Expansion and Maintenance of Northeast Grasslands
- Northeast Habitat Database
- Northeast Regional Bat Conservation Partnership
- Predictive Model for Northeast Forest Bat Habitat
- Recreational Trails Demonstration Project
- DoD Natural Resources Friends Group

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National Conservation Partnerships

- Cooperative Ecosystem Study Units (CESUs)
- Native Plant Conservation
- North American Pollinator Protection Campaign
- North American Bird Conservation Initiative
- Partners in Amphibian and Reptile Conservation



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Regional Conservation Partnerships

- Ecosystem Management Initiatives
 - Gulf Coastal Plain Ecosystem Partnership
 - Mojave Desert
 - Sonoran Desert
 - Colorado Shortgrass Prairie
 - Puget Sound
- Weed Management Areas

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Local Conservation Partnerships

- National Public Lands Day
 - 38 sites for 2008, 22 states and DC
 - 14 Army
 - 9 Navy
 - 9 Air Force
 - 1 Marine Corps
 - 5 Air National
- Bat Conservation International
- Ducks Unlimited
- National Wild Turkey Federation



Maintaining and Implementing Sustainable INRMPs



Partnering Best Practices

- Involve local and regional partners
- Seek partnership funding
 - Legacy Program
 - USFWS Grants
 - Other
- Participate in buffer programs
 - Army Compatible User Buffer (ACUB) Program
 - REPI

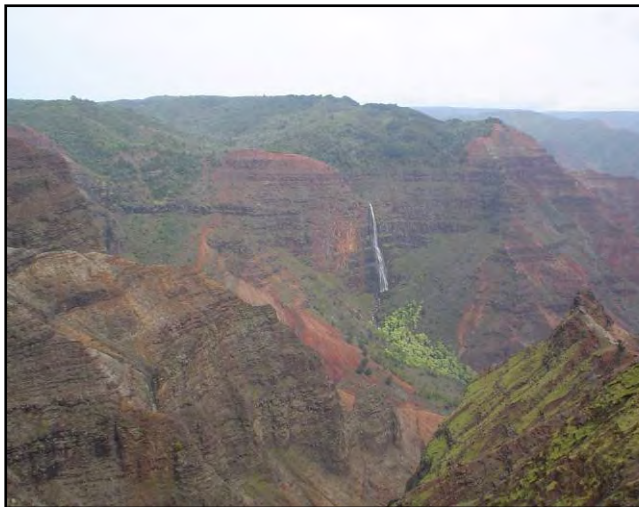


Maintaining and Implementing Sustainable INRMPs



Maintaining & Implementing Sustainable INRMPs:

INRMP Reviews



Maintaining and Implementing Sustainable INRMPs



Review Requirements

- Must be reviewed “as to operation and effect”
- By all three parties
- “On a regular basis”
- “But not less often than every 5 years”
- DoD strongly recommends an annual tripartite review



Maintaining and Implementing Sustainable INRMPs



Review Timing

- “Regular basis, but not less often than every 5 years”
- DoD Policy: annual cooperative reviews
- Document for the record
- Ensure “mutual agreement” reflected



Maintaining and Implementing Sustainable INRMPs



Scope of Review: By the Parties

- Focus on “operation and effect”
 - Implemented & producing intended results
- Revision not necessarily required
- Triggers
 - Changed circumstances
 - ESA critical habitat designation
 - Not Working

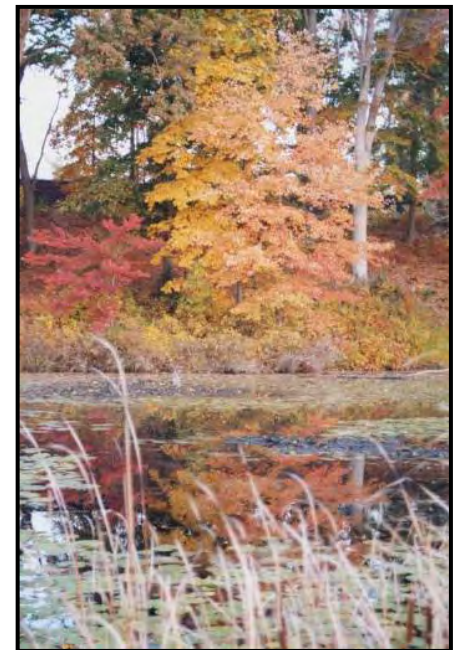


Maintaining and Implementing Sustainable INRMPs



INRMP Adequacy

- Adequacy determination based on:
 - Effectiveness of INRMP implementation
 - Effectiveness of partnership and collaboration
 - Sustainment of installation's mission
 - Status of listed species and critical habitat
 - Maintenance of ecosystem integrity



Maintaining and Implementing Sustainable INRMPs



INRMP Adequacy (continued)

- Compliance with
 - Sikes Act
 - Endangered Species Act
 - Migratory Bird Treaty Act
 - Other natural resource and environmental laws
- Support for exclusion from critical habitat designation



Photo by Peter S. Weber

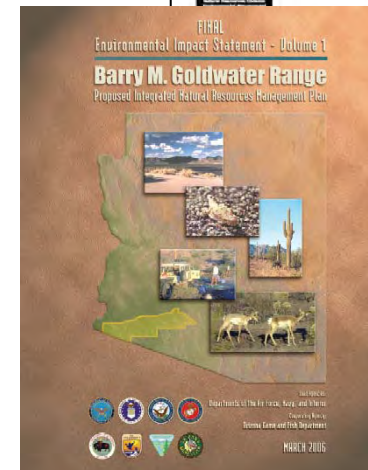
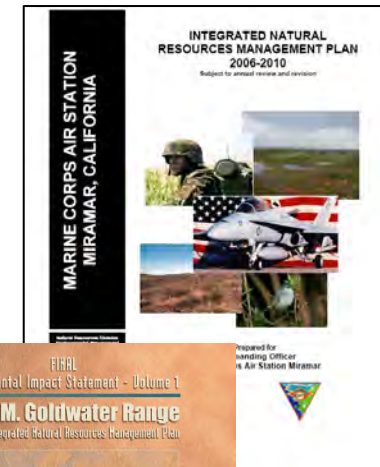


Maintaining and Implementing Sustainable INRMPs



Bottom Line

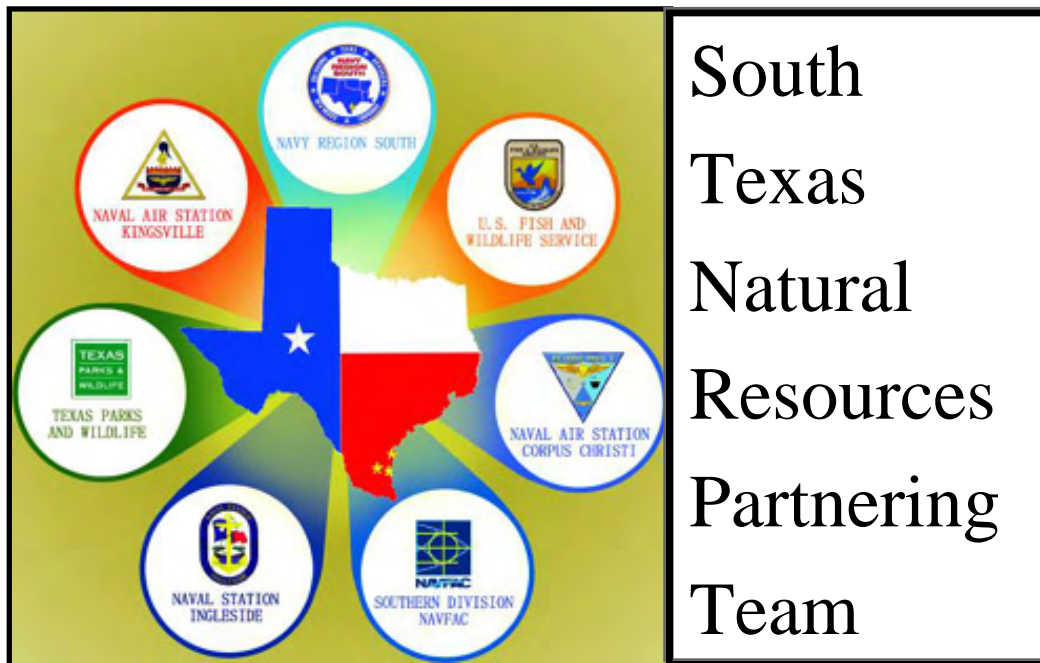
- Congress expects:
 - Plans will be developed and revised cooperatively
 - Plans will be implemented
 - Public will have access to installations to enjoy natural resources...
 - But military preparedness **CANNOT** be compromised



Maintaining and Implementing Sustainable INRMPs



Discussion



FWS INRMP Review Guidance



Maintaining & Implementing Sustainable INRMPs:

FWS INRMP Review Guidance

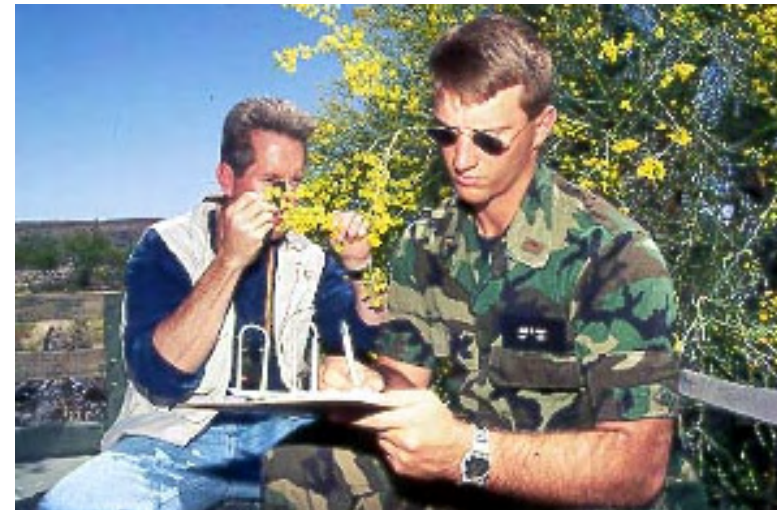


FWS INRMP Review Guidance



FWS Sikes Act Challenges

- Managing workload for military installations, FWS, and States
- Developing and implementing quality INRMPs
- Improving INRMP review timelines
- Streamlining INRMP review process



FWS INRMP Review Guidance



Addressing Challenges

- Encourage partner team approach in INRMP implementation, reviews and updates
 - Participate with the military in INRMP review
 - Tie in landscape ecosystem level priorities of FWS
 - Tie in State Wildlife Conservation Plan priorities
 - Use military INRMP metric review to evaluate
 - Investigate creative funding

FWS INRMP Review Guidance



Partnership Goals

- May include FWS and State & other missions
- Encourage early involvement
- Encourage Communication
- Develop creative funding sources for INRMP implementation and other projects
 - DoD Legacy projects
 - DoD Partners in Flight projects
 - Military installation encroachment buffer partnerships

FWS INRMP Review Guidance



Partnership Benefits

- Ensures quality INRMPs and natural resource stewardship
- Promotes integration of Operational Mission & natural resources management
- Enhances cooperative relations with FWS and State
- Provides opportunities to interact with other partners & stakeholders



FWS INRMP Review Guidance



Responsibilities

- **The installation** is responsible for coordinating the development and review of INRMPs with FWS and State fish and wildlife agency



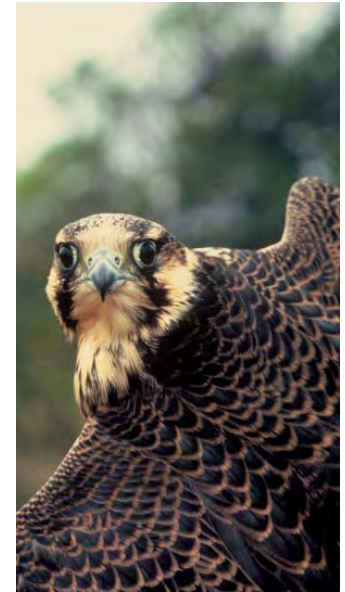


FWS INRMP Review Guidance



Review Preparation

- Service lead field office is usually the one initially contacted
- Per the new guidelines, installation informs Service field station of **intent to prepare or revise INRMP 30 days prior** to doing so; and requests Service participation
- The field station will participate in the development of INRMPs as much as feasible within time and staff constraints



FWS INRMP Review Guidance



Review Preparation (continued)

- Installation informs Service field station of **intent to provide a draft INRMP** for review and coordination **60 days prior** to delivering document
- The field station will provide written acknowledgement of receipt of draft INRMP within 15 days





FWS INRMP Review Guidance



Field Station Review

- Field stations provide comments and/or preliminary agreement on draft INRMP within 60 days of receipt
 - unless ESA consultation needed
 - unless installation requests critical habitat review
- Other Field stations may review INRMP to ensure complete programmatic participation





FWS INRMP Review Guidance



Field Station Review (continued)

- FWS field station should facilitate migratory bird conservation review with military installation per
 - FWS Final Rule on DoD Migratory Bird Conservation (2007)
 - DoD/FWS MOU on Migratory Bird Conservation (2006)
- DoD Partners in Flight Program has resources to facilitate migratory bird conservation in INRMP



FWS INRMP Review Guidance



Regional Review

- Provide final draft INRMPs to the lead FWS Field Station & Regional Sikes Act Coordinator
- Should be reflective of field level participation and concurrence with the INRMP
- Regional Sikes Act Coordinator
 - Key in facilitating all comments into one response to military installation
 - Should work to resolve concerns with FWS field station
 - Should work to get Regional Director's signature
 - Provide approval or comments within 60 days



FWS INRMP Review Guidance



Regional Concurrence

- State fish and wildlife representatives concurrence or concerns will be provided to the Regional Director for consideration
- FWS and State fish and wildlife agencies **may** discuss mutual concerns
- FWS **may** withhold INRMP concurrence if State fish and wildlife agency concerns are not resolved
- If conflicts remain after extensive efforts to resolve issues, the Regional Director will make a determination either to withhold Service agreement or provide agreement on INRMP with recommendation or caveats

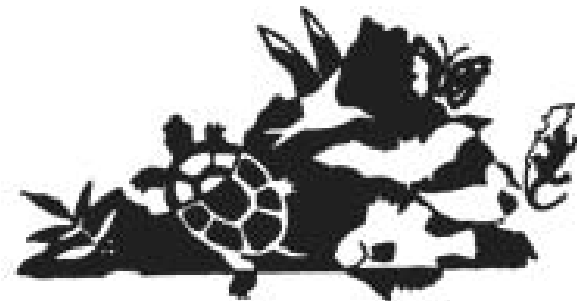
FWS INRMP Review Guidance



Review Process Summary

- Inform FWS Field Office of intent
- Provide draft to FWS Field Office
- Field Office provides comments
- Provide final draft to Regional Office
- Regional Office provides comments or concurrence





State Wildlife Agencies and Wildlife Action Plans

David K. Whitehurst
Virginia Department of
Game and Inland Fisheries
September 16, 2008



Purpose of this Presentation

- Understand the nature of state wildlife agencies
- History, Role, and Function of Wildlife Action Plans
- Importance of DoD facilities to wildlife conservation
- Overview of Virginia's Action Plan and conservation efforts involving DoD facilities

State Wildlife Agencies



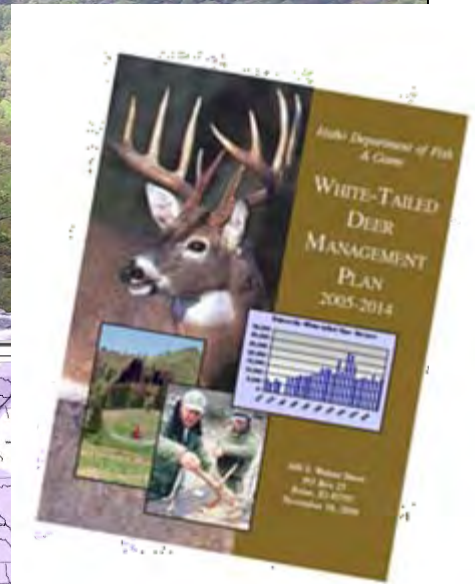
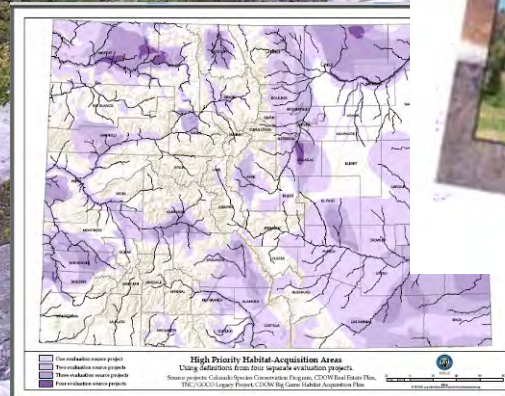
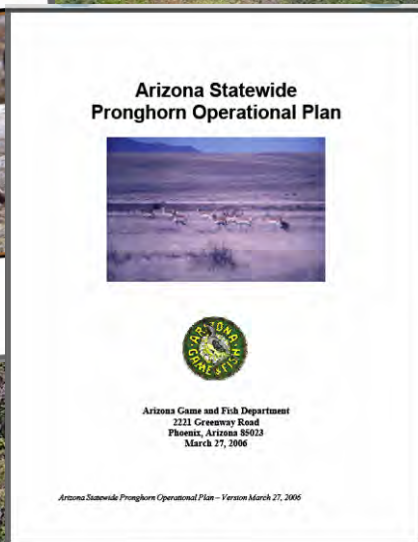
- Protecting the Public Trust
- Working Across Boundaries
- A Legacy of Success

State Wildlife Agencies

- Protecting the Public Trust:
 - the North American Model
 - Structure, Funding of Wildlife Agencies
 - Constituencies, Stakeholders




Protecting the Public Trust



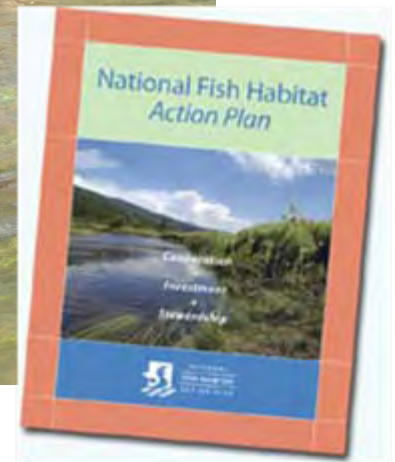
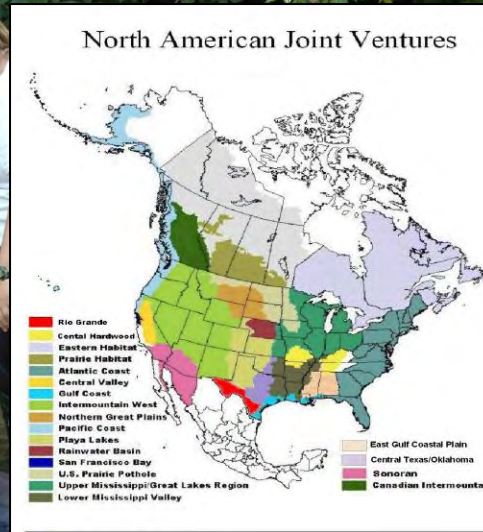
Working Across Boundaries

Public Review Draft

**GREATER SAGE-GROUSE
COMPREHENSIVE CONSERVATION
STRATEGY**



National Sage-grouse Conservation Planning Framework Team
Western Association of Fish and Wildlife Agencies
December 2008



A Legacy of Success...



A Legacy of Success...



... An Unfinished Agenda.

Conservation Funding

- State Wildlife Grants appropriations vary year-to-year.
- Wildlife Action Plan needs money for full implementation.
- New and greater funding is needed.



