



**Managing for Biodiversity:
An Overview of DoD's Challenges and
its INRMPS**

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Background



DoD's Mission

“The mission of the Department of Defense is more than just aircraft, guns, and missiles. Part of the defense job is protecting the lands, waters, timber, and wildlife -- the priceless natural resources that make this great nation of ours worth defending.”

General Thomas D. White
Air Force Chief of Staff
1957-1961



DoD Land Base

Army



16 Million Acres

Navy and Marines



4 Million Acres

Air Force



9 Million Acres

Significant Natural Resources

- 29 million acres
- >320 federally-listed species and >550 species at risk
- “Islands” of habitat diversity



Diverse Habitats



New Boston AFB, New Hampshire



Jim Creek Naval Radio Station, Washington



Vandenberg AFB, California



Nellis AFR, NV

Major DoD Natural Resources Program Elements

- Land Management
- Fish and Wildlife Management
- Revenue Programs
- Outdoor Recreation

Land Management

- Mission Sustainment
- Vegetation and Soil Management
- Invasive Species Control
- Wetlands



Fish and Wildlife Management

- Threatened and Endangered Species
- BASH Program
- Hunting and Fishing
- Wildlife Management



Revenue Programs

- Commercial Forestry
- Agricultural Outleasing
- Cattle Grazing



Outdoor Recreation



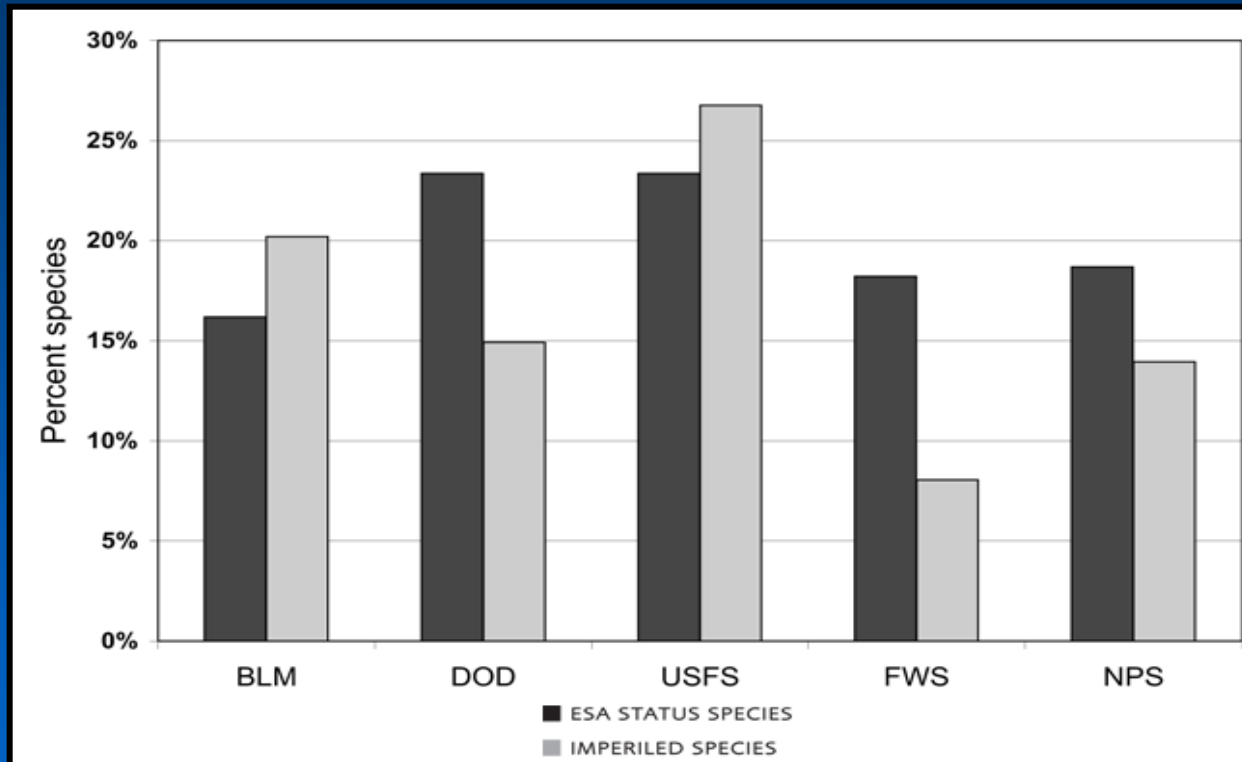
Key Challenges

Encroachment

- Urban Growth
- Maritime Restrictions
- Airspace Restrictions
- Airborne Noise
- Air Quality
- Unexploded Ordnance and Munitions
- Radio Frequency Spectrum
- Base Closures and Realignment
- Larger Weapons Platforms



DoD Lands & Listed Species