Teaming With Wildlife: A Natural Investment

- Coalition of more than **5,700 organizations** working to **keep common species common** by supporting **increased state and federal funding for wildlife conservation, outdoor recreation, and conservation education**
- Includes wildlife managers, conservationists, hunters/angers,
- businesses, others supporting this goal



TEAMING WITH WILDLIFE
a natural investment

Coalition Accomplishments



- Successful grassroots efforts
- Wildlife Conservation & Restoration Program
- State Wildlife Grants
- Successful annual “Fly-In” in Washington to increase awareness about these needs
- **GOAL:** 10,000 members!

www.teaming.com

State Wildlife Action Plans

*Our Nation's Core Program for
Preventing Wildlife From Becoming
Endangered in Every State*

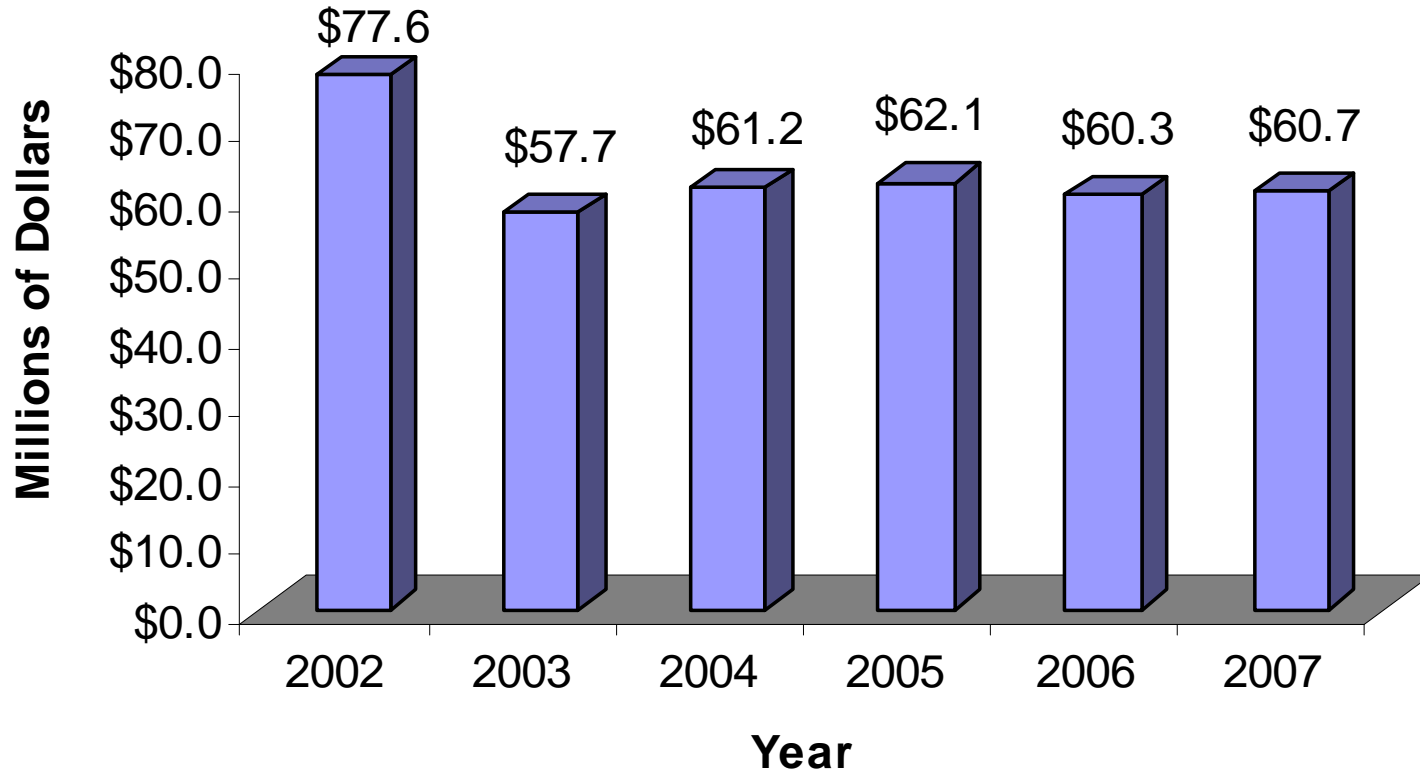


State Wildlife Action Plans

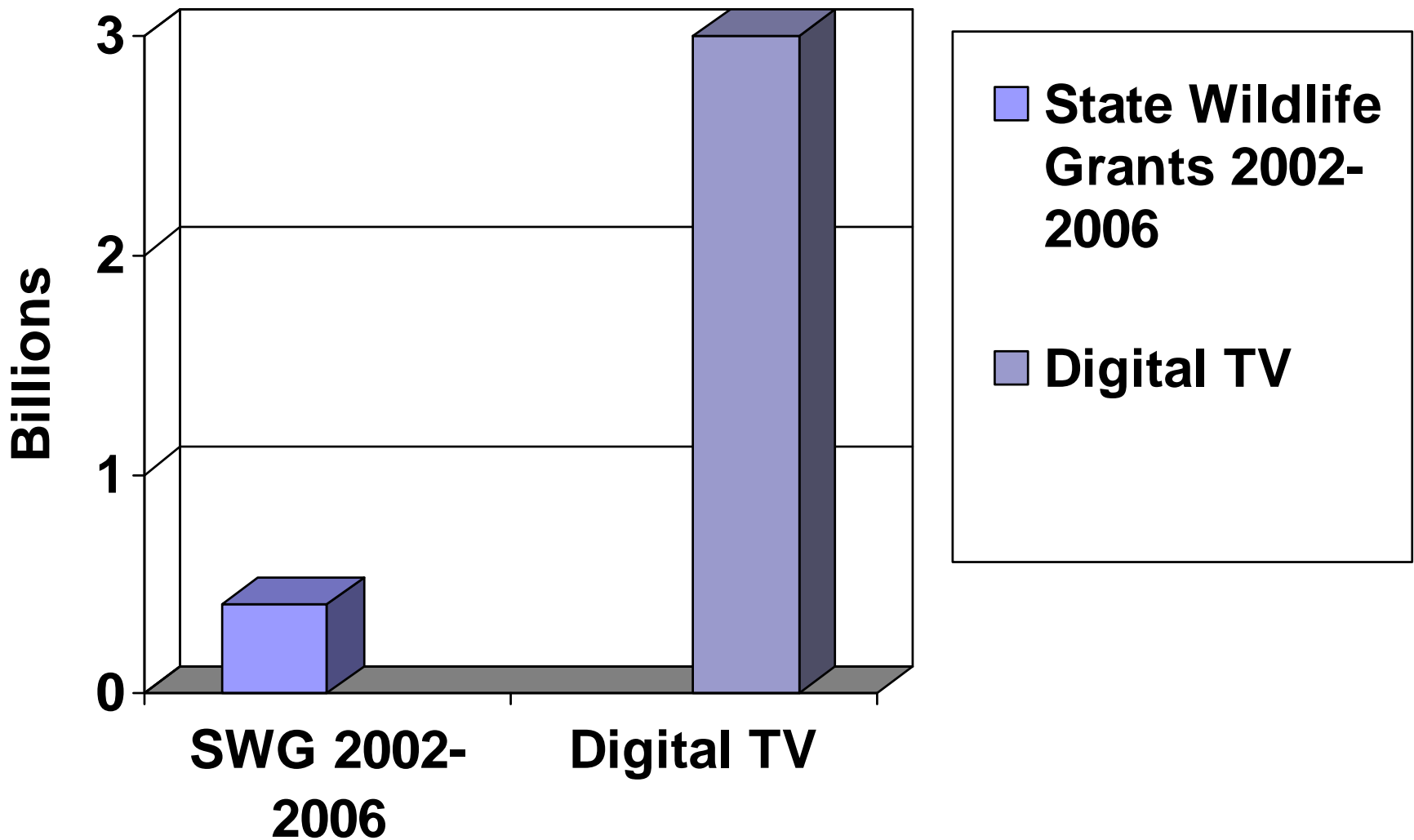
- Funded by State Wildlife Grants



Annual SWG Allocation



State Wildlife Grant Funding



Action Plans: Eight Elements

1. **Distribution** and abundance, focused on **species of greatest need**
2. **Habitat** location and condition
3. **Problems** and research needs
4. **Conservation Actions** and priorities

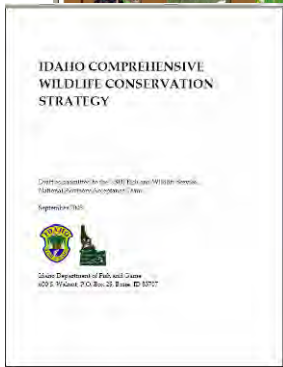
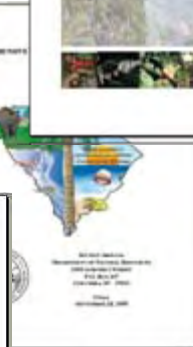
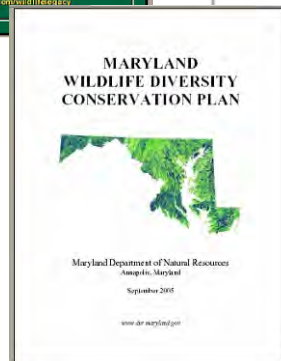
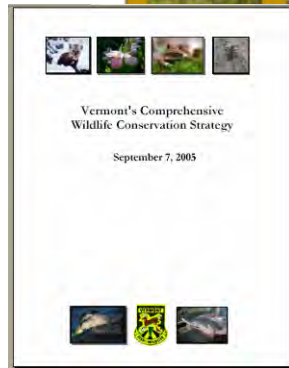
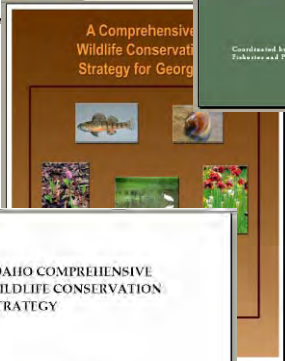
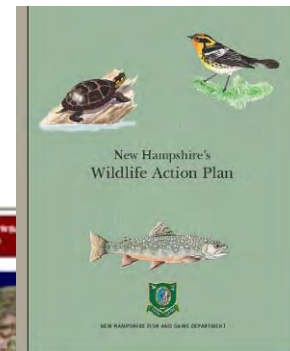
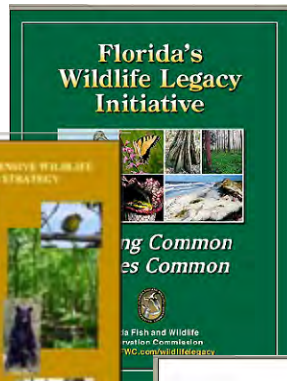
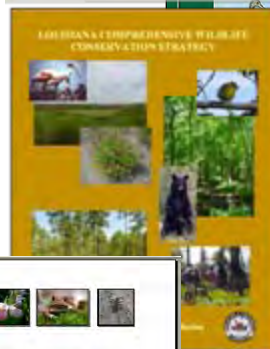
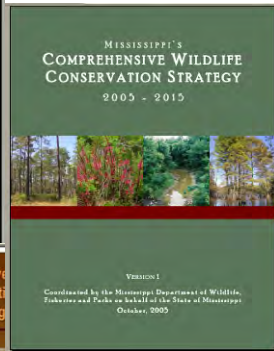
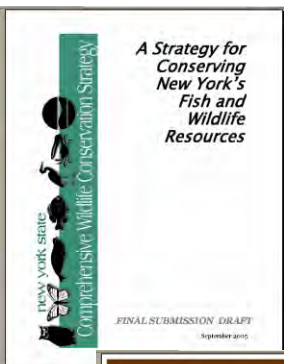


Action Plans: Eight Elements

5. **Monitor and Evaluate**
6. **Plans to Review and Revise**
7. **Coordination** with other agencies, planning efforts
8. **Public participation**



State Wildlife Action Plans



State Wildlife Action Plans are:



Historic
Structured
Flexible

Olivia Boinet

State Wildlife Action Plans

Additional information:

www.fishwildlife.org

www.teaming.org



www.wildlifeactionplans.org

Virginia's Wildlife Action Plan



What Does It Mean For Virginia?

- A strategy and common vision for conservation for the **Commonwealth**, not just DGIF
- **Status check** of Virginia's wildlife & habitats
- In line with ***Roadmap for Virginia's Future*** (Virginia's long-term strategic plan):
“Protect, conserve, and wisely develop our natural, historical and cultural resources”
- Can be used to **prioritize and leverage funding** across agencies and programs within and outside of Virginia government



Wildlife Action Plan Overview

- A wildlife conservation plan for the Commonwealth, not just DGIF
- Developed with input from multiple partners, stakeholders, and citizens
- Plan evaluates and assesses:
 - Location and abundance of wildlife and habitats
 - Problems facing species and habitats
 - Conservation actions to address problems
 - Research and monitoring needs



Key Outcomes



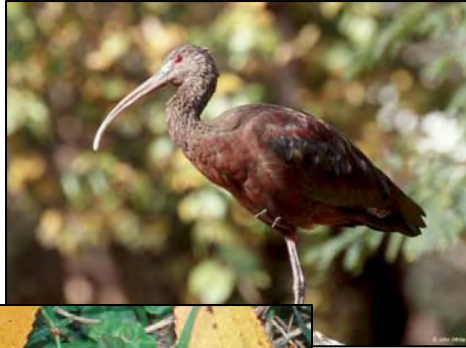
Species of Greatest Conservation Need



- Final List: 925 species
- Assigned to one of four tiers of relative conservation need
- Reviewed and endorsed by scientists and stakeholders

Tiers and associated species served as the foundation for Plan development, including setting conservation priorities and actions.

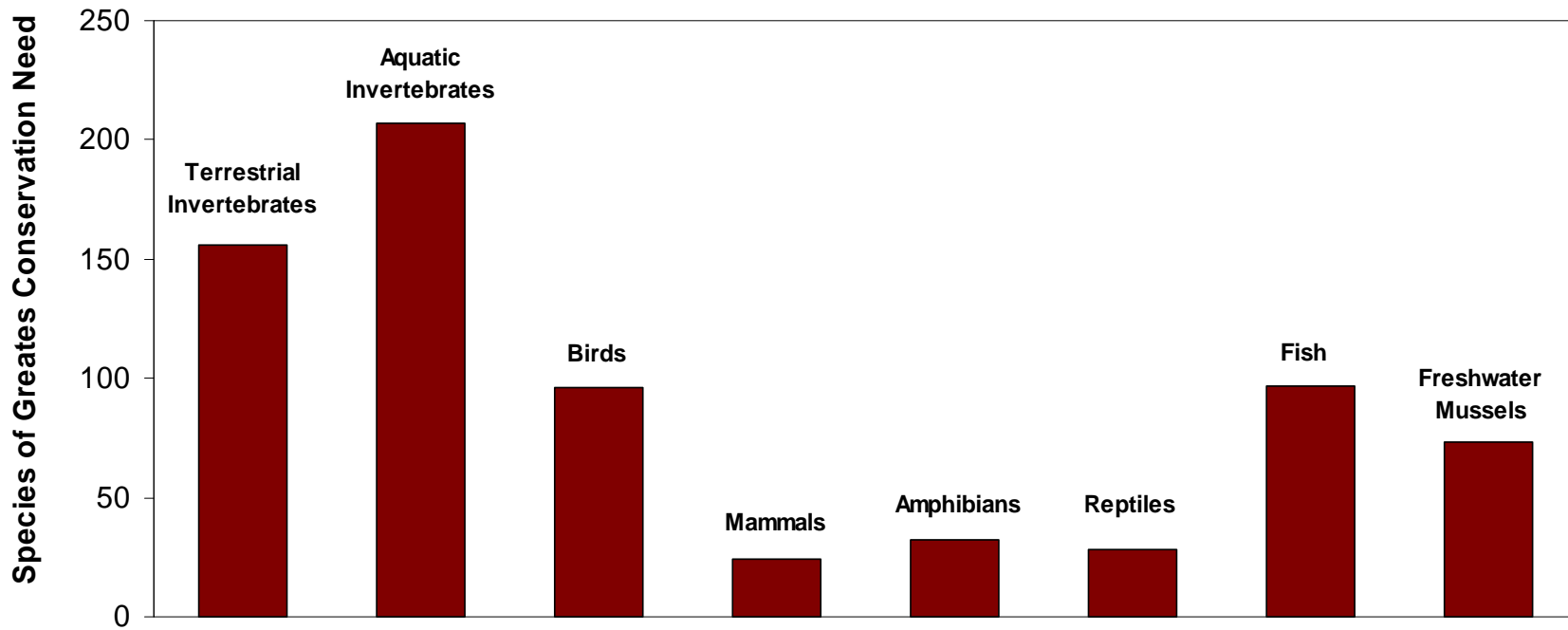
Species of Greatest Conservation Need



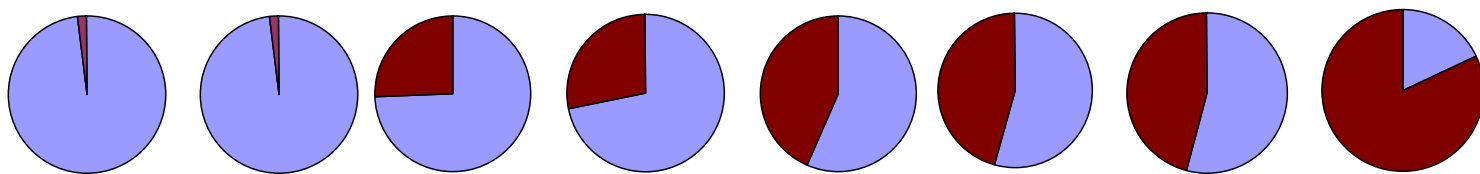
Mammals	24
Birds	96
Fishes	97
Reptiles	28
Amphibians	32
Mussels	61
Aquatic crustaceans	61
Aquatic insects	148
Terrestrial insects	142
Other aquatic invertebrates	34
Other terrestrial invertebrates	202

70% are invertebrates; 60% are aquatic

Species of Greatest Conservation Need



Taxonomic Group



Percent Species of Greatest Conservation Need to Total Species in Virginia by Taxonomic Grouping

Summary of Taxa

	# in VA	# SGCN	# State listed	# Fed listed	# G1-2	# S1-2
Fishes	210	97	20	6	14	65
Amphibians	74	32	4	1	3	18
Reptiles	61	28	6	2	0	15
Birds	374	96	12	4	0	30
Mammals	85	24	10	5	1	15
Terr insects	10,000+	144	5 (p)	3	63	118
Other terr inverts	??	196	7	1	82	167
FW Mussels	89	73	38	20	38	54
Crustaceans	10,000+	61	3	2	35	43
Aquatic insects	10,000+	146	0	0	24	134
Other aquatic inverts	??	12	0	0	7	8

Northern Piedmont Species of Greatest Conservation Need



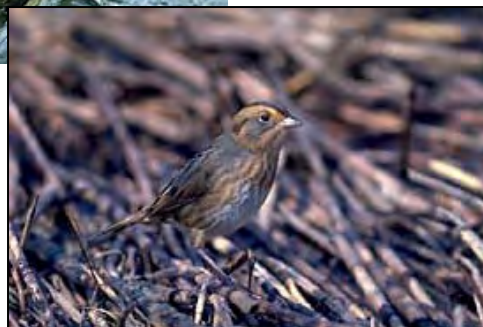
Bald Eagle
Tier II



Peregrine falcon
Tier I



Black-throated green warbler
Tier I



Saltmarsh sharp-tailed sparrow
Tier II



Yellow-crowned night heron
Tier III



Ovenbird – Tier IV



Prothonotary and 10 other warblers
Tier IV

Northern Piedmont Species of Greatest Conservation Need



Wood turtle Tier I



Spotted turtle Tier III



Scarletsnake Tier IV



Eastern box turtle Tier III



Eastern hog-nose
snake Tier IV

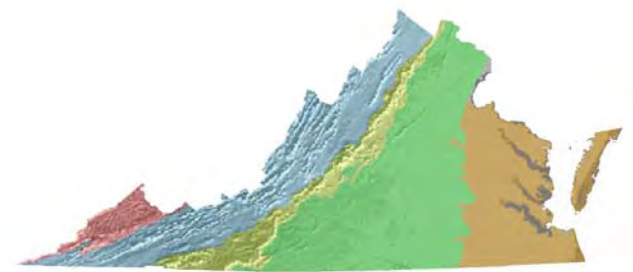
Habitat Assessment

- Broad Habitat Assessment

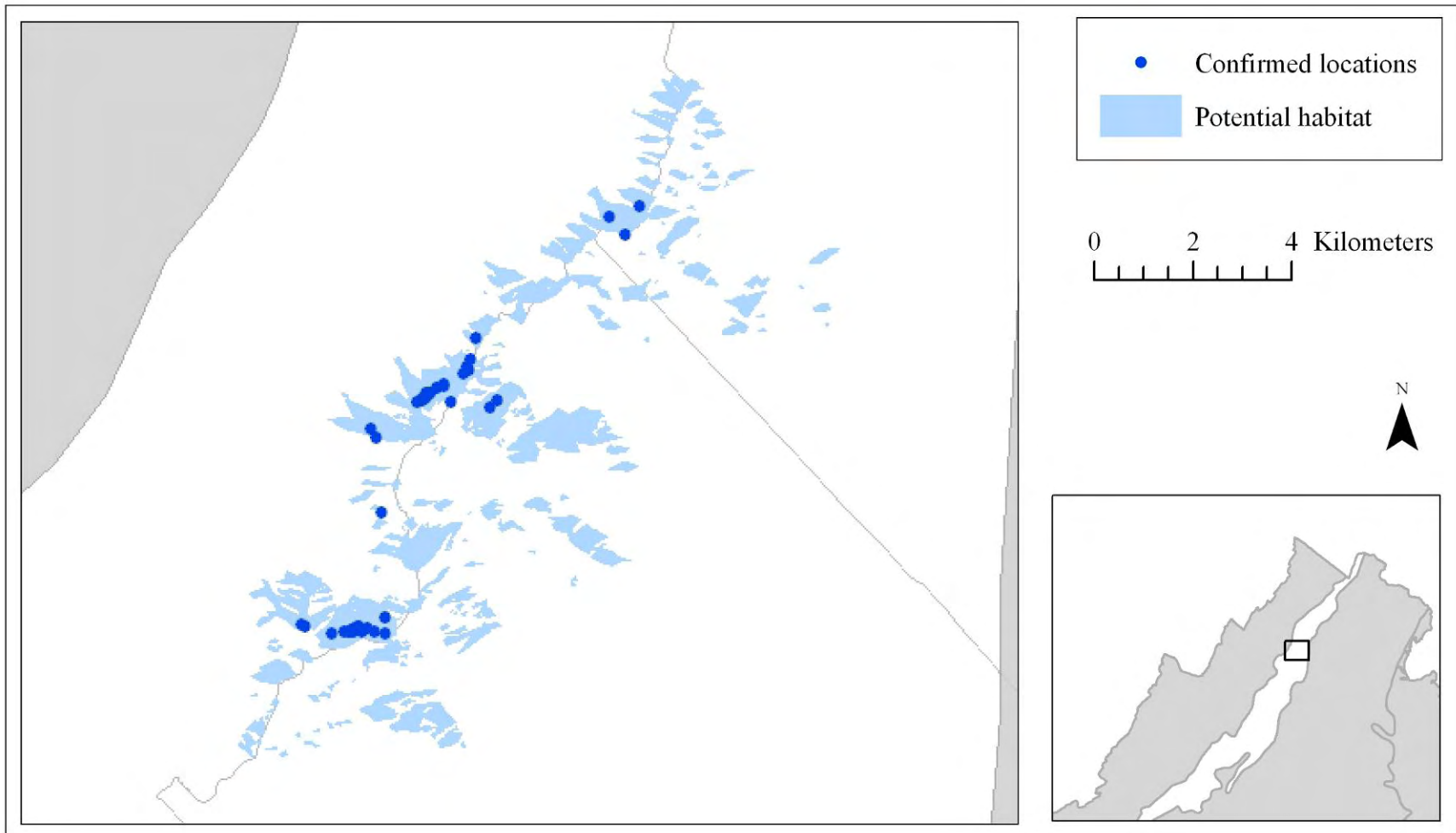
- Statewide terrestrial, aquatic, and subterranean habitats, their locations, and their condition

- Species of Greatest Conservation Need (SGCN) Habitat Assessment

- Identified general habitat needs for all SGCN species
- Created detailed maps of Tier I species habitats modeled from best available information



Terrestrial species distribution map **Shenandoah salamander**





Conservation Opportunities

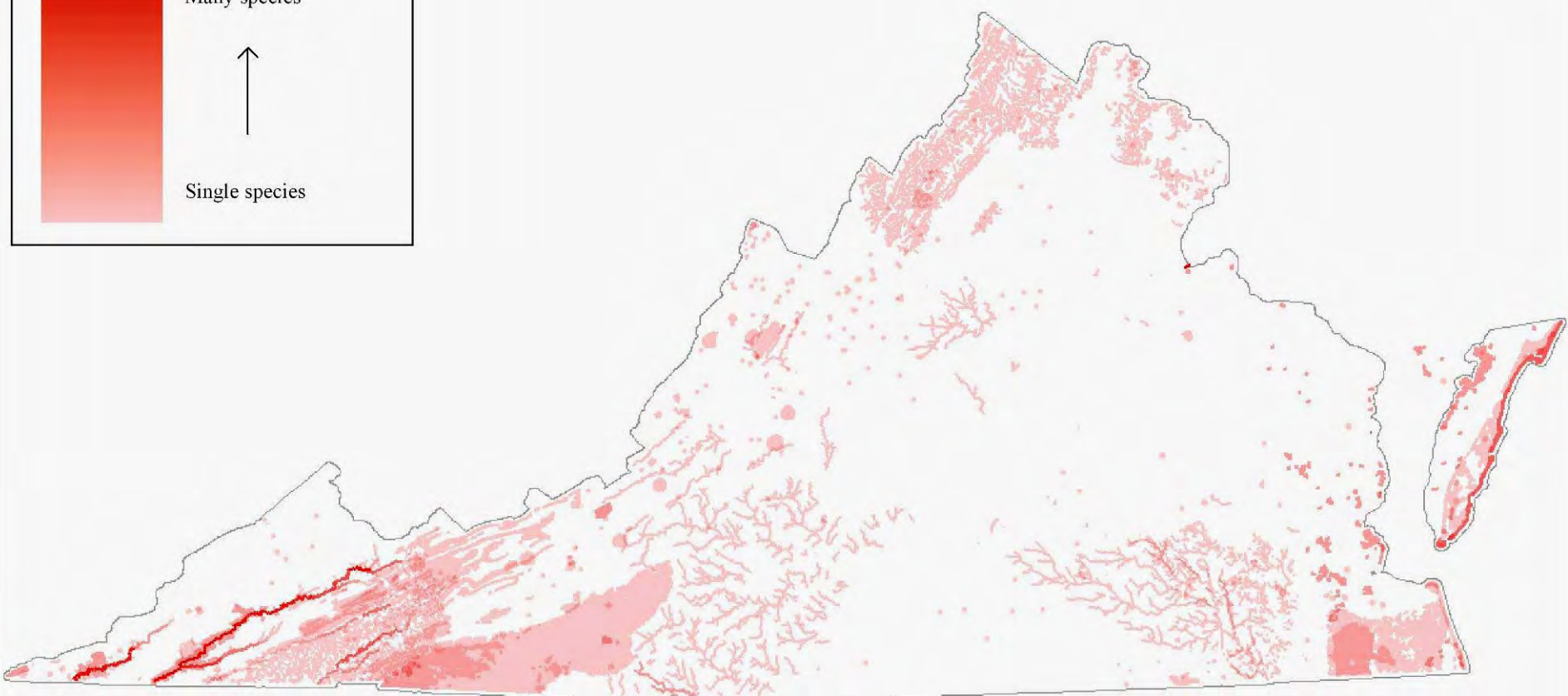
Potential and Confirmed Habitat for Tier I Species in Virginia



Many species



Single species



Potential and Confirmed Habitat for Tier I Species in Virginia



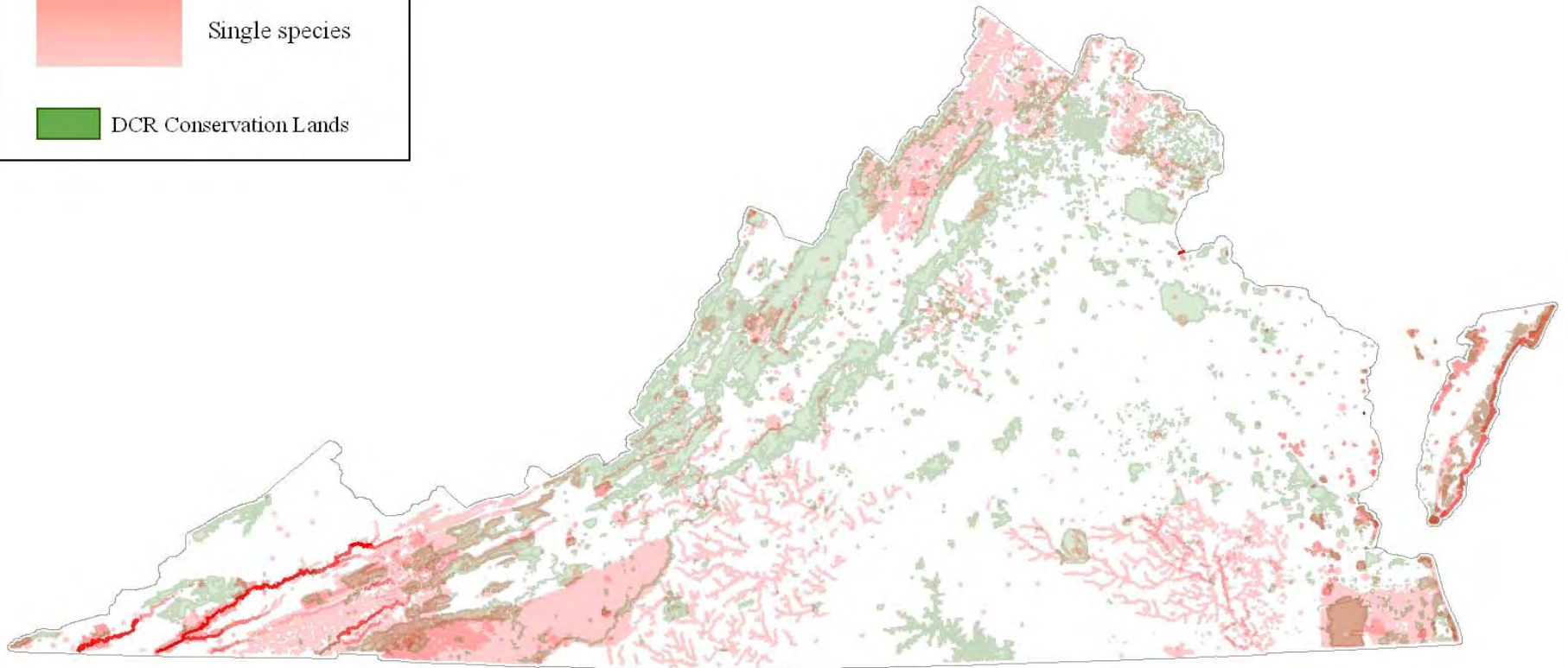
Many species



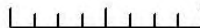
Single species

DCR Conservation Lands

Land Conservation Opportunities



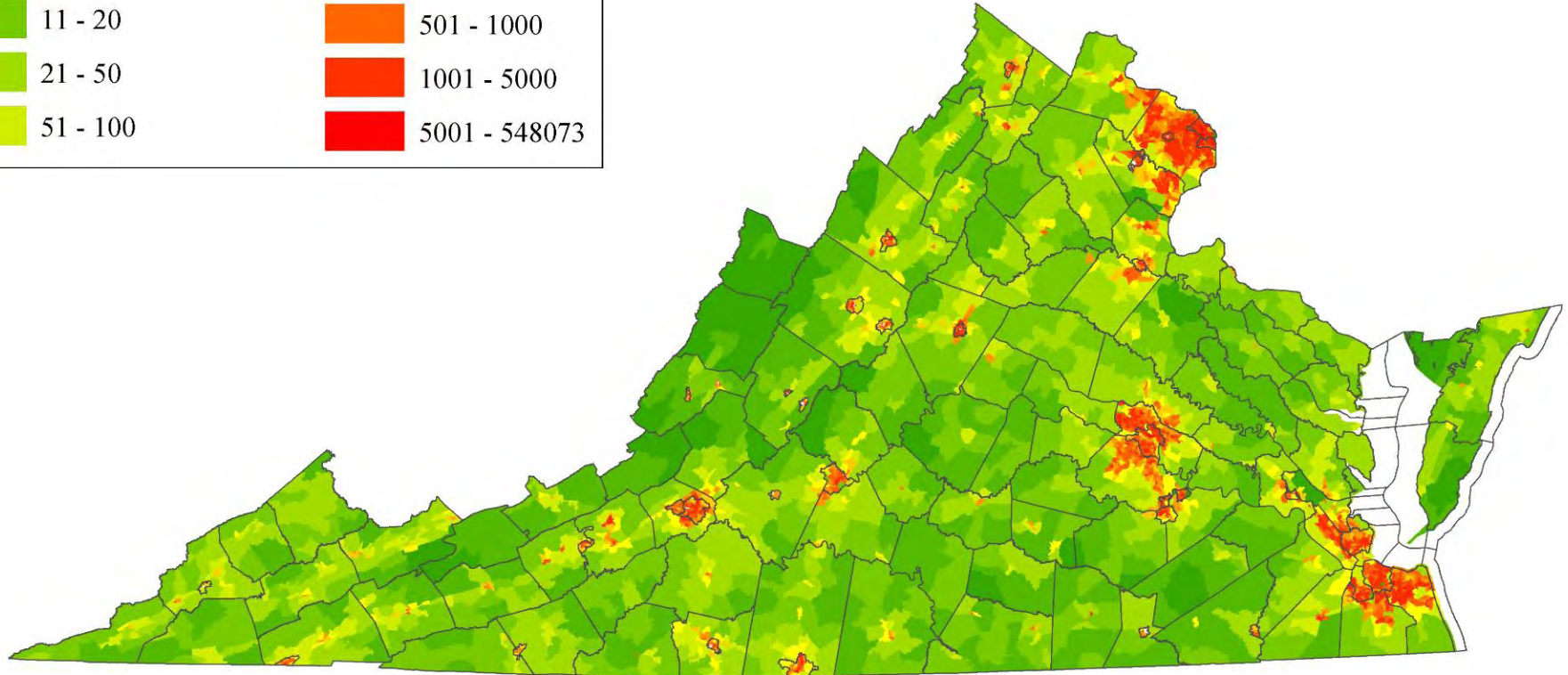
0 40 80 Kilometers



Human Population Density

(from 2000 census block groups)

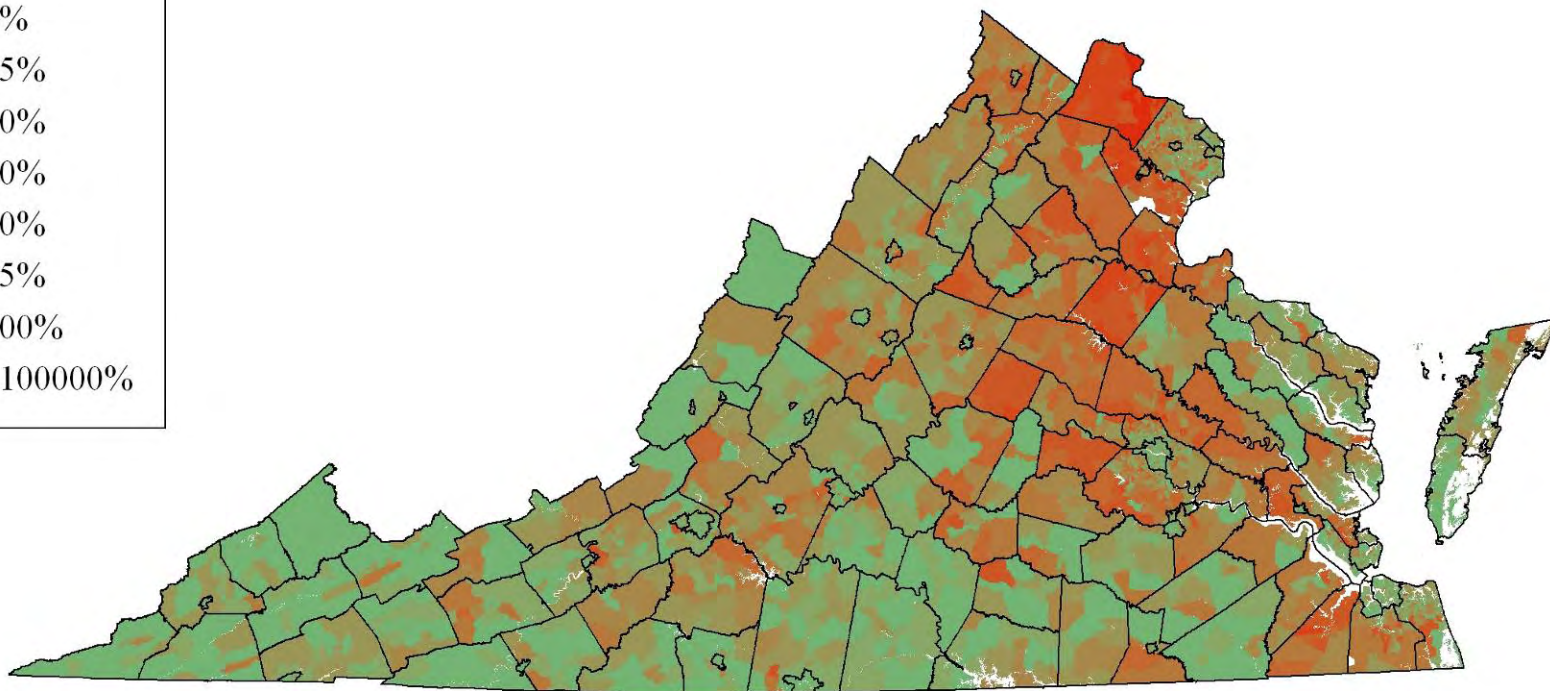
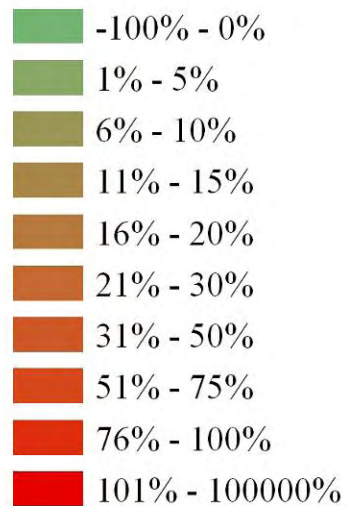
People per Square Kilometer



Predicted % Change in Population

(from 2000 to 2009)

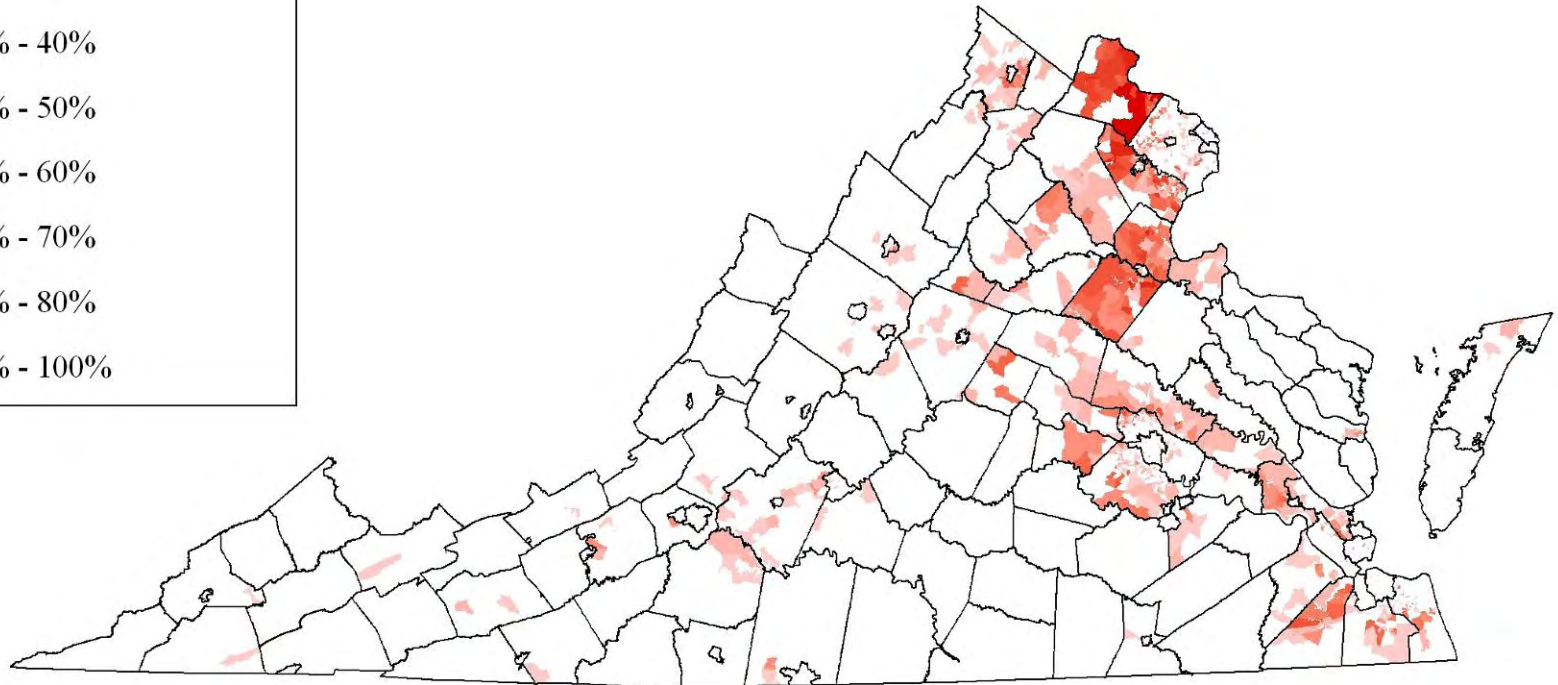
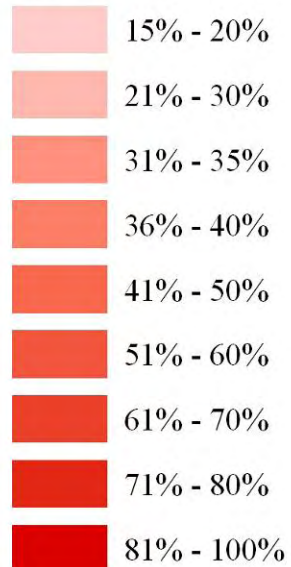
Percent Increase



0 90 180 Kilometers

High Impact Growth Areas

Predicted Increase 2000 - 2009



0 80 160 Kilometers

A scale bar showing distances in kilometers. It is marked with 0, 80, and 160 kilometers. The bar is divided into segments of 20 kilometers each.



Problems Facing Wildlife

- Greatest threats to terrestrial species state-wide are related to **habitat destruction or fragmentation**, including development and some agricultural and forestry practices.
- Greatest threats to aquatic species state-wide are related to **water and habitat quality**, including pollution and sedimentation, from development and some industrial, agricultural, and forestry practices.



Conservation Actions

■ **Coordination**

- Share data with local land trusts to help them implement Plan priorities

■ **Education and Outreach**

- Educate local planners & developers – water quality, green space and stormwater management

■ **Enforcement**

- Improve enforcement & prosecution of wildlife laws

■ **Habitat Management**

- Conserve, restore, and create important habitats and buffers

■ **Land Protection**

- Continue or improve conservation easement programs
- Preserve high elevation habitat

■ **Planning**

- Improve land use planning in urban, forestry, agricultural uses

■ **Regulations, Policy and Law**

- Establish permanent dedicated funding for conservation

■ **Species Management**

- Control overabundant native species, exotic/invasive species

Bottom Line

Unless habitats and functional ecosystems are conserved, wildlife populations will continue to decline.

Wildlife and native habitat will be conserved only if society determines they are **VALUABLE!**



Virginia Success Stories – SWG



Restoration of freshwater mussels in SW Virginia



Eradication of invasive exotic zebra mussels



Identification and conservation of important areas for birds



Acquisition of important habitat in the “Green Sea”



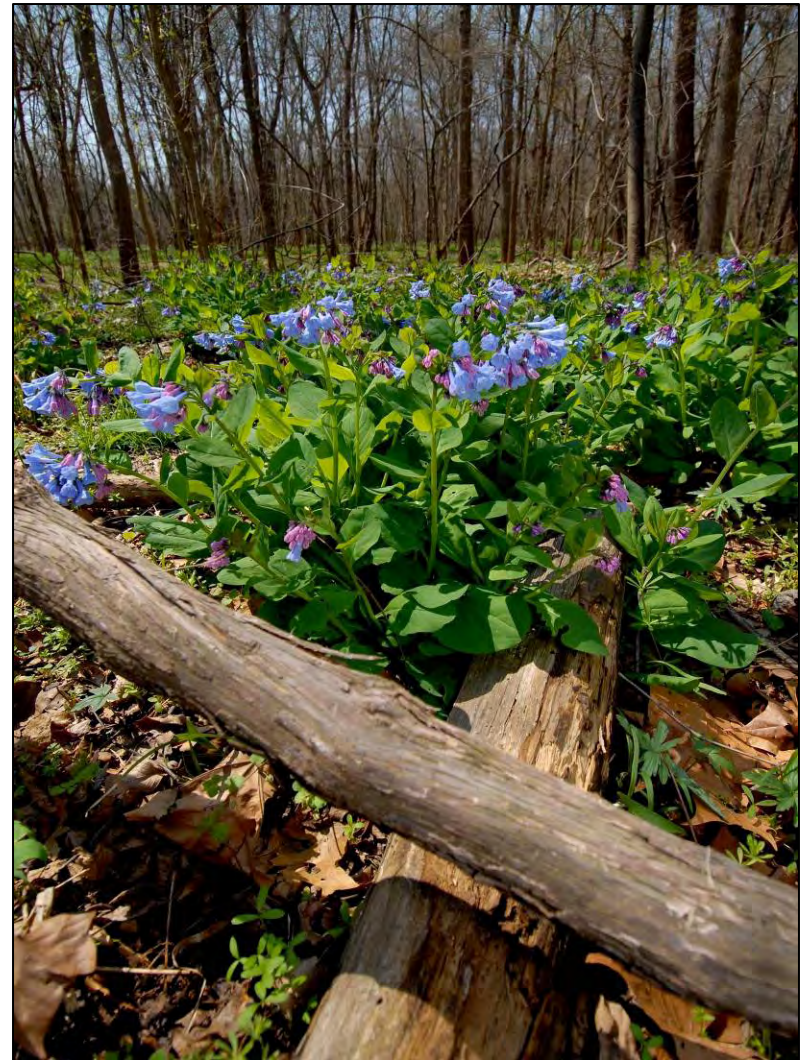
Importance of DoD Lands

“The 25 million acres managed by the DoD are home to more federally listed species and imperiled species than any other federal lands, including even national parks and national wildlife refuges.”

NatureServe 2004

Recent Success With DoD

- Acquisition of Merrimac Farm
- Within Quantico MCB's Encroachment Buffer
- DoD, DGIF and local partners
- 302 acres of native habitats conserved in the Washington DC area



Other DoD Opportunities



- Canebrake Rattlesnake conservation – Northwest Naval Base
- Land Conservation opportunities – Fort Pickett and Fort A.P. Hill
- Resource Coordination – Fort A.P. Hill

New Efforts

- Climate Change Strategies
- Expanded Species & Habitat Mapping
 - Support habitat conservation
- Regional Priorities and Opportunities
 - Including DoD



Keeping INRMPs Current



Keeping INRMPs Current: INRMP Reviews and Metrics





Keeping INRMPs Current



INRMP Reviews: Sikes Act Requirement

- Reviewed as to “operation and effect”
- Occurs on a regular basis
- Not less often than every 5 years
- If determined adequate, no revision needed





Keeping INRMPs Current



INRMP Reviews: DoD Policy and Guidance

- Requires INRMP review annually
- Conducted in cooperation with other parties
 - Outcome should be documented
 - Mutual agreement achieved



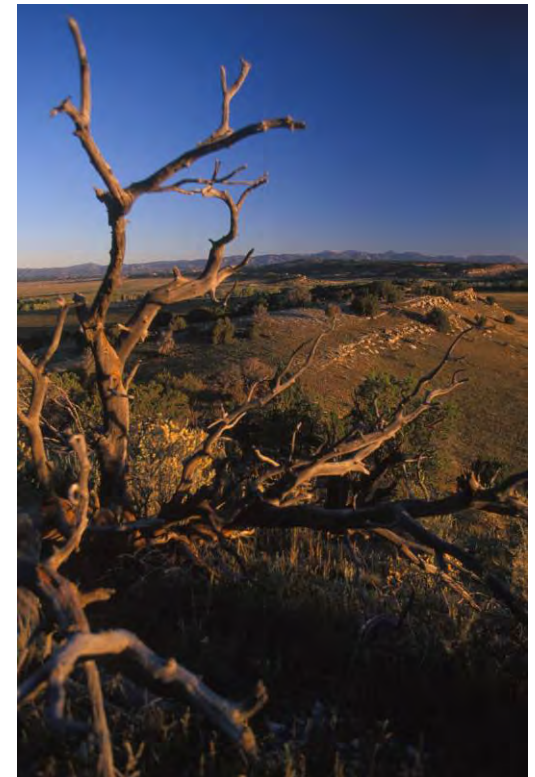


Keeping INRMPs Current



Annual Reviews and Adaptive Management

- Reviews facilitate adaptive management
- Opportunity to review goals and objectives
- Realistic schedule can be established





Keeping INRMPs Current



Usefulness of Annual Reviews

- Developing ex parte reports
 - Reports required under Sikes Act
 - IPR, EMR, MOMs, etc.
 - Annual Report to Congress
- Expedite 5-year reviews





Keeping INRMPs Current



DoD Measures of Merits (MOMs)

- Established to meet reporting requirements
- Reported at each conservation IPR
- Reported in Annual Report to Congress





Keeping INRMPs Current



General Metrics Development Guidelines

- Keep it simple
- Utilize readily available information
- Do it fast
- Make it meaningful



Defense Environmental Programs



Fiscal Year
2007

Annual Report to Congress



Annual Report to Congress Details:

- Funds Spent on INRMPs
- Year INRMP Completed & Projected Revision
- Has INRMP been Coordinated with FWS & State Y/N
- Does the INRMP have a Project List Y/N

Figure G-15
Navy FY2006 Sites Act Reporting²

Installation Name	State	Year Most Recent INRMP Completed	Meets Requirements	\$ Spent in FY2006 to Implement INRMP	Coordinated with FWS & State	Current List of Projects	Next INRMP Due
Y = Complete; N = Not Complete, but Required; N/A = Not Applicable							
Navy							
Naval Observatory Flagstaff	AZ	2002	Y	\$89,000	Y	Y	2007
Naval Air Facility El Centro	CA	2001	Y	\$0	Y	Y	2008
Naval Air Station Lemoore	CA	2002	Y	\$42,568	Y	Y	2007
Naval Air Weapons Station China Lake	CA	2002	Y	\$228,436	Y	Y	2007
Coronado Complex	CA	2002	Y	\$532,707	Y	Y	2007
Naval Auxiliary Landing Field San Clemente Island	CA	2002	Y	\$3,147,001	Y	Y	2007
Naval Base Ventura County (Point Mugu)	CA	2002	Y	\$531,823	Y	Y	2007
Naval Construction Battalion Center Port Hueneme	CA	2002	Y	\$10,000	Y	Y	2007
Naval Medical Center San Diego	CA	2002	Y	\$0	Y	Y	2007
Naval Postgraduate School Monterey	CA	2002	Y	\$11,176	Y	Y	2007
Naval Station San Diego	CA	2002	Y	\$42,488	Y	Y	2007
Naval Supply Center Fuel Depot, San Pedro	CA	2002	Y	\$0	Y	Y	2007
Naval Transmitting Facility Dixon	CA	2003	Y	\$0	Y	Y	2008
Naval Warfare Assessment Station Corona	CA	2005	Y	\$0	Y	Y	2010
Naval Weapons Station Fallbrook Annex	CA	2008	Y	\$0	Y	Y	2011
Naval Weapons Station Seal Beach	CA	2001	Y	\$14,070	Y	Y	2008

Figure G-13
Amount Spent on INRMPs in FY2006 by Component

DoD Component	Total
Army	\$71,771,603
Navy	\$8,871,429
Marine Corps	\$12,197,370
Air Force	\$24,154,540
DLA	\$220,000
Total	\$117,214,942



Installation Name	State	Year Most Recent INRMP Completed	Meets Requirements	\$ Spent in FY2006 to Implement INRMP	Coordinated with FWS & State	Current List of Projects	Next INRMP Due
Y = Complete; N = Not Complete, but Required; N/A = Not Applicable							
Navy							
Naval Observatory Flagstaff	AZ	2002	Y	\$89,000	Y	Y	2007
Naval Air Facility El Centro	CA	2001	Y	\$0	Y	Y	2006
Naval Air Station Lemoore	CA	2002	Y	\$42,568	Y	Y	2007
Naval Air Weapons Station China Lake	CA	2002	Y	\$228,435	Y	Y	2007
Coronado Complex	CA	2002	Y	\$532,707	Y	Y	2007
Naval Auxiliary Landing Field San Clemente Island	CA	2002	Y	\$3,147,001	Y	Y	2007
Naval Base Ventura County (Point Mugu)	CA	2002	Y	\$531,623	Y	Y	2007
Naval Construction Battalion Center Port Hueneme	CA	2002	Y	\$10,000	Y	Y	2007
Naval Medical Center San Diego	CA	2002	Y	\$0	Y	Y	2007
Naval Postgraduate School Monterey	CA	2002	Y	\$11,175	Y	Y	2007
Naval Station San Diego	CA	2002	Y	\$42,486	Y	Y	2007
Naval Supply Center Fuel Depot, San Pedro	CA	2002	Y	\$0	Y	Y	2007
Naval Transmitting Facility Dixon	CA	2003	Y	\$0	Y	Y	2008
Naval Warfare Assessment Station Corona	CA	2005	Y	\$0	Y	Y	2010
Naval Weapons Station Fallbrook Annex	CA	2006	Y	\$0	Y	Y	2011
Naval Weapons Station Seal Beach	CA	2001	Y	\$14,070	Y	Y	2006
Naval Weapons Station Seal Beach, Det. Concord	CA	2005	Y	\$0	Y	Y	2010
Outlying Field San Nicolas Island	CA	2006	Y	\$0	Y	Y	2011
Point Loma Complex	CA	2002	Y	\$173,254	Y	Y	2007
San Diego Bay INRMP	CA	2002	Y	\$0	Y	Y	2007
Naval Submarine Base New London	CT	2004	Y	\$0	Y	Y	2009



Keeping INRMPs Current



DASN(E) Task: Develop Metrics

- Assess conservation program impacts on mission
- Indicate successfulness of partnerships





Keeping INRMPs Current



Methodology

- Meeting of NR managers and partners
- Purpose:
 - Determine important focus areas
 - Determine criteria
 - Develop measuring/rating system
 - Develop annual process



			FOCUS AREAS					
Installation Name		State						
1.	Annapolis, USNA	MD						
2.	Bangor, NSB	WA						
3.	Barking Sands, PMRF	HI						
4.	Bayview Det., Carderock NSWC	ID						
5.	Boardman, NWSTF	OR						
6.	Bremerton, NAVHOSP	WA						
7.	Brownfield, NNSOC	CA						
8.	Brunswick, NAS	ME						
9.	Carderock, NSWC	MD						
10.	Charleston, NWS	SC						
11.	Chesapeake Bay Det., NRL	MD						
12.	China Lake, NAWS	CA						
13.	Coastal Systems Station Panama City,	FL						
14.	Concord Det., NWS Seal Beach	CA						
15.	Corona, NNAS	CA						
16.	Coronado, Naval Base Complex	CA						
17.	Corpus Christi, NAS	TX						
18.	Crane, NSWC	IN						
19.	Dahlgren, NSWC	VA						
20.	Dam Neck, FCTCLANT	VA						
21.	Dixon, NRTF	CA						
22.	Earle, NWS	NJ						
23.	El Centro, NAF	CA						
24.	Elephant Butte, NNSOC	NM						
25.	Everett, NAVSTA	WA						
26.	Fallbrook Det., NWS Seal Beach	CA						
27.	Fallon, NAS	NV						
28.	Flagstaff, NAVOBSY	AZ						
29.	Ft Worth, NAS JRB	TX						
30.	Gila River, NNSOC	AZ						
31.	Great Lakes, NTC	IL						
32.	Guam, COMNAVMARIANAS	GU						
33.	Gulfport, NCBC	MS						
34.	Harvey Point, DTA	NC						
35.	Indian Head, NSWC	MD						
36.	Indian Island, NAVMAG	WA						
37.	Ingleside, NAVSTA	TX						
38.	Jacksonville, FISC	FL						
39.	Jacksonville, NAS	FL						
40.	Jim Creek, NAVRADSTA (T)	WA						

Keeping INRMPs Current



Installation Name	State	FOCUS AREAS				
1. Annapolis, USNA	MD					
2. Bangor, NSB	WA					
3. Barking Sands, PMRF	HI					
4. Bayview Det., Carderock NSWC	ID					
5. Boardman, NWSTF	OR					
6. Bremerton, NAVHOSP	WA					
7. Brownfield, NNSOC	CA					
8. Brunswick, NAS	ME					
9. Carderock, NSWC	MD					
10. Charleston, NWS	SC					
11. Chesapeake Bay Det., NRL	MD					
12. China Lake, NAWAS	CA					
13. Coastal Systems Station Panama City,	FL					
14. Concord Det., NWS Seal Beach	CA					
15. Corona, NNAS	CA					
16. Coronado, Naval Base Complex	CA					
17. Corpus Christi, NAS	TX					
18. Crane, NSWC	IN					
19. Dahlgren, NSWC	VA					
20. Dam Neck, FCTCLANT	VA					
21. Dixon, NRTF	CA					
22. Earle, NWS	NJ					
23. El Centro, NAF	CA					
24. Elephant Butte, NNSOC	NM					
25. Everett, NAVSTA	WA					
26. Fallbrook Det., NWS Seal Beach	CA					
27. Fallon, NAS	NV					
28. Flagstaff, NAVOBSY	AZ					
29. Ft Worth, NAS JRB	TX					
30. Gila River, NNSOC	AZ					
31. Great Lakes, NTC	IL					
32. Guam, COMNAVMARIANAS	GU					
33. Gulfport, NCBC	MS					
34. Harvey Point, DTA	NC					
35. Indian Head, NSWC	MD					
36. Indian Island, NAVMAG	WA					
37. Ingleside, NAVSTA	TX					
38. Jacksonville, FISC	FL					
39. Jacksonville, NAS	FL					
40. Jim Creek, NAVRADSTA (T)	WA					

https://www.denix.osd.mil/denix/Public/News/OSD/DEP2005/appH-sikes.pdf - Microsoft Internet Explorer provided by Navy Marine Co

Address: https://www.denix.osd.mil/denix/Public/News/OSD/DEP2005/appH-sikes.pdf

Figure H-2
FY2005 Sikes Act Reporting Data by Installation

Installation Name	State	Year Most Recent INRMP Completed	Meets Requirements	\$ Spent in FY05 to Implement INRMP	Coordinated with FWS & State	Current List of Projects	Next INRMP Due
Y = Complete, N = Not Complete, but Required, N/A = Not Applicable							
NAVY							
Naval Observatory Flagstaff	AZ	2002	Y	\$0	Y	Y	2007
Naval Air Facility El Centro	CA	2001	Y	\$114,315	Y	Y	2006
Naval Air Station Lemoore	CA	2002	Y	\$46,812	Y	Y	2007
Naval Air Weapons Station China Lake	CA	2002	Y	\$247,057	Y	Y	2007
Coronado Complex	CA	2002	Y	\$391,045	Y	N	2007
Naval Auxiliary Landing Field San Clemente Island	CA	2002	Y	\$2,616,153	Y	Y	2007
Naval Base Ventura County (Point Mugu)	CA	2002	Y	\$533,157	Y	Y	2007
Naval Construction Battalion Center Port Hueneme	CA	2002	Y	\$0	Y	Y	2007
Naval Medical Center San Diego	CA	2002	Y	\$0	Y	Y	2007
Naval Postgraduate School Monterey	CA	2002	Y	\$36,000	Y	Y	2007
Naval Station San Diego	CA	2002	Y	\$269,369	Y	Y	2007
Naval Supply Center Fuel Depot, San Pedro	CA	2002	Y	\$0	N	N	2007
Naval Transmitting Facility Dixon	CA	2002	Y	\$0	Y	Y	2007

11 x 8.5 in | 10 of 21

• Note the similarities



Keeping INRMPs Current



Focus Areas

- INRMP Implementation
- Partnership/Cooperation and Effectiveness
- Team Adequacy
- INRMP Impact on Installation Mission





Keeping INRMPs Current




Focus Areas (continued)

- Status of Federally Listed Species and CH
- Ecosystem Integrity
- Fish & Wildlife Management and Public Use



<u>ASSESSMENT OF INRMP PROJECT IMPLEMENTATION</u>	<u>ASSESSMENT OF LISTED SPECIES AND CRITICAL HABITAT</u>	<u>ASSESSMENT OF PARTNERSHIP EFFECTIVENESS</u>	<u>ASSESSMENT OF FISH AND WILDLIFE MANAGEMENT AND PUBLIC USE</u>	<u>ASSESSMENT OF TEAM ADEQUACY</u>	<u>ASSESSMENT OF ECOSYSTEM INTEGRITY</u>	<u>ASSESSMENT OF INRMP IMPACT ON INSTALLATION MISSION</u>
IS THE PROJECT IN EPR Web? (Y/N)	IS SPECIES HABITAT MAPPED ON GIS?	SUPPORTS FWS REGIONAL EFFORTS	ARE SUSTAINABLE HARVEST GOALS EFFECTIVE?	IS THERE AN ON-SITE PROFESSIONAL NRM?	GENERAL TEAM CONSENSUS OF OVERALL HABITAT TYPE INTEGRITY	HAS COORDINATION BETWEEN NR STAFF AND OPERATORS BEEN SUCCESSFUL/EFFECTIVE?
WAS THE PROJECT INCLUDED IN THE POM?	TO WHAT EXTENT DO INRMP PROJECTS AND PROGRAMS PROVIDE A BENEFIT TO SPECIES?	SUPPORTS STATE CONSERVATION PLANS	AVAILABILITY OF PUBLIC RECREATIONAL OPPORTUNITIES	IS THERE AN ADEQUATE NR TEAM?	STATUS OF HABITAT INDICATORS	TO WHAT LEVEL DO NR COMPLIANCE REQUIREMENTS ENHANCE THE INSTALLATION MISSION?
HAS PROJECT FUNDING BEEN RECEIVED?	TO WHAT DEGREE HAVE LISTED LISTED, POPOSED, AND CANDIDATE PROJECTS BEEN FUNDED?	SUPPORT OF OTHER CONSERVATION INITIATIVES	WAS PUBLIC OUTREACH PROVIDED?	IS CONTRACTOR SUPPORT ADEQUATELY UTILIZED	SPECIFIC STUDY RESULTS	HAS THERE BEEN A NET LOSS OF TRAINING LANDS?
WHAT PERCENT OF INRMP PROJECT GOALS & OBJECTIVES HAVE BEEN MET?	DO SPECIES SURVEYS PROVIDE ADEQUATE DATA HABITAT CONDITIONS?	IS THERE ADEQUATE COLLABORATION BETWEEN PARTNERS?		IS FWS AND STATE SUPPORT ADEQUATE?	HABITAT CONVERSION BENEFITS	DOES THE INRMP PROCESS ADEQUATELY ADDRESS CURRENT MISSION REQMNTS?
USE OF CREATIVE ALTRNATIVES FOR PROJECT FUNDING	DO SPECIES SURVEYS PROVIDE ADEQUATE DATA ON POPULATION NUMBERS AND TRENDS?	IS THERE SATISFACTORY COOPERATION BETWEEN PARTNERS?		IS NAVFAC & REGIONAL SUPPORT TRAINED / ADEQUATELY UTILIZED?	HABITAT RESTORATION ACCOMPLISHED	
IS PROJECT ACCOMPLISHMENT ON SCHEDULE?	HOW WELL ARE FWS SPECIES BENEFIT RECOMMENDATIONS BEING MET?	IS NR PROGRAM EXECUTION MEETING FWS AND STATE EXPECTATIONS?		IS THE FWS/STATE/NAVY TEAM EFFECTIVE?		

			Impact on Military Mission	INRMP Implementation	Status of Fed. Listed Spp.	Team Adequacy	Ecosystem Integrety	Partnership Coop. & Effectiveness	F&W MGT and Public Use
	Installation Name	State							
1.	Annapolis, USNA	MD							
2.	Bangor, NSB	WA							
3.	Barking Sands, PMRF	HI							
4.	Bayview Det., Carderock NSWC	ID							
5.	Boardman, NWSTF	OR							
7.	Brownfield, NNSOC	CA							
8.	Brunswick, NAS	ME							
9.	Carderock, NSWC	MD							
10.	Charleston, NWS	SC							
11.	Chesapeake Bay Det., NRL	MD							
12.	China Lake, NAWS	CA							
13.	Coastal Systems Station Panama City,	FL							
14.	Concord Det., NWS Seal Beach	CA							
15.	Corona, NNAS	CA							
16.	Coronado, Naval Base Complex	CA							
17.	Corpus Christi, NAS	TX							
18.	Crane, NSWC	IN							
19.	Dahlgren, NSWC	VA							
20.	Dam Neck, FCTCLANT	VA							
21.	Dixon, NRTF	CA							
22.	Earle, NWS	NJ							
23.	El Centro, NAF	CA							
24.	Elephant Butte, NNSOC	NM							
25.	Everett, NAVSTA	WA							
26.	Fallbrook Det., NWS Seal Beach	CA							
27.	Fallon, NAS	NV							
28.	Flagstaff, NAVOBSY	AZ							
29.	Ft Worth, NAS JRB	TX							
30.	Gila River, NNSOC	AZ							
31.	Great Lakes, NTC	IL							
32.	Guam, COMNAV/MARIANAS	GU							
33.	Gulfport, NCBC	MS							
34.	Harvey Point, DTA	NC							
35.	Indian Head, NSWC	MD							
36.	Indian Island, NAVMAG	WA							
37.	Ingleside, NAVSTA	TX							
38.	Jacksonville, FISC	FL							
39.	Jacksonville, NAS	FL							
40.	Jim Creek NAVRADSTA (T)	WA							



Keeping INRMPs Current



Annapolis, USNA: INRMP Implementation

- Rating/Score:
- Findings:
 - Several Class 1 Projects not funded
 - Incomplete proposal submissions
- Recommendation(s):
 - Properly submitted proposals for unfunded projects



Keeping INRMPs Current



Annapolis, USNA: Team Adequacy

- Rating/Score: ██████████
- Findings:
 - NR Manager position remains open
- Recommendation(s):
 - Fill the NR Manager vacancy

Keeping INRMPs Current



Metric Builder Provides Feedback to Leadership

- Natural resources management impacts on mission
- Relationship with FWS and State partners
- Health of Navy Natural Resources Program
- Status of INRMP Implementation



Keeping INRMPs Current



Metric Builder as a Mechanism to:

- Accomplish INRMP annual reviews
- Cultivate the Relationship with partners
- Keep INRMPs Current



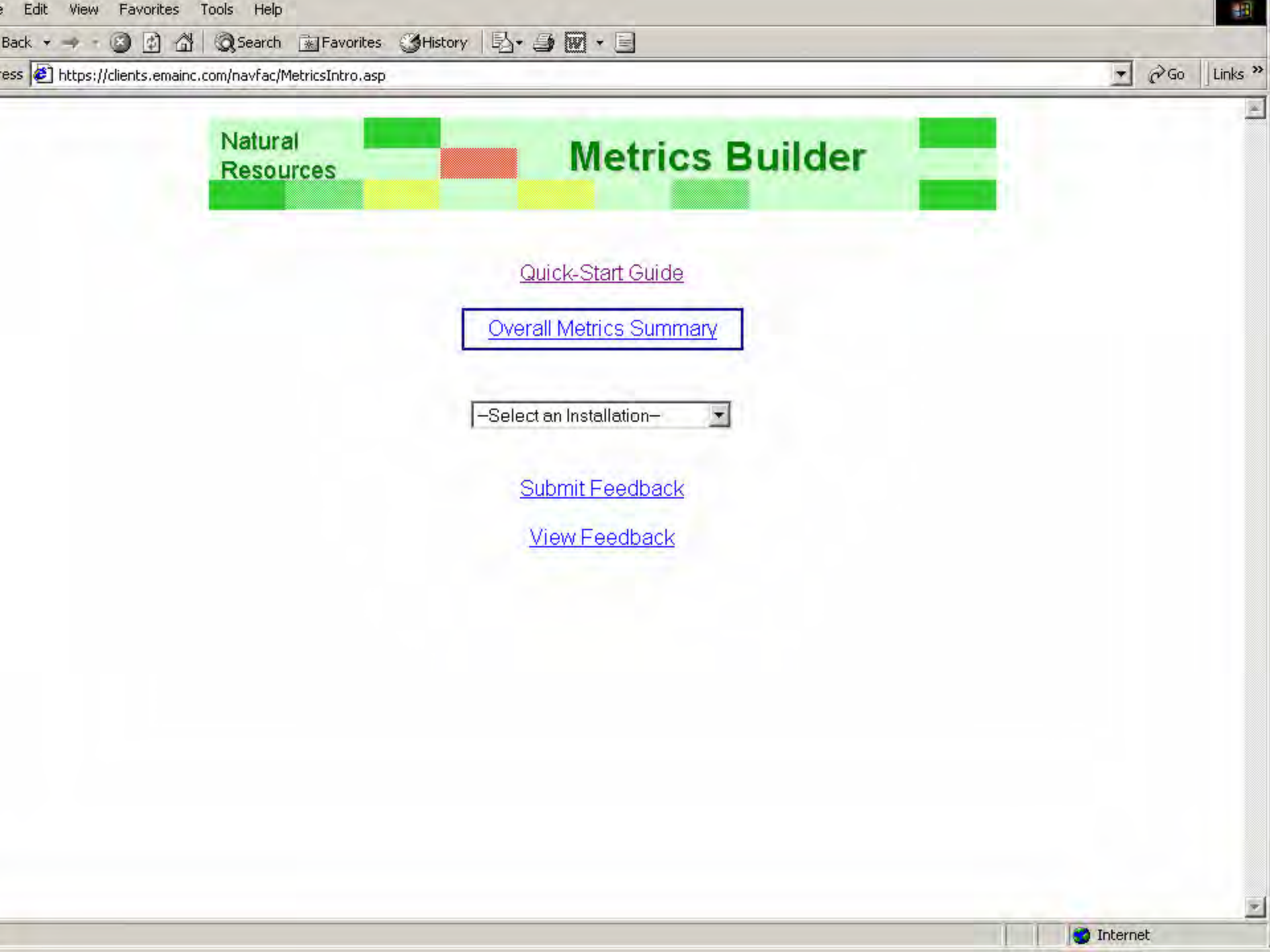


Keeping INRMPs Current



Metric Builder as a Mechanism to:

- Track INRMP project accomplishment
- Monitor habitat conditions
- Monitor endangered species recovery efforts



Natural
Resources

Metrics Builder

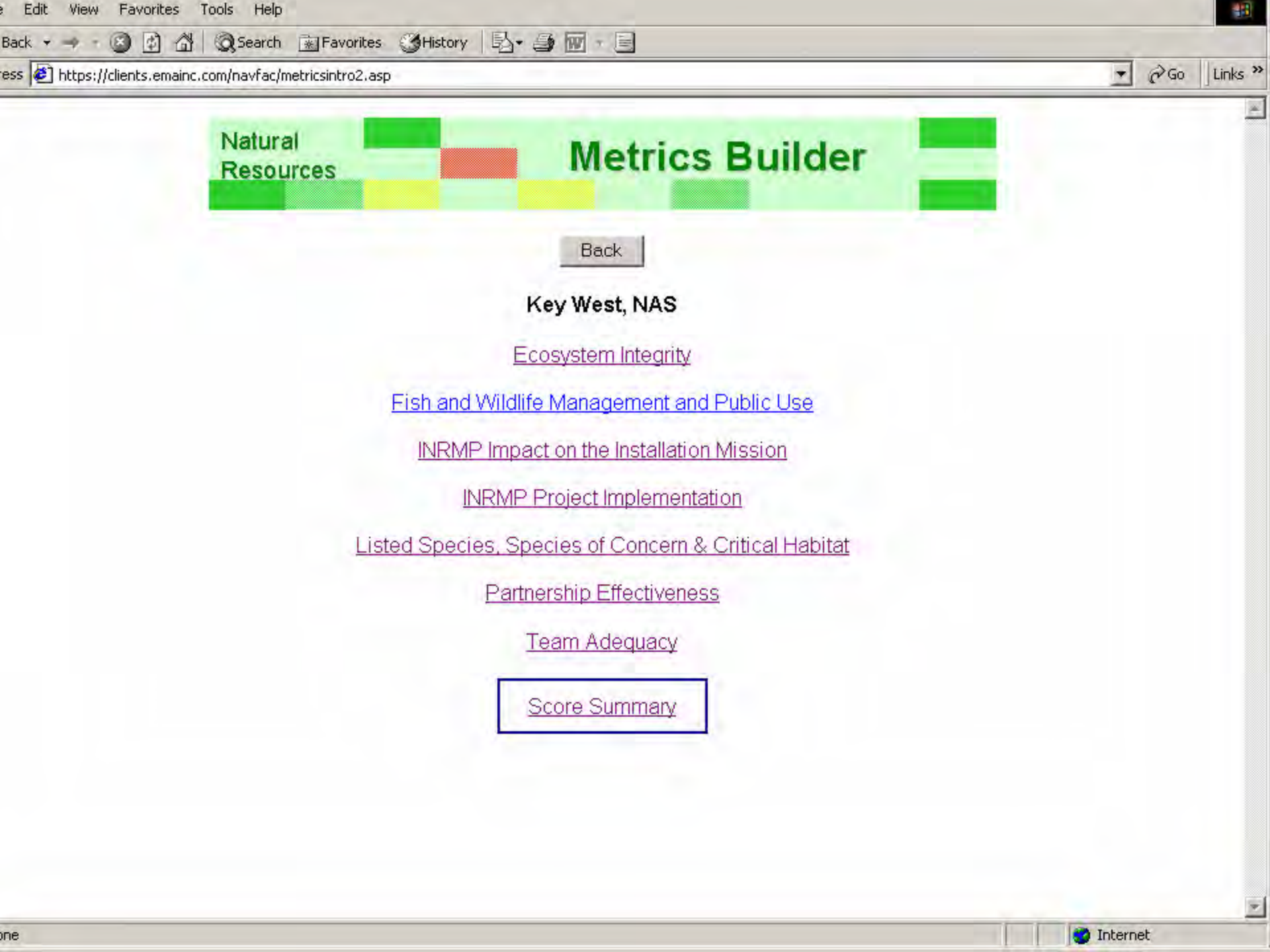
[Quick-Start Guide](#)

[Overall Metrics Summary](#)

-Select an Installation-

[Submit Feedback](#)

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Natural
Resources

Metrics Builder

Back

Key West, NAS

[Ecosystem Integrity](#)

[Fish and Wildlife Management and Public Use](#)

[INRMP Impact on the Installation Mission](#)

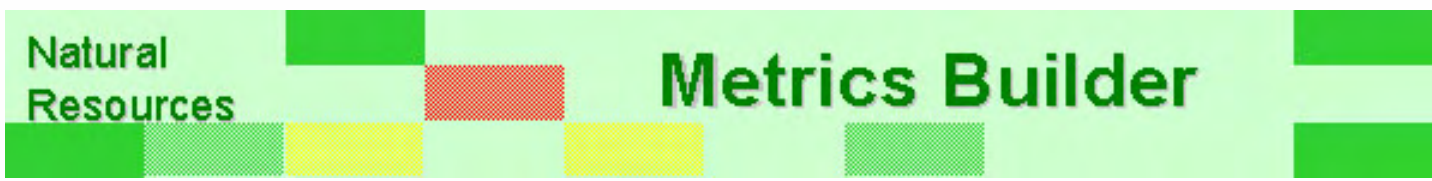
[INRMP Project Implementation](#)

[Listed Species, Species of Concern & Critical Habitat](#)

[Partnership Effectiveness](#)

[Team Adequacy](#)

[Score Summary](#)



FOCUS AREA: ASSESSMENT OF INRMP PROJECT IMPLEMENTATION
 Projects with POM06 Funding (snapshot from August 16, 2004)

Key West, NAS

Completed on 3/14/05 by Joe Hautzenroder
 Current Score: 0.48

[Back](#) [Findings](#) [Submit Scores](#)

[INRMP Revision Forecast](#)
 Year of Revision:

Project Name	Is the Project in the EPRWeb/CompTRAK? (Y/N)	Was this project included in the POM?	Use of Creative Alternative Resources for Project Accomplishment? (Y/N/NA)	Has Project Funding been Received? (0-4)	Percent of project goals and objectives met (0-4)	Is project accomplishment on schedule? (Y/N)
RMP No.10 Project EVALUATE WASH RABBIT POPULAT (Level 1)	<input type="text" value="Yes"/>	<input type="text" value="Yes"/>	<input type="text" value="NA"/>	<input type="text" value="0"/>	<input type="text" value="4"/>	<input type="text" value="No"/>
RMP No. 16 Project TRAINING (CONSERVATION) (Level 1)	<input type="text" value="Yes"/>	<input type="text" value="Yes"/>	<input type="text" value="NA"/>	<input type="text" value="3"/>	<input type="text" value="4"/>	<input type="text" value="No"/>
RMP No. 4 Project Shoreline Protection (Level 1) (Level 1)	<input type="text" value="Yes"/>	<input type="text" value="Yes"/>	<input type="text" value="NA"/>	<input type="text" value="0"/>	<input type="text" value="4"/>	<input type="text" value="No"/>
RMP No. 5b Project Long-term Monitoring of Ecological Diversity in Native Communities (Level 1) (Level 1)	<input type="text" value="Yes"/>	<input type="text" value="Yes"/>	<input type="text" value="NA"/>	<input type="text" value="0"/>	<input type="text" value="4"/>	<input type="text" value="No"/>

Project Name	Is the Project in the EPRWeb/ CompTRAK? (Y/N)	Was this project included in the POM?	Use of Creative Alternative Resources for Project Accomplishment? (Y/N/NA)	Has Project Funding been Received? (0-4)	Percent of project goals and objectives met (0-4)	Is project accomplishment on schedule? (Y/N)
RMP No.10 Project EVALUATE MARSH RABBIT POPULAT (Level 1)	Yes	Yes	NA	0	4	No
RMP No. 16 Project TRAINING (CONSERVATION) (Level 1)	Yes	Yes	NA	3	4	No
RMP No. 4 Project Shoreline Protection (Level 1) (Level 1)	Yes	Yes	NA	0	4	No
RMP No. 5b Project Long-term Monitoring Ecological Diversity in Native Plant Communities (Level 1) (Level 1)	Yes	Yes	NA	0	4	No
RMP No. 9a Project Endangered Lower Marsh Rabbits and Silver Rice Rat Population Surveys (Level 1) (Level 1)	Yes	Yes	NA	2	4	Yes
RMP No. 6a Project Invasive and Exotic Species Mapping (Level 1) (Level 1)	Yes	Yes	NA	0	4	No
RMP No. 9b Project Other Species of Special Concern Population Plan (Level 1) (Level 1)	Yes	Yes	NA	0	4	No
RMP No. 5b Project Long-term Monitoring Ecological Diversity in Native Plant Communities (Level 1) (Level 1)	Yes	Yes	NA	0	4	No
RMP No. 6a Project Invasive and Exotic Species Mapping (Level 1) (Level 1)	Yes	Yes	NA	0	4	No
RMP No. 9b Project Other Species of Special Concern Population Plan (Level 1) (Level 1)	Yes	Yes	NA	0	4	No

Resubmit

Score 0.62 Findings



Key West, NAS

Assessment of INRMP Project Implementation

Findings

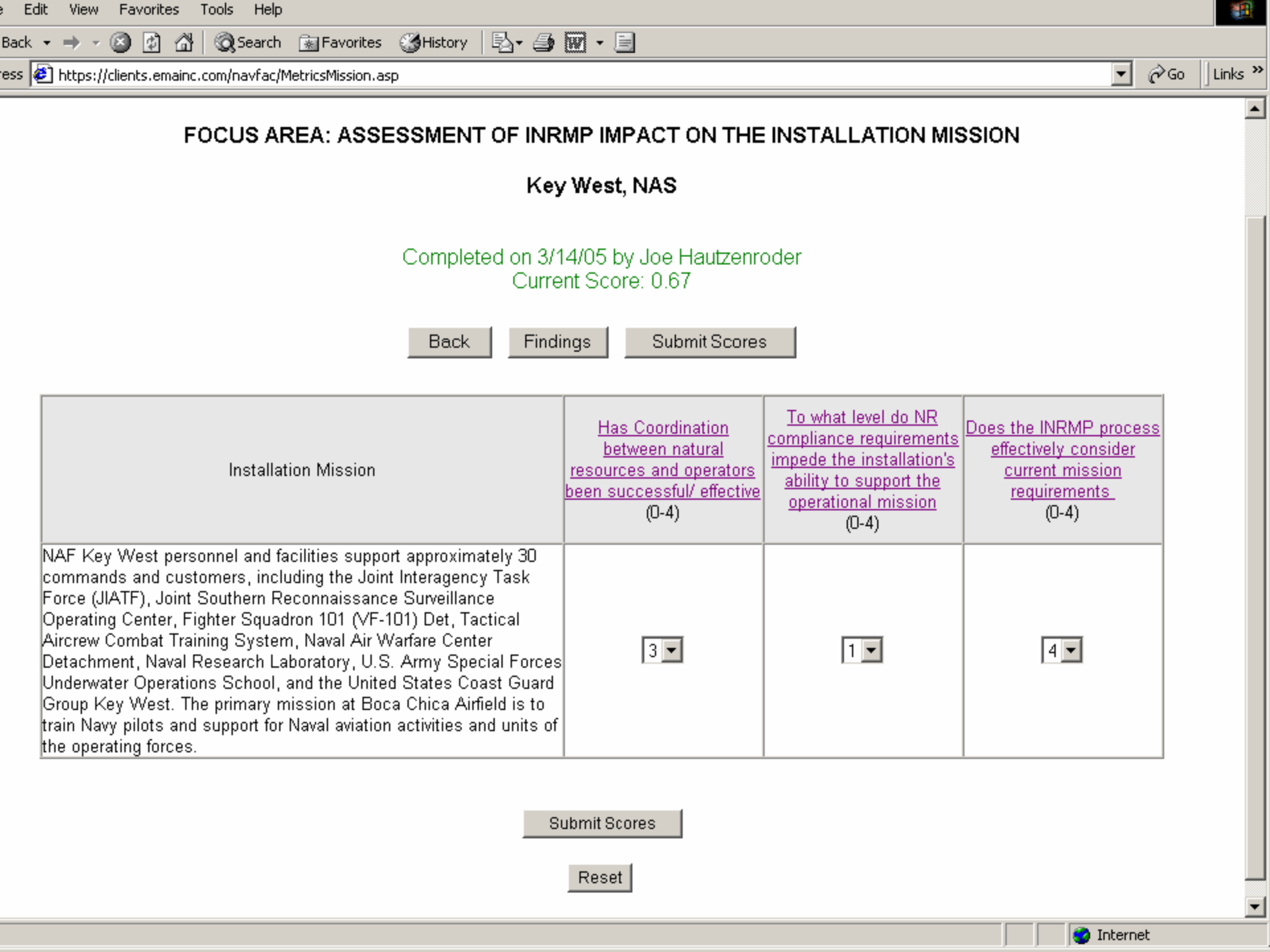
Funding was not received for projects, so the project schedule could not be met and stakeholder expectations were not satisfied.

Recommendation(s):

Ensure that projects are properly entered into the EPR Web and that the proposals are clearly linked to a statutory requirement.

Submit

Back



FOCUS AREA: ASSESSMENT OF INRMP IMPACT ON THE INSTALLATION MISSION

Key West, NAS

Completed on 3/14/05 by Joe Hautzenroder
Current Score: 0.67

Back

Findings

Submit Scores

Installation Mission	<u>Has Coordination between natural resources and operators been successful/ effective</u> (0-4)	<u>To what level do NR compliance requirements impede the installation's ability to support the operational mission</u> (0-4)	<u>Does the INRMP process effectively consider current mission requirements</u> (0-4)
NAF Key West personnel and facilities support approximately 30 commands and customers, including the Joint Interagency Task Force (JIATF), Joint Southern Reconnaissance Surveillance Operating Center, Fighter Squadron 101 (VF-101) Det, Tactical Aircrew Combat Training System, Naval Air Warfare Center Detachment, Naval Research Laboratory, U.S. Army Special Forces Underwater Operations School, and the United States Coast Guard Group Key West. The primary mission at Boca Chica Airfield is to train Navy pilots and support for Naval aviation activities and units of the operating forces.	3 ▾	1 ▾	4 ▾

Submit Scores

Reset

Natural Resources Metrics Builder

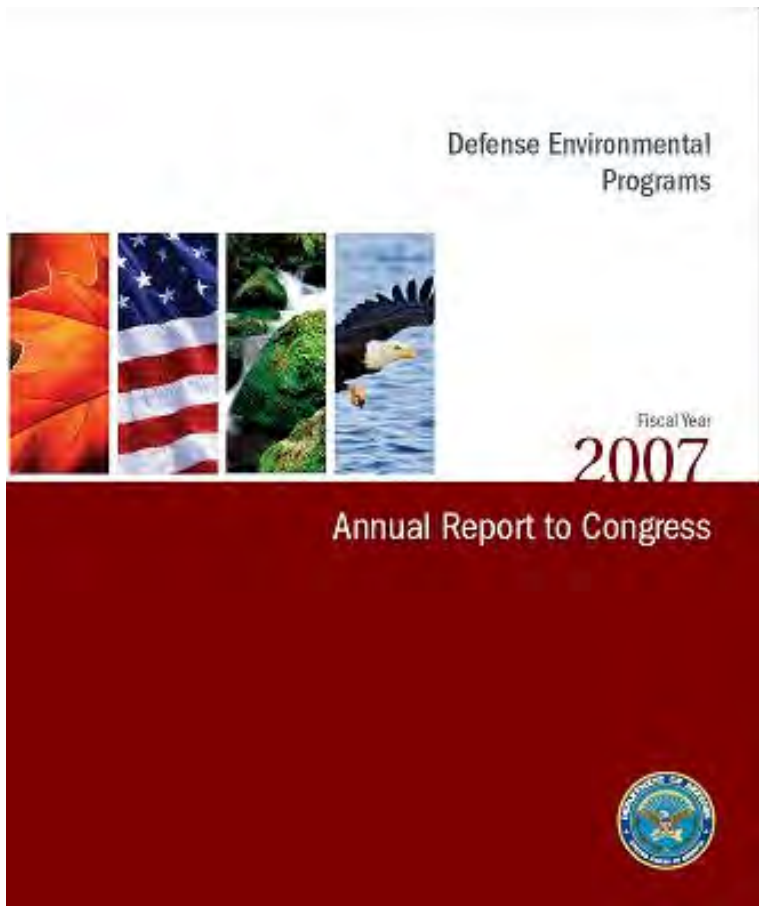
FOCUS AREA: ASSESSMENT OF INRMP IMPACT ON THE INSTALLATION MISSION

Key West, NAS

Installation Mission	Has Coordination between natural resources and operators been successful/ effective (0-4)	To what level do NR compliance requirements impede the installation's ability to support the operational mission (0-4)	Does the INRMP process effectively consider current mission requirements (0-4)
NAF Key West personnel and facilities support approximately 30 commands and customers, including the Joint Interagency Task Force (JIATF), Joint Southern Reconnaissance Surveillance Operating Center, Fighter Squadron 101 (VF-101) Det, Tactical Aircrew Combat Training System, Naval Air Warfare Center Detachment, Naval Research Laboratory, U.S. Army Special Forces Underwater Operations School, and the United States Coast Guard Group Key West. The primary mission at Boca Chica Airfield is to train Navy pilots and support for Naval aviation activities and units of the operating forces.	<input type="text" value="3"/>	<input type="text" value="1"/>	<input type="text" value="4"/>

Score 0.67

Keeping INRMPs Current



Defense Environmental Programs Annual Report to Congress



INRMP Builder

Proposed DoD Template - February 2006

[Download Proposed DoD INRMP Template \(2/2006\)](#)

[Download INRMP Guidance for Navy Installations](#)

Back to Menu

View Document

-Select an Installation-

-Select an Installation-

Annapolis, USNA

Barking Sands, PMRF

Barstow, MCLB

Beaufort, MCAS

Beaufort/Parris Island, MCRD

Bayview, Carderock NSWC Det.

Boardman, NWTF

Bremerton, NAVHOSP

Brunswick, NAS

Camp Peary, AFETA

[Table of Contents](#)

- Chapter 1 [Overview](#)
- Chapter 2 [Current Conditions and Use](#)
- Chapter 3 [Environmental Management Strategy and Mission Sustainability](#)
- Chapter 4 [Program Elements](#)
- Chapter 5 [Implementation](#)

-Select an Installation-

Final Draft

Flagstaff, NAVOBSY

[Title Page](#)

[Signature Page](#)

[Commander's / Executive Summary](#)

[Table of Contents](#)

- Chapter 1 [Overview](#)
- Chapter 2 [Current Conditions and Use](#)
- Chapter 3 [Environmental Management Strategy and Mission Sustainability](#)
- Chapter 4 [Program Elements](#)
- Chapter 5 [Implementation](#)

- Appendix 1 [Project Descriptions](#)
- Appendix 2 [List of Projects](#)
- Appendix 3 [Surveys](#)
- Appendix 4 [Research Requirements](#)
- Appendix 5 [Migratory Bird Management](#)
- Appendix 6 [Critical Habitat Issues](#)



This module is under construction!!



Chapter 1 [Overview](#)

- a. [Purpose](#)
 - To develop a plan which integrates installation Natural Resources management with the military mission
- b. [Scope](#)
 - To cover all lands, ranges, near shore areas and leased areas
- c. [Goals and Objectives](#)
 - Summarize overall goals and objectives
- d. [Responsibilities](#)
 - Describe the responsibilities of the stakeholders (including off-base stakeholders, as appropriate) and their responsibilities in the implementation of the Integrated Natural Resources Management Plan (INRMP).
 - Installation stakeholders will include Installation Trainers, Public Works/Civil Engineering, Installation Legal Office, Public Affairs, etc.
 - The term "stakeholders" does not refer to the public, which includes Non-Governmental Organizations (NGOs).
- e. [Authority](#)
 - Describe the authority behind the INRMP (Sikes Act, applicable Department of Defense (DoD) and Service policies)
- f. [Sustainability and Compliance Discussion](#)
 - Ensure that the difference between sustainability and compliance is clear as well as define the criteria for INRMP implementation.
 - This section should also discuss how we develop and demonstrate an approach to integrating sustainability considerations into planning and analysis.
- g. [Review and Revision Process](#)
 - Briefly discuss Sikes Act and DoD requirements for review and revision.
 - Discuss methodology for keeping INRMPs current via annual INRMP reviews and formal "5-year" reviews for operation and effect.
 - Discussion of Environmental Management System (EMS) could be inserted here. The processes of annual and "5-year" reviews are components of EMS.
- h. [Commitment of the United States Fish and Wildlife Service \(FWS\) and State](#)

Chapter 1 Overview

a. Purpose

- To develop a plan which integrates installation Natural Resources management with the military mission

The purpose of this Integrated Natural Resources Management Plan (INRMP) is to provide the U.S. Naval Observatory Flagstaff Station (NOFS) with a viable framework for managing natural resources over the next five years on lands it owns and controls.

The Sikes Act Improvement Act of 1997 (SAIA) committed the U.S. Department of Defense (USDoD) and U.S. Navy to develop INRMPs for installations like NOFS by November 17, 2001. The purpose of an INRMP is to help installation commanders manage their natural resources in a manner that is consistent with sustainability of those resources and ensuring continued support of the military mission. The SAIA stipulates that this INRMP provides for:

Conservation and rehabilitation of the natural resources on military installations;

Sustainable, multipurpose use of the resources;

Public access to facilitate their use, subject to safety requirements and military security; and

Specific natural resource goals and objectives and time frames for acting on them.

These five-year, ecosystem-based plans are to be developed in cooperation with and with the concurrence of the U.S. Fish and Wildlife Service (USFWS) and the state fish and wildlife agency, in this case, the Arizona Game and Fish Department (AGFD). Signatures on the document reflect the mutual agreement of all parties.

This INRMP will support the institutional and operational mission of NOFS by:

Serving as a strategic land use and natural resource planning tool.

Providing a framework for daily land use and resource management decision-making.

Anticipating land use problems and conflicts.

Communicating land use and resource guidelines.

Providing an institutional memory.

This section was last updated on 9/29/2006 by Christy Patterson.

* - Tables will need to be uploaded as images.

Save

Preview this section

Upload File

Images for Section

Photo 1-1.

[Photo1_1.jpg](#)

Upload Image

Back

The image/map/photo/table will be saved to Chapter , Section of the INRMP for Flagstaff, NAVOBSY.

Select the image to upload:

 Browse...

Title (Figure 1.1, etc):

Caption/Description

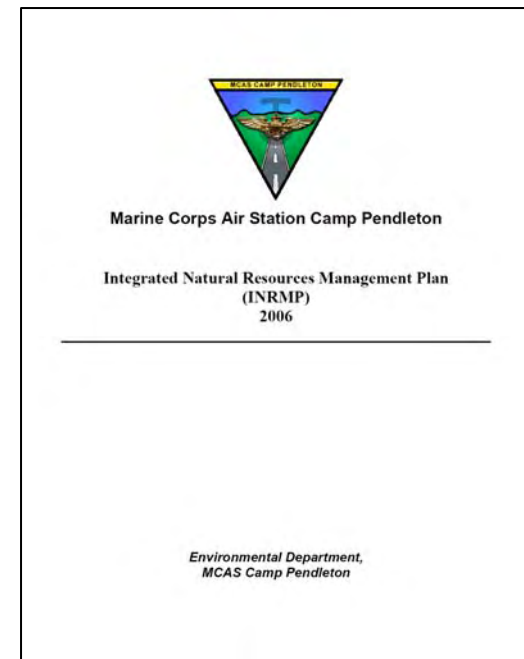
Upload the file

Keeping INRMPs Current



Case Study: Camp Pendleton, CA

- Developed INRMP tracking database
- Tracks all planned INRMP actions (289 in total)
- Camp Pendleton Evaluation
 - Saves work on annual report





NUMBER	TYPE ACTION	YEAR	Page in INRMP	LEAD ORGANIZATION	SECONDARY
10	PPA	2003,2005	4-22; 4-33; 4-41	RM DIV	

PLANNED ACTION

Conduct high-resolution aerial photography of the riparian and estuarine areas on Camp Pendleton every two years.

Comtrak #	Class	Category	Stewardship/ Compliance	Comtrak Descr
PE65828	0	1	Compliance	[0 Aerial Photography of Base Ecosystem Habitat (WL), FY01, FY03, FY05]

DRIVERS

Riparian BO (Recom p. 39; T&C, Appx 4, p. 1; T&C, Appx 5, p. 4)

STATUS

Contract issued 2002, photos taken in 2003. Currently waiting on processing and digitization. Reviewed 2004. Funded in FY04, work to be conducted in FY05.

INRMP NOTES

Date changed from 2002,2004 to 2003,2005 Date changed in document. May 2004 update: High-resolution aerial photography of riparian and estuarine area on Base was conducted in 2003. This included some gnatcatcher habitat and vernal pools complexes that were in the vicinity of riparian areas.

Keeping INRMPs Current



Case Study: Camp Pendleton, CA (continued)

- Categories used during annual review to roll-up annual report
- Review's results summarized in brief report:
 - Includes significant changes to INRMP and updated actions
 - Prepared for the Commanding General
- Annual report distributed to key staff

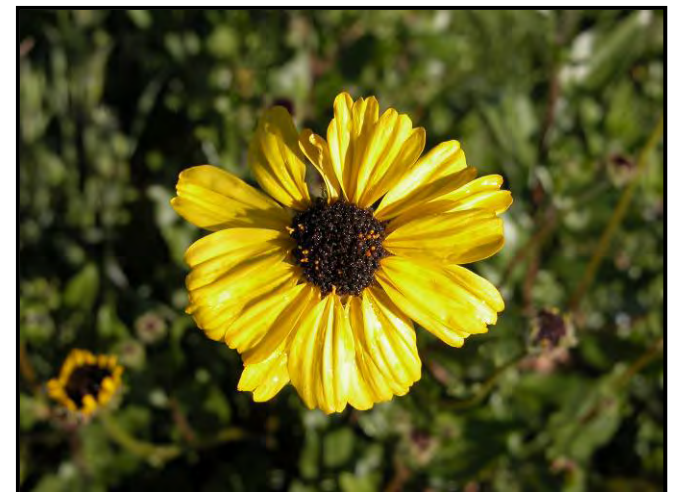
Resource: Ken Quigley, Camp Pendleton, (760) 725-9733

Keeping INRMPs Current



Tracking and Documentation Best Practices

- Assign this responsibility to staff person
- Establishing tracking system
- Update status annually
- Make data available to others



Major Natural Resource Issues



Maintaining & Implementing Sustainable INRMPs:

Major Natural Resource Issues



Major Natural Resource Issues



The Issues

- Threatened and Endangered Species
- Migratory Birds
- Wetlands
- Invasive Species
- Encroachment



Desert Tortoise

Major Natural Resource Issues



INRMPs & Endangered Species Act (ESA)

- INRMPs should reflect relevant aspects of:
 - Prior §7(a)(2) consultations
 - §7(a)(1) conservation planning
 - §4(f) recovery plans
- Typically, INRMPs incorporate measures agreed to as part of informal or formal consultations
- INRMP multi-species strategies may trigger need for new consultation on INRMP



Major Natural Resource Issues



Section 7(a)(2) Consultation

- Each Federal agency must ensure that its actions:
 - Will not jeopardize the continued existence of any threatened or endangered species, **or**
 - Destroy or adversely modify designated critical habitat

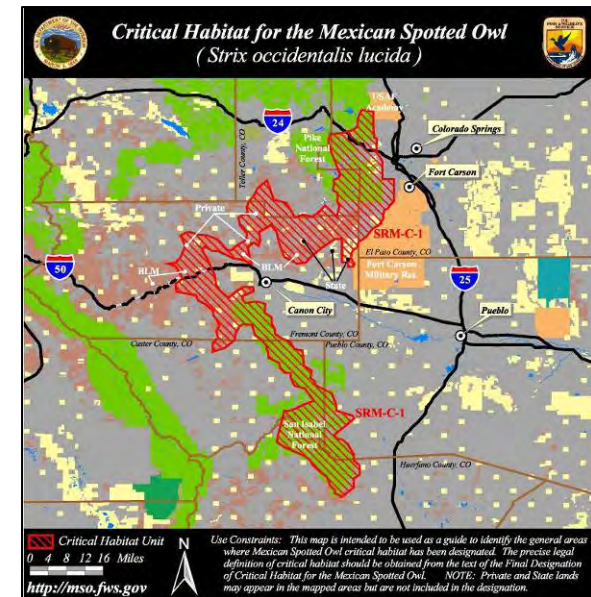


Major Natural Resource Issues



Designated Critical Habitat

- “Critical Habitat” defined:
 - Areas deemed essential to the conservation of a threatened or endangered species, and
 - May require special management consideration or protection
- “Conservation” in this context means those areas needed to enable a T&E species to recover to the point the protections of the ESA are no longer necessary



Major Natural Resource Issues



ESA sec. 4(a)(3)(B)

- INRMP may obviate need for designation of critical habitat if the INRMP “provides a benefit to the species”
- To provide a “benefit,” INRMP must demonstrate that no special management or protection is needed
- Per rulemakings to date, FWS will require INRMP to:
 - Provide a conservation benefit to the species;
 - Provide assurances that management strategies will be implemented; and
 - Provide assurances the strategies will be effective



Major Natural Resource Issues



ESA sec. 4(a)(3)(B) (continued)

- If Interior Secretary determines INRMP provides “benefit” to the species, critical habitat designation precluded
- INRMPs substitute for designation of critical habitat
- Advantage?
 - Only “jeopardy” standard applies
 - So what?
 - Consultation obligation limited to occupied habitat
 - “Jeopardy” survival obligations may be less demanding than “adverse modification” conservation requirements

Major Natural Resource Issues



T&E Species Coordination Best Practices

- Establish working relationship with FWS
- Consult informally with FWS
- Baseline T&E and share data
- Partner to increase T&E presence



Major Natural Resource Issues



Pitfalls: Stewardship and Preservation

- NR management supports the military mission
- NR managers must balance habitat management with preservation





Major Natural Resource Issues



Migratory Bird Treaty Act, 16 USC 703

- Multi-national treaty protecting migratory birds
- FWS has exclusive authority
- FY04 NDAA
 - Exempts DoD readiness activities
 - DoD must minimize, mitigate and monitor takes
- 50 CFR Part 21
- <http://birds.fws.gov>
 - Focal Species Strategy for Migratory Birds



American redstart

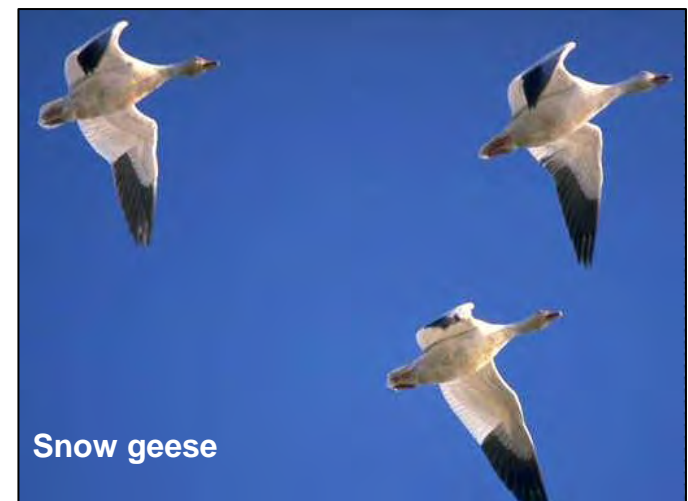


Major Natural Resource Issues



Migratory Bird Rule

- Pertains to defense readiness activities
- Final Rule issued in 2007
- DoD required to
 - Determine if proposed activities have significant effect
 - Confer and cooperate with FWS on conservation measures



Snow geese

Major Natural Resource Issues



Executive Order 13186 (Jan. 10, 2001)

- Enhances agency coordination & communication
- Pertains to non-readiness activities
- Requires DoD – DOI(FWS) MOU
 - Fully executed on 31 July 06
 - Incorporates management objectives in INRMPs
 - Work with partners (Partners in Flight)



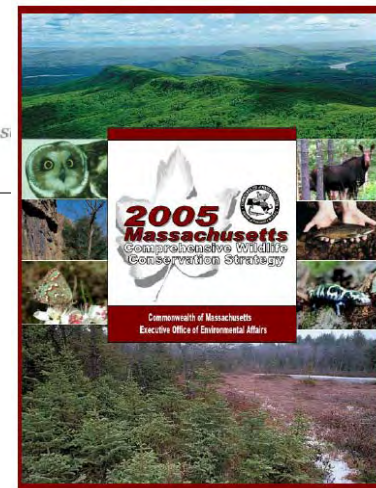
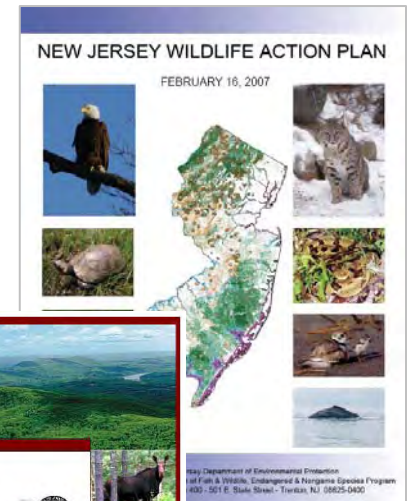
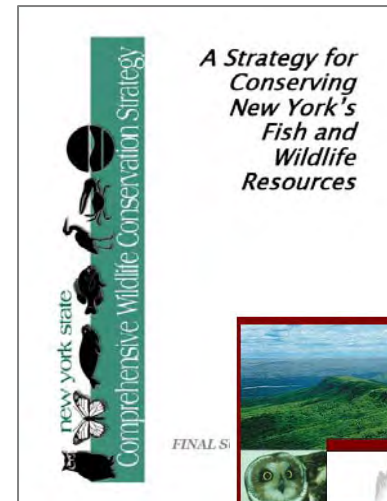


Major Natural Resource Issues



State Wildlife Action Plans

- Provides direction at a state level
- Manages species of concern and their habitat
- Activities may be limited geographically
 - USFWS address range-wide issues and concerns



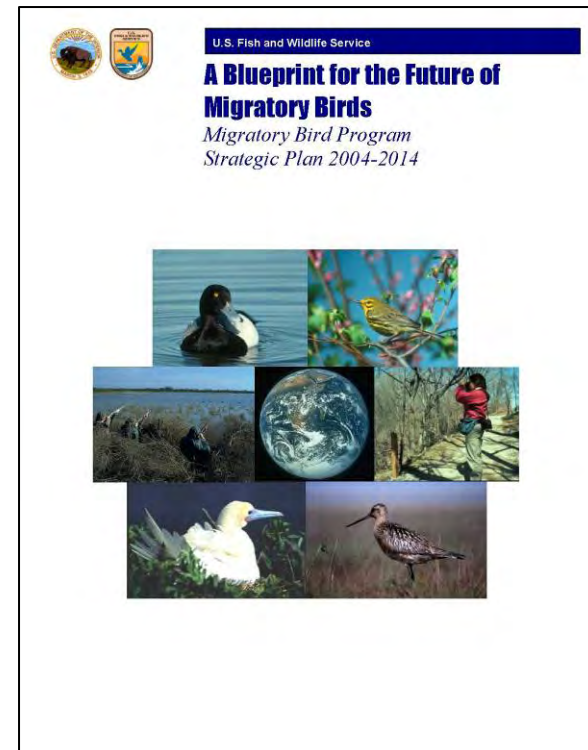


Major Natural Resource Issues



USFWS Strategic Plan

- Program Priorities
 - Habitat
 - Scientific knowledge
 - Partnerships
- Focal Species Strategy



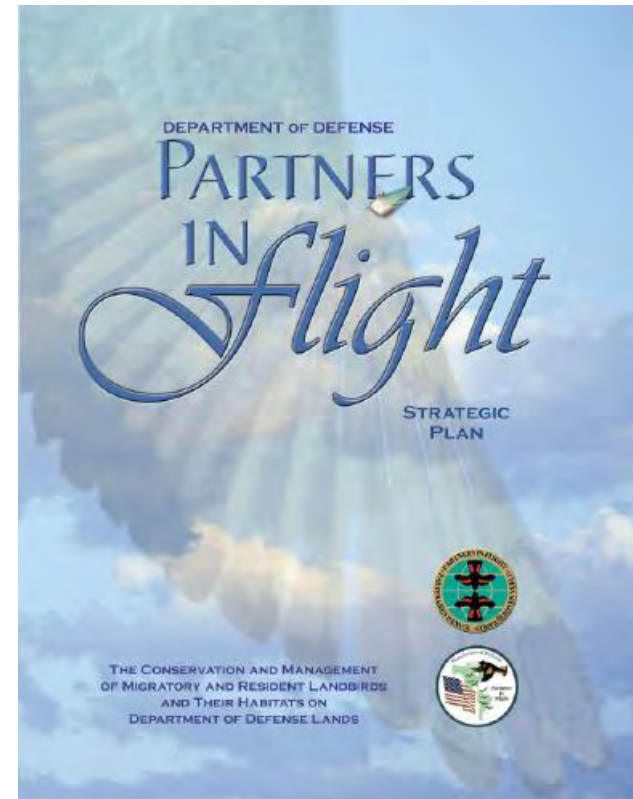


Major Natural Resource Issues



DoD Partners in Flight

- Consultation with installations
- Bird conservation priorities
- Migratory bird legislation
- Outreach
- Partnerships



Major Natural Resource Issues



Species of Concern Database



Major Natural Resource Issues



www.dodpif.org



The screenshot shows the DOD PIF website interface. On the left is a dark blue sidebar with a circular logo at the top containing a map of the United States and a bird, with the text "Department of Defense" and "Partners in Flight". Below the logo are several menu items: "Program Areas", "Species of Concern", "Steppingstones Newsletter", "Working Groups", "Representatives", "Partners", "DODPIF-L Listserv", "Bird Conservation Database", "Site Map", and "Home". At the bottom of the sidebar, it says "Last Update: 09/04/06". The main content area has a light blue background with a cloud pattern. At the top center is the "DOD PIF" logo, with "DOD" in red and "PIF" in blue. To the right of the logo is the text "Program Areas" and a blue box containing "BCP's and INRMP's". Below the logo is the title "Integrating Bird Conservation Strategies into Integrated Natural Resources Management Plans". Underneath the title is a paragraph: "For the current INRMP Handbook, visit the 'Planning Tools, Handbooks, and Guidelines' page on the [DENIX web site](#)". This is followed by three numbered steps: 1. Review information on the [Comprehensive State Wildlife Conservation Strategies](#) web site. 2. Review the Partners in Flight Bird Conservation Plan for your region. 3. Compile a species prioritization list for your installation using the Partners in Flight database at the [Rocky Mountain Bird Observatory](#).

Major Natural Resource Issues



Wetlands Facts and Figures

- More than 1/3 of all threatened and endangered species in the U.S. live only in wetlands
- Almost half of the threatened and endangered species in the U.S. use wetlands, at some point in their lives
- Approximately 80% of America's breeding birds use wetlands
- Ownership:
 - Federal: 13 percent
 - Private: 74 percent
 - State and Local Government: 13 percent



Major Natural Resource Issues



Wetlands Management

- INRMP component
- Comply with Executive Order 11990, Protection of Wetlands
- Goal of no net loss (DODI 4715.3)



Major Natural Resource Issues



DODI 4715.3 – Wetlands Guidance

- Goal: Manage for goal of no net loss of wetlands
 - Inventory and manage significant or sensitive natural resources
 - Strive for no net loss of function or value
 - Protect, rehabilitate, restore, and create wetlands
 - Avoid adverse impacts, offset unavoidable impacts
 - Encourage integration: Ecosystem, watershed management
 - Encourage use of mitigation banking

Major Natural Resource Issues



**“No Net Loss to Wetlands”
Only Applies to Jurisdictional Wetlands and Not
Isolated Wetlands**



Major Natural Resource Issues



Wetlands Partners – USACE and EPA

- Both oversee Section 404 compliance:
 - USACE issues permits after notice and opportunity for public hearings for the discharge of dredged or fill materials into the waters of the United States at specified disposal sites
 - EPA issues guidelines for disposal site selection, reviews applications, and can veto a permitting decision

Major Natural Resource Issues



Wetlands Partners - FWS

- Acts in an advisory role
- Maintains National Wetlands Inventory
 - Provides characteristics, extent, and status
 - Sufficient for broad planning purposes



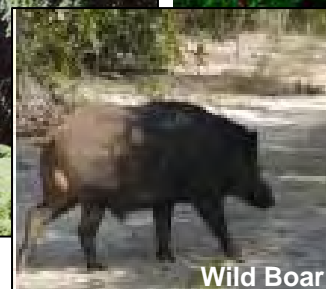
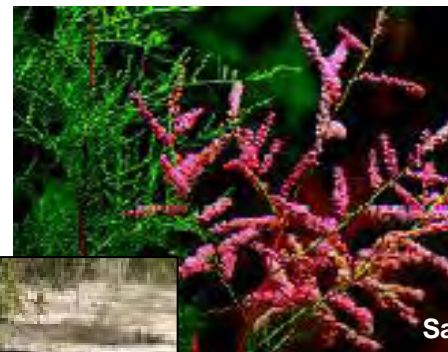
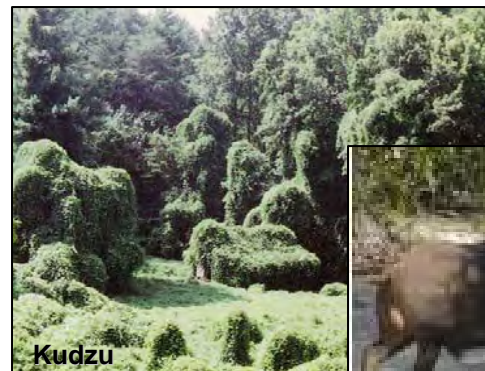


Major Natural Resource Issues



Invasive Species Management Responsibilities

- Address in INRMPs to avoid potential mission impacts
- Prevent invasive species introduction
- Detect, monitor and control invasive species
- Restore native species



Major Natural Resource Issues



DoD Invasive Species Control Programs

- Programs include:
 - Ballast Water Management
 - Transportation Policy and Procedures
 - Pest Management and Quarantine Regulations
 - Integrated Pest Management
 - Natural Resources Management

Major Natural Resource Issues



DoD Implementation- Invasives Control and Protection

- National Invasive Species Act
- Plant Protection Act (supersedes Federal Noxious Weed Act)
- Federal Insecticide, Fungicide, and Rodenticide Act
- Endangered Species Act
- Lacey Act
- National Environmental Policy Act
- E.O. 13112

Major Natural Resource Issues



Executive Order 13112

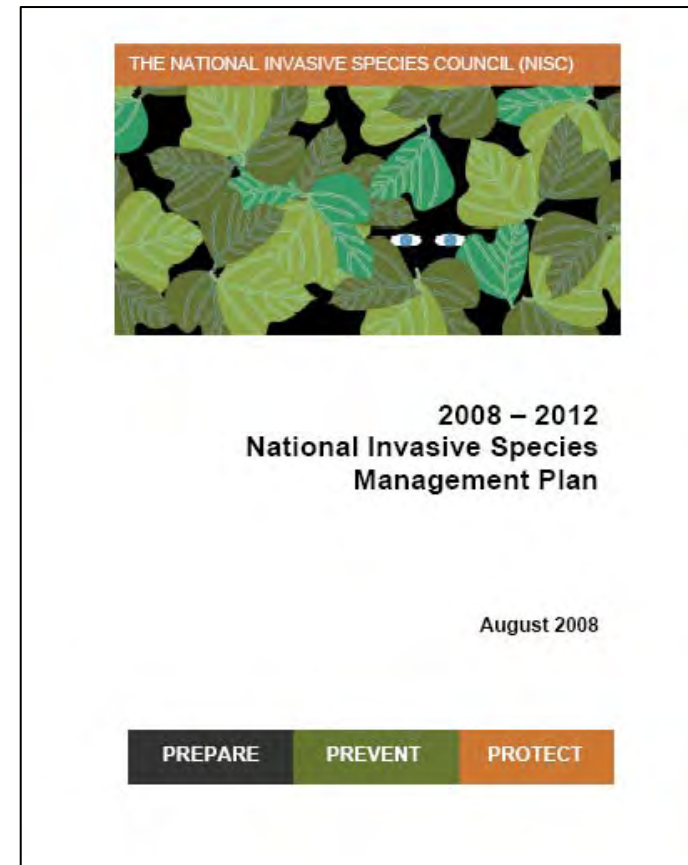
- Addresses growing ecological and economic damage caused by invasive species
- Requires Federal agencies to:
 - Identify action that might impact the status of invasive species and prevent introductions
 - Not authorize, fund, or carry out actions likely to cause the spread of invasive species
 - Monitor and conduct research on invasive species
 - Restore native species and habitat conditions in ecosystems that have been invaded

Major Natural Resource Issues



National Invasive Species Council

- Provides oversight, leadership, and coordination
- Prepares a National Management Plan for invasive species every two years



Major Natural Resource Issues



Legacy Resource Management Program

- FY07 Invasive Species Control Projects:
 - NC Sandhills Weed Management Area: Sharing DoD Invasive Species Management Strategies with Installation Neighbors
 - Removal of Invasive Fire-prone Grass to Increase Training Lands in the Pacific
 - Ten Year Resurvey of Biodiversity of Marine Communities and introduced Species in Pearl and Honolulu Harbors
 - Predator-proof Fencing for Invasive Species Control in Hawaii
 - Further Development of the Noxious and Nuisance Plant Management Information System (PMIS)

Major Natural Resource Issues



Invasive Species Management Best Practices

- Create partnerships focused on
 - Research
 - Prevention
 - Education and Outreach
 - Management
- Incorporate SWAP, regional, state and local goals in INRMPs



Major Natural Resource Issues



Invasive Species Management Example: Fairchild AFB

- Implemented Biological control of seven noxious weeds
- Partnered with Washington State University to identify biological agents
- Completed Environmental Assessment and held public meeting to share with information with neighboring landowners
- 300,000 insects released on 710 acres, costing \$30,000
- Results: 1,200 acres eliminated from spraying program and a 40% decrease in pesticide sprayed weeds

Major Natural Resource Issues



Fairchild AFB (Continued)

Benefits

- Cost savings when insects reproduce naturally
- Reduction in overall pesticide use
- Opportunity for community outreach and involvement

Drawbacks

- Takes many years before permanent decrease in noxious weeds
- Initial agent population build up takes time
- Typically will not eradicate weed populations

Major Natural Resource Issues



Encroachment Issues

- Causes:
 - Urban growth
 - Habitat loss and/or land use change
 - Increased per capita resource use
- Effects:
 - Restricts training and testing
 - Impacts military readiness
 - Threatened and endangered species
 - Air quality

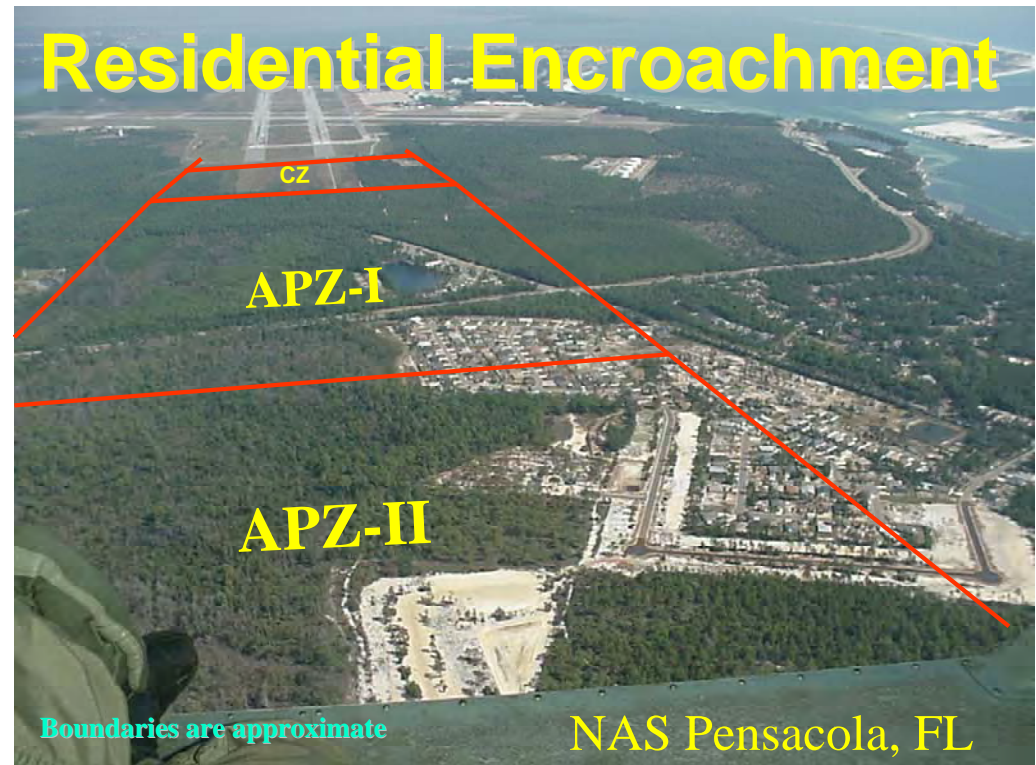


Major Natural Resource Issues



REPI and Encroachment

- REPI offers “win-win” solutions to encroachment
 - Preserves military readiness
 - Promotes smart growth strategies, and
 - Protects the natural environment

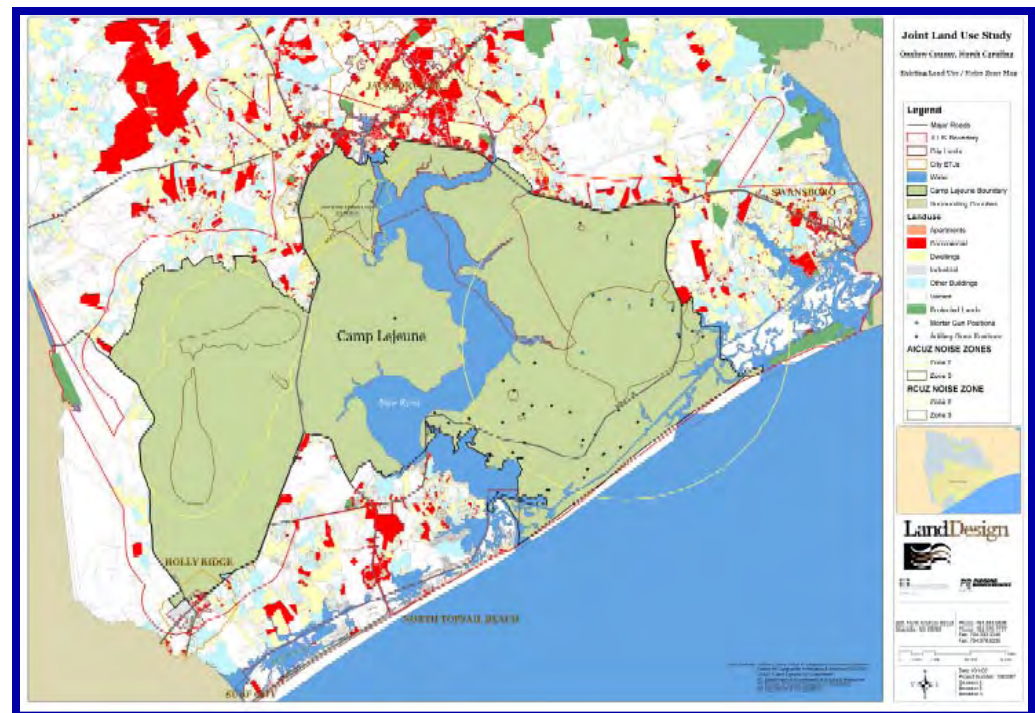


Major Natural Resource Issues



Case Study: Camp Lejeune, NC

- Ecological oasis with endangered species
- Pressure on FWS to list species
- Encroachment by homes and businesses
- Installation's mission threatened



Land Use Map, Camp Lejeune

Major Natural Resource Issues



Case Study: Camp Lejeune, NC (continued)

- Onslow-Bight Conservation Forum developed
- Shared goals of partnership
 - Acquire/control adjoining land as a buffer
 - Acquire easements/buffers as habitat corridors to ease T/E listing pressure
- Role of DoD contribution to purchase of easements



Major Natural Resource Issues



Case Study: Camp Lejeune, NC (continued)

- Forum members include
 - Camp Lejeune and Cherry Point
 - Federal agencies (FWS, USFS, NRCS)
 - North Carolina state agencies
 - Conservation Organizations

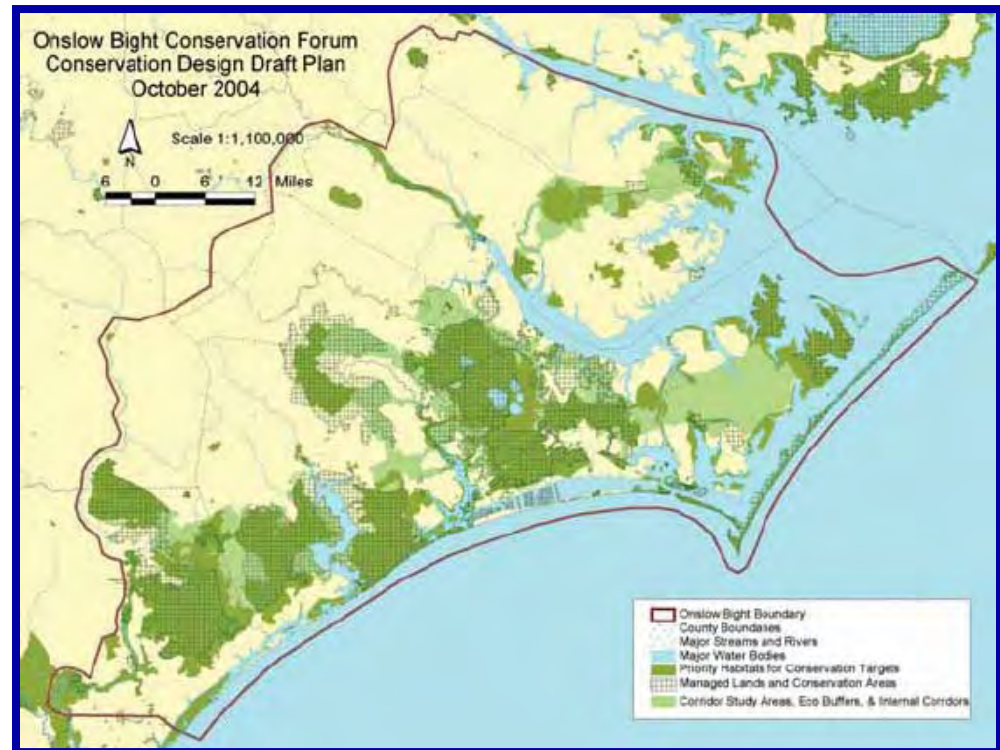


Major Natural Resource Issues



Case Study: Camp Lejeune, NC (continued)

- Forum meets bi-monthly
- Members bring projects to the group
- Group works to acquire land or engage in a land management program

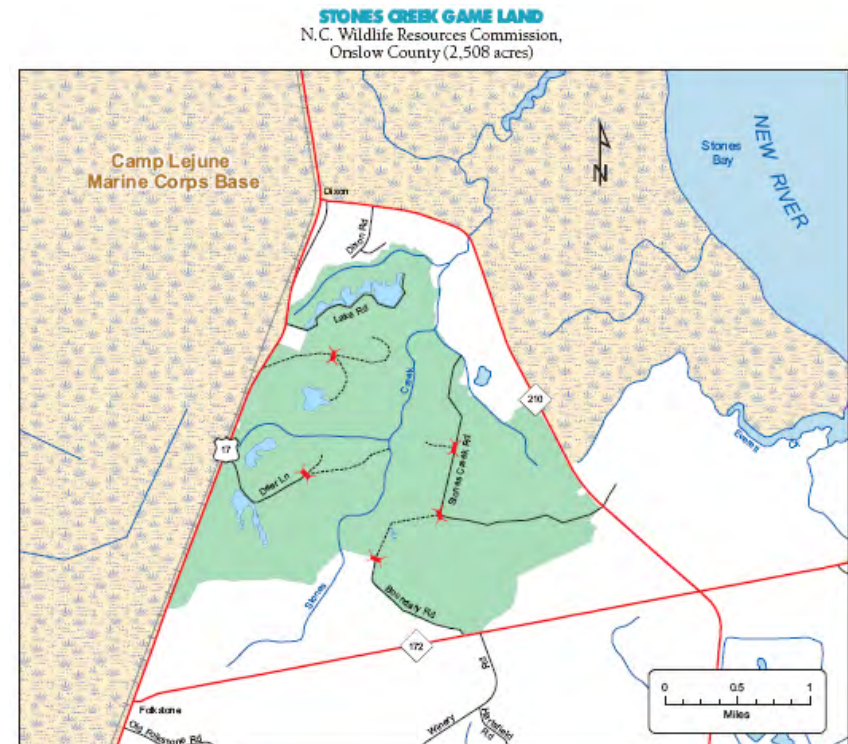


Major Natural Resource Issues



Case Study: Camp Lejeune, NC (continued)

- Example of project
 - North Carolina bought 2500 adjoining acres
 - Marine Corps bought 50% interest
 - Title held by State
 - Land operated as game land



Major Natural Resource Issues



Case Study: Camp Lejeune, NC (continued)

- Establish ecosystem-based goals
- Work with local, regional and state entities
- Acquire easements or buffers
- Coordinate management with neighbors



Major Natural Resource Issues



Pitfalls

- Seeing the installation as an “environmental oasis”
 - DoD installations often include large amounts of near pristine, uninterrupted habitat
 - Land area around installation may become urbanized
 - Communities may perceive installation land area as park-like



The Florida Ecological Network development team and the State of Florida considered Eglin AFB and Avon Park AFR (circled) as globally significant habitats that needed to be protected

Major Natural Resource Issues



Discussion



INRMP Public Review and Involvement



Maintaining & Implementing Sustainable INRMPs:

INRMP Public Review and Involvement



INRMP Public Review and Involvement



Key Terms

- The Public
- Stakeholders
 - Internal stakeholders
 - External stakeholders



INRMP Public Review and Involvement



Internal Coordination

- Information must be shared with other installation individuals and elements
- Good internal communications is key to INRMP implementation
 - Projects often require coordination and support of several installation offices
 - May result in more efficient INRMP maintenance and implementation

INRMP Public Review and Involvement



Case Study: Fort Stewart, GA

- Innovative management prescriptions (IMPs) prepared for 121 units
- Three levels of planning:
 - INRMP
 - Innovative Management Prescription (IMP)
 - Specific Management Prescriptions



3D Infantry Division (Mech)



"Rock of the Marne"

INRMP Public Review and Involvement



Case Study: Fort Stewart, GA (continued)

- Prepared in a Coordination Partners team
 - Forestry
 - Fish & Wildlife
 - Environmental Branch
 - Range Division (ITAM)
 - Army Corps Regional (resident) Forester
- Meet about every two weeks



INRMP Public Review and Involvement



Case Study: Fort Stewart, GA (continued)

- Developed about 25 unit prescriptions/year
- Addressed specific actions (e.g., timber sale, road work)
- Encountered conflicts within a unit
- Resolved within the unit rather than by full team



INRMP Public Review and Involvement



Case Study: Fort Stewart, GA (continued)

- INRMP review completed
- Established work groups with clarified roles and responsibilities
- Involved all installation and community representatives
- Provided opportunity to comment
- Encouraged command and operations participation



Resource: Tom Hilliard, Fort Stewart, (912) 767-8736

INRMP Public Review and Involvement



Internal Coordination Best Practices

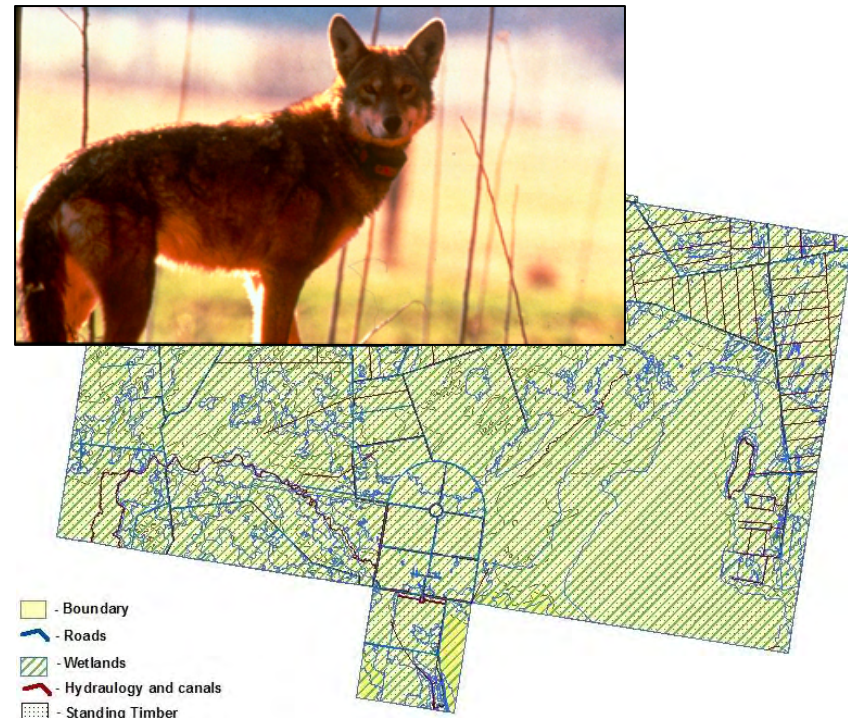
- Regularly communicate with individuals and offices with INRMP responsibilities
 - Meetings
 - Email
 - Intranet
- Establish environmental review committee for oversight
- Communicate for NEPA review and compliance

INRMP Public Review and Involvement



Public Comments on INRMPs

- Sikes Act
 - Provide a public comment opportunity
 - Accept comments on new INRMPs and amendments
- DoD Policy
 - Minimum 30-day comment period for initial INRMP
 - Comment period for major revisions/NEPA analysis



Dare County Bombing Range in eastern North Carolina is home to one of North America's rarest mammals—Red Wolf

INRMP Public Review and Involvement



Public Comments on INRMPs (continued)

- Driven by need for “substantial” revisions
- What’s a “substantial” revision?
 - Would result in materially different biophysical consequences than previously considered
- Soliciting public comments on revised INRMPs
 - NEPA process
 - Other



INRMP Public Review and Involvement



National Environmental Policy Act (NEPA)

- Major revisions may trigger NEPA
- NEPA Requirements for Public Participation
 - Agency disclosure of environmental impacts for proposed action: scoping periods, hearings, comment periods
 - Environmental Impact Statement comment period: 45 days



INRMP Public Review and Involvement



Federal Advisory Committee Act (FACA)

- Creates an orderly procedure for seeking outside advice and assistance
- Intends to
 - promote collaboration and meaningful participation
 - ensure no unfair access by interest groups
- Institutes many procedural requirements
 - Time consuming
 - Restrictive

INRMP Public Review and Involvement



Alternatives to a FACA Advisory Committee

- Working group of government entities acting in official capacity
- Group established and managed by a non-Federal entity
- Group to gather information only – no solicitation of advice



INRMP Public Review and Involvement



Consultation with Indian Tribes

- Tribal consultation not expressly required by Sikes Act
- DoD Instruction 4710.02 requires consultation when actions may affect:
 - Treaty-reservation rights to fish, hunt, or gather
 - Access to traditional cultural properties
 - Off-base tribal resources
- Written consultation protocol is desirable



INRMP Public Review and Involvement



Principles for Engaging Tribes

- Identify all tribes with present or historic ties to land
- Consult on a government-to-government basis
- Consult early and consider tribal concerns and interests
- Respect tribal requests for confidentiality
- Accommodate access, consistent with safety and security



INRMP Public Review and Involvement



Case Study: MCB Camp Pendleton

- 19 Federally recognized tribes, several unrecognized tribes
- Numerous important gathering sites
 - Access provided to gather basket materials, acorns
- Consulted with tribes on revised INRMP
- Officials meet regularly to discuss proposed actions



INRMP Public Review and Involvement



Adequacy of Public Involvement

- Adequacy = what it takes for INRMP to be credible or acceptable
 - Legal adequacy
 - Community acceptance
- May exceed legal minimums



INRMP Public Review and Involvement



Stakeholder Involvement Programs

- Goal: produce comprehensive, inclusive INRMPs
- Elicit public participation
- Include internal and external stakeholders in process
- Document in a stakeholder involvement plan



Program Development Steps:

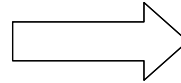
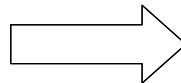
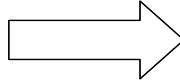
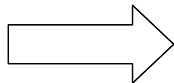
Identify
planning
process and
schedule

Identify
involvement
objectives

Identify
probable
issues and
stakeholders

Identify
appropriate
involvement
techniques

Write Plan



INRMP Public Review and Involvement



Stakeholder Involvement Techniques

- Workshops
- Open houses
- Interviews
- Internet
- Task forces or advisory groups
- Public meetings
- Many more ...

INRMP Public Review and Involvement



Stakeholder Involvement Best Practices

- Engage early and often
- Establish stakeholder forums
- Hold public meetings
- Incorporate comments and suggestions



INRMP Public Review and Involvement



Discussion

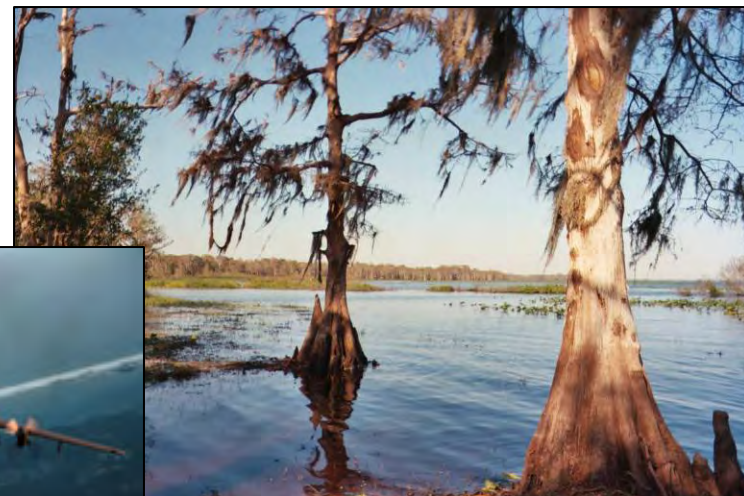


INRMP Project Funding



Maintaining & Implementing Sustainable INRMPs:

INRMP Project Funding



INRMP Project Funding



Traditional Funding Sources: O&M

- **Class 0** – Recurring conservation requirements – maintain compliance
- **Class 1** – Non-recurring conservation requirements – fix noncompliance
- **Class 2** – Non- recurring conservation requirement – prevent noncompliance
- **Class 3** – Non-recurring conservation requirement – enhance environment



INRMP Project Funding



Must Fund Projects and Activities

- Typically Class 0 or Class 1
- Meet the FWS special management criteria for T/E species and other Federal laws
- Provide for qualified NR personnel
- Prevent resource loss or degradation impacting military readiness



Prescribed burn program at Ft. Bragg is considered a must fund program

INRMP Project Funding



Traditional Funding Source: Reimbursable Accounts

- Sikes Act provides basic authority
- Accounts:
 - Grazing/Cropland
 - Fish and Wildlife Management
 - Forest Management
 - Department of Defense Forestry Reserve Account



INRMP Project Funding



Cropland and Grazing Programs

- Land outlease for grazing/agriculture
- Monies retained by service
 - Cover administrative costs of program
 - Fund installation natural resource programs
- Broadest-use funds available

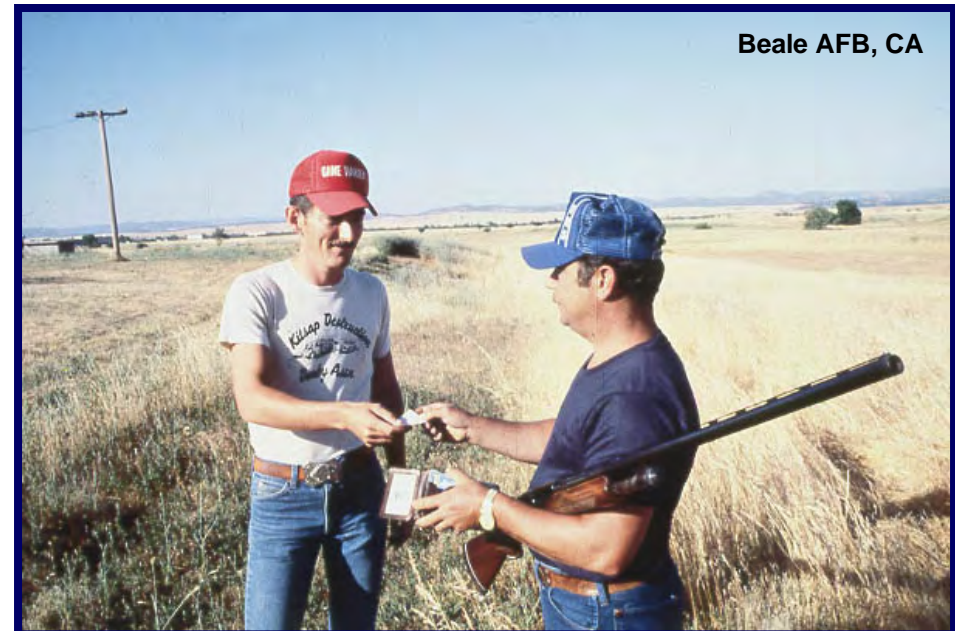


INRMP Project Funding



Hunting and Fishing Programs

- May establish permit fees
- Use of fees collected:
 - Only by collecting installation
 - For protecting and managing fish and wildlife



INRMP Project Funding

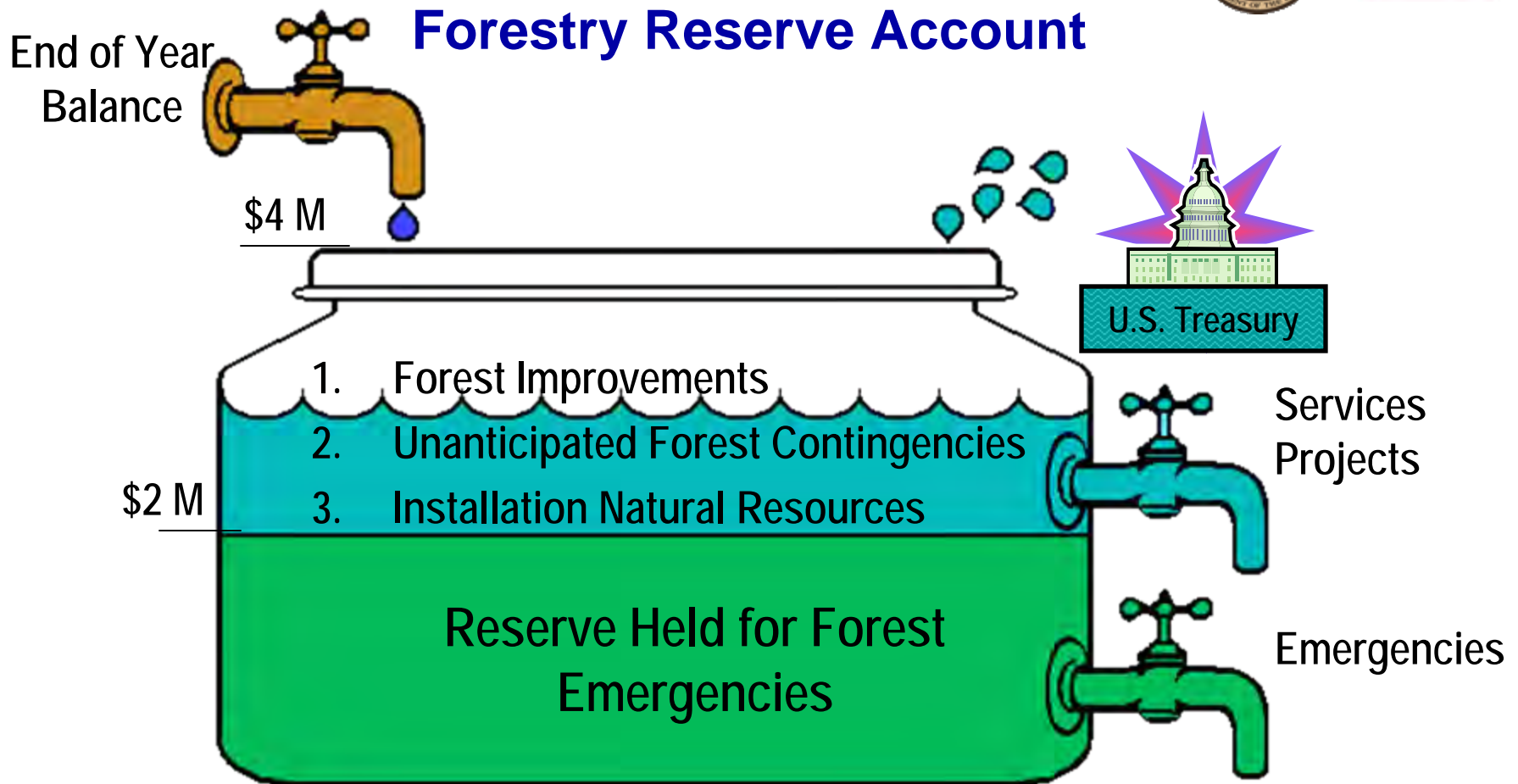


Forestry Programs

- May produce/sell forest products
- Use revenues to reimburse costs
 - Operations must be included in INRMP
- 40% net proceeds as State entitlement
- State entitlement usually goes to local government
- Surplus goes into DoD Forestry Reserve Account



INRMP Project Funding

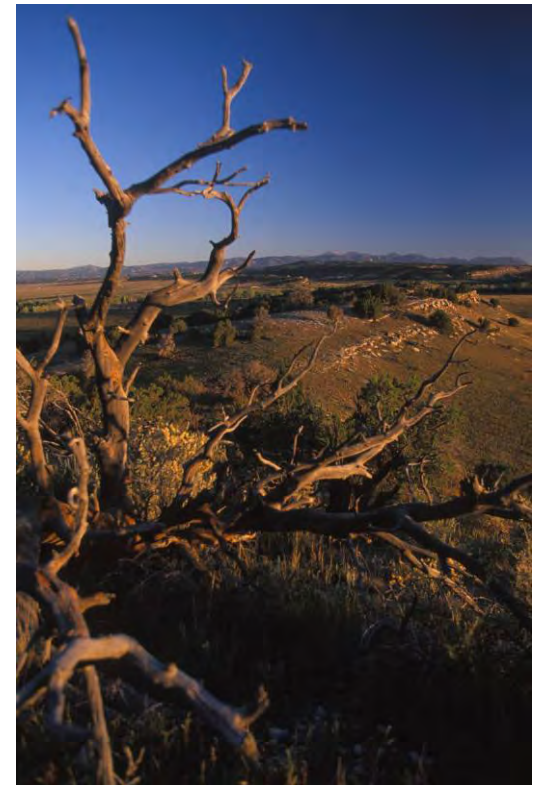


INRMP Project Funding



Other Sources

- Legacy Program
- Strategic Environmental Research and Development Program
- Environmental Security Technology Certification Program
- Readiness and Environmental Protection Initiative (REPI)



INRMP Project Funding



Legacy Program Funding

- \$290 million spent on almost 2,900 projects since 1991
- Will not invest in installation specific projects
- Exceptions:
 - National Programs (e.g., National Public Lands Day)
 - Demo projects



INRMP Project Funding



Legacy: A Repository of Information

Legacy Tracker – www.dodlegacy.org

- On-line proposal submission & project approval process
- Deadlines
- Project progress management
- Information source

DENIX: www.denix.osd.mil

- Highlights DoD Conservation program and Legacy projects

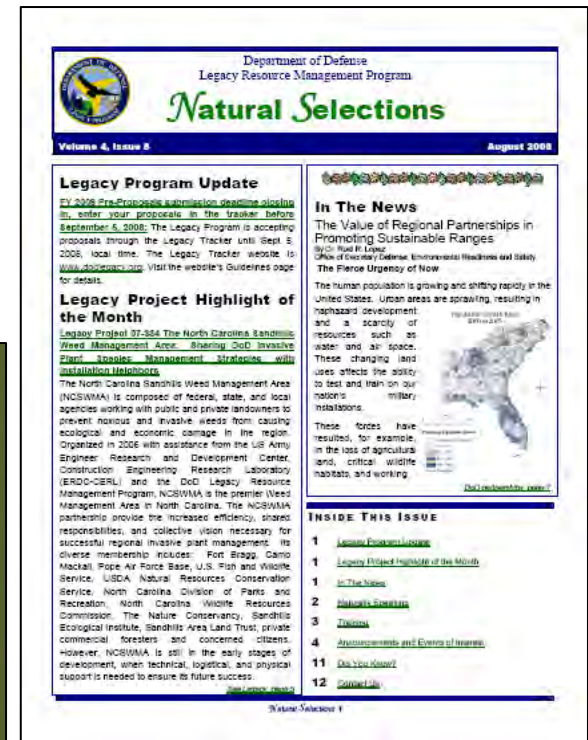
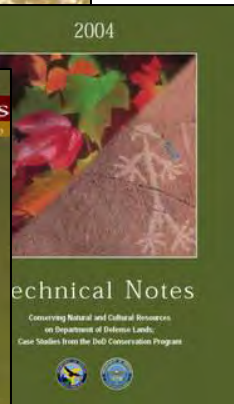
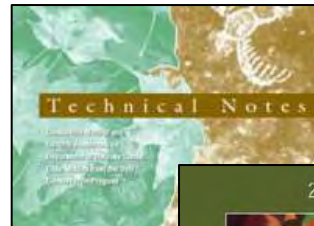


INRMP Project Funding



Legacy: Tools and Products

- Monthly newsletters
 - Cultural Resources **UPDATE**
 - Natural Selections
- Technical notes
 - 1999, 2004 and 2006

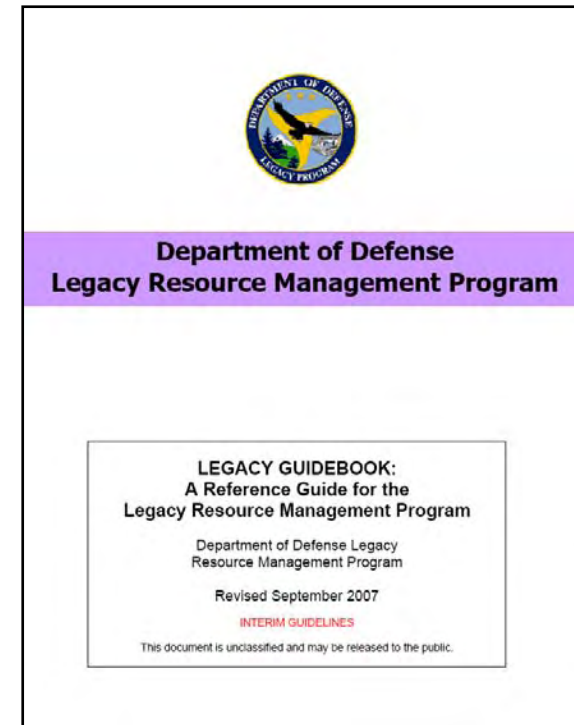


INRMP Project Funding



Legacy: A Potential Source of Funds

- Legacy Guidelines
 - Describes filling out the pre-proposal forms
 - Discusses criteria for successful application
 - Lists Areas of Emphasis



INRMP Project Funding



Strategic Environmental Research and Development Program (SERDP)

- Funds federal and private sector research and development of new technologies in:
 - Environmental Restoration
 - Sustainable Infrastructure
 - Weapons Systems and Platforms
 - Munitions Management
- FY 2008 funding - \$69.7 million



INRMP Project Funding



Environmental Security Technology Certification Program (ESTCP)

- Funds projects that test promising, innovative technologies that target the DoD's most urgent environmental needs involving:
 - Environmental Restoration
 - Sustainable Infrastructure
 - Weapons Systems and Platforms
 - Munitions Management
- FY 2008 funding - \$33.2 million



INRMP Project Funding



REPI Funding

- Funds buffer projects based on:
 - Military needs
 - Partner opportunities
- Over \$89 million spent on 90 projects since FY05
- DoD funding leverages and complements partner's contributions



Location of REPI Projects through FY08

INRMP Project Funding



FWS Administered Grants

- Neotropical Bird Conservation Fund
- Endangered Species Grants (ESA, Section 6)
- Private Stewardship Grants
- North American Wetlands Conservation Act
- National Coastal Wetlands Conservation Grants
- Federal Assistance Grants



U.S. Fish & Wildlife Service

Conserving The Nature of America

INRMP Project Funding



Neotropical Migratory Bird Conservation Fund

- Matching grants at \$1 grant funds to \$3 partner funds
- Funds sustainable, effective, long-term conservation partnerships that conserve neotropical migratory birds



Prothonotary
Warbler



INRMP Project Funding



Endangered Species Grants

- Available to States in partnerships
- Projects for candidate, proposed, and listed species.
- Funds available for land acquisition
- Contribution requirements:
 - State - 25% of costs, or
 - 2 or more states - 10%



INRMP Project Funding



Private Stewardship Grants

- Available to private landowners and their partners
- Federal agencies may encourage private landowners to apply
- A 10% applicant match of cash or in-kind contributions is required

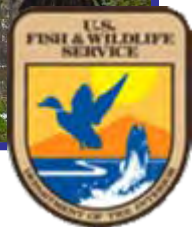


INRMP Project Funding



North American Wetlands Conservation Act

- Funds the North American Waterfowl Management Plan implementation
- Supports the Canada, U.S. and Mexico Tripartite Agreement on wetlands
- Applicant provides at least 50% of funds
- Matching funds cannot be from a federal agency



INRMP Project Funding



Coastal Wetlands Conservation Grants

- Authorized by the National Coastal Wetlands Conservation Act
- Program to help states acquire and manage coastal wetlands
- Grants fund 50-75% of the project

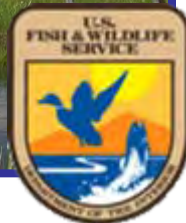
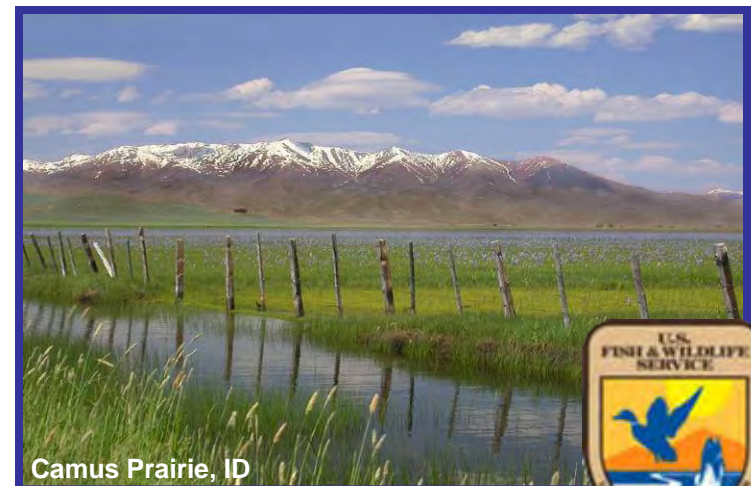


INRMP Project Funding



Federal Assistance Grants Available to States

- Aimed at *preventing* species from becoming endangered
- Grants to every state wildlife agencies
- Requires non-federal match
- Opportunity for partnership efforts
- POC: State Wildlife Program Coordinator, Division of Federal Aid
 - Telephone: (703) 358-2156
 - <http://www.fws.gov/grants/state.html>



INRMP Project Funding



Other Funding Sources

- Mitigation
 - Military construction mitigation projects may provide funding for INRMP projects (Storm water mitigation project yields stream restoration project)
- Environmental Restoration Project
 - Clean up programs can include habitat restoration or creation program
- Anti-Terror Force Protection (ATFP)
- National Fish and Wildlife Foundation Grants

INRMP Project Funding



Non-Conservation Related INRMP Program Funding Sources

- Army's Integrated Training Area Management (ITAM) Funds
- Real Property Service

Transfer of the 347th from AFSOC to ACC at Moody AFB is more than a people transfer, but also a real property transfer that may necessitate funding for INRMP revisions



INRMP Project Funding



Potential Paid Labor

- In-house work force
- Contractors
- Reserve units
- Interagency Personnel Agreements
- Fire Department (Installation)
- ORISE Programs (Only Army)
- Student Conservation Association
- Cooperative projects between DoD and states, FWS, NGOs, or universities



INRMP Project Funding



Potential Volunteer Labor

- Rod & Gun Clubs
- Boy Scouts of America
- Girl Scouts of America
- Bluebird Network
- Master Naturalist Program
- Individual volunteers
- Prison labor
- DoDI 1100.21- Voluntary Services in the Department of Defense



INRMP Project Funding



Sources of Free Materials

- Overstocks from public works jobs
- Defense Remarketing and Reutilization Office
- Recycling Yard
- Throw-aways from other programs, departments, and installation tenants



INRMP Project Funding



Partnering

- Working with organizations or agencies with similar regional goals
- Chesapeake Bay Restoration Day
- Partnership with NOAA
- Webster Outlying Field



INRMP Project Funding



Tri-Party Guidance

- Encourages installation to take advantage of its partners' natural resources expertise
- Use Economy Act transfers and cooperative agreements
- Priority should be given to projects that
 - Sustain the military mission
 - Consider the strategic planning priorities of partners, and
 - Effectively apply the principles of ecosystem management

INRMP Project Funding



Economy Act Transfers

- Federal agency may enter into an agreement with another Federal agency for services
- Services are rendered in a more convenient and cost effective manner than the other agency



INRMP Project Funding



Interagency Agreements

- DoD provided \$5,172,835 in transfer funding to the USFWS for Sikes Act-related work in FY 2007

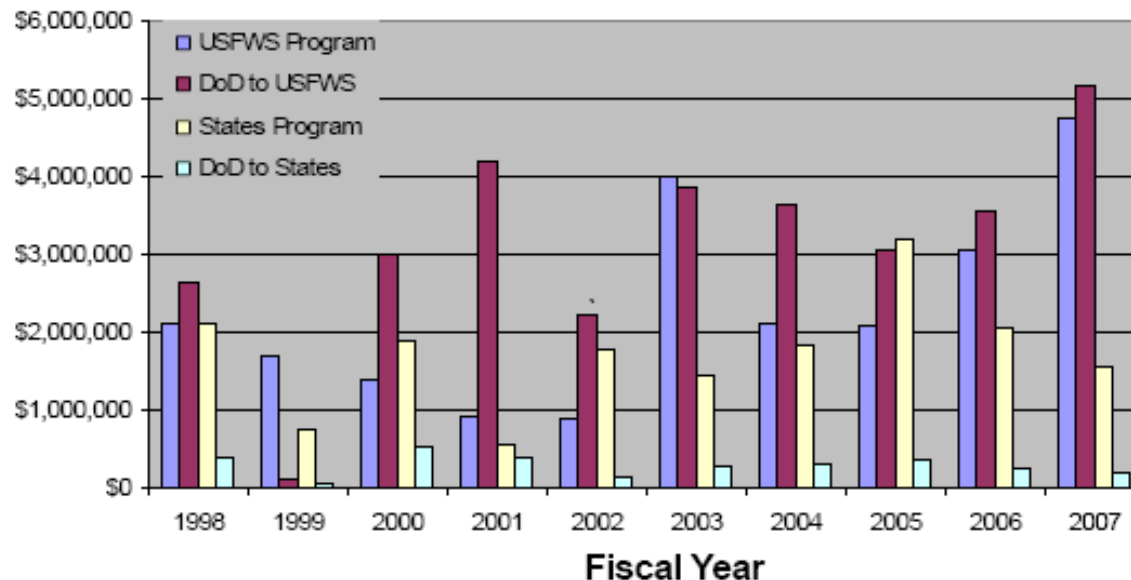


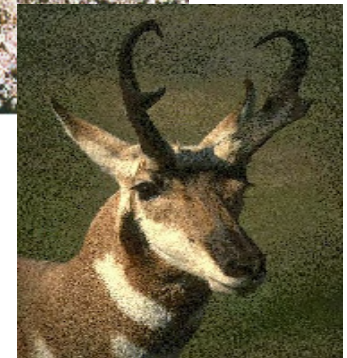
Figure 4. Sikes Act expenditures by the USFWS and States from FY 1998 to FY 2007.

INRMP Project Funding



Interagency Agreements

- Ft. Carson, CO
- U.S. Air Force Academy, CO
- MCB Camp Pendleton, CA
- Naval Surface Warfare Center Crane, IN



INRMP Project Funding



Cooperative Agreements

- An acquisition tool
- Less formal than a contract
- More control than a grant
- Effective way to implement INRMPs
- Substantial government involvement



INRMP Project Funding



Cooperative Agreement Authority

- Authorized by Sikes Act
- DoDI 4715.3 Environmental Conservation
 - Promotes use of cooperative agreements
- DoDGAR 3210.6-R DoD Grant & Agreement Regulations
 - Provides general guidance



INRMP Project Funding



Governing Regulations

- DoDGAR Part 22
- Circular A-110 & DoDGAR Part 32
- Circular A-102 & DoDGAR Part 33

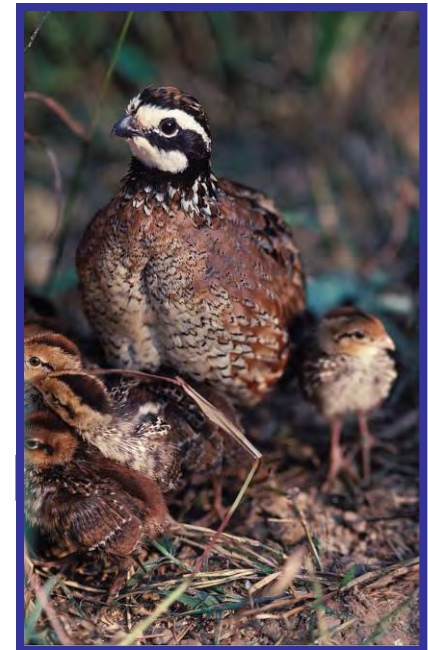


INRMP Project Funding



Cooperative Agreements: Typical Cooperators

- State Agencies
 - Soil Conservation Districts
 - Forestry and Wildlife Divisions
- Universities
- NGOs
 - Resource Conservation and Development
 - The Nature Conservancy
- Individuals (SMEs)



INRMP Project Funding



Cooperative Agreements

- DOD provided \$184,994 in transfer funding to the States for Sikes Act-related work in FY 2007
- States used \$1,565,831 of their own program funds for Sikes Act related activities in FY 2007

INRMP Project Funding



Cooperative Agreements: Typical Projects

- Soil Surveys
- Timber Cruises
- Prescribed Burning
- Genetic Studies
- Invasive Species Control
- Shoreline Stabilization
- Predator Control
- MAPS Projects
- T&E Surveys
- Monitoring Projects

INRMP Project Funding



Cooperative Agreements and REPI

- Tool used to implement REPI projects
- Authorized under 10 USC 2684a
- Used to acquire conservation easements
 - Partner executes easement/purchase
 - DoD can cost share the acquisition



INRMP Project Funding



Cooperative Ecosystem Studies Units

- Partnership of federal agencies, universities and non-governmental organizations
- Research, technical assistance, and training provided
- Natural and cultural resources management addressed
 - Multiple scales
 - Ecosystem context



INRMP Project Funding



Cooperative Ecosystem Studies Units (continued)

- Not a funding program
 - Funding should be committed prior to project approval
- Fast access and implementation of cooperative agreements
- Increased research, assistance and education for resource managers
- For more information:
www.cesu.org



INRMP Project Funding



DoD Membership in the CESU



INRMP Project Funding



DoD Participation in the CESU

CESU REGIONS	Projects	Funding
DS-Desert Southwest	3	\$281,196
CW-Chesapeake Watershed	7	\$307,964
GC-Gulf Coast	8	\$1,288,257
UMMV-Upper and Middle Mississippi Valley	36	\$2,921,121
HPI-Hawaii Pacific Islands	1	\$1,400,000
SAM-Southern Appalachian Mountains	1	\$34,500
CP-Colorado Plateau	1	\$30,200

TOTALS: 57 \$6,263,238

Cost Avoidance of over \$2.0M over a period of just 3 to 4 years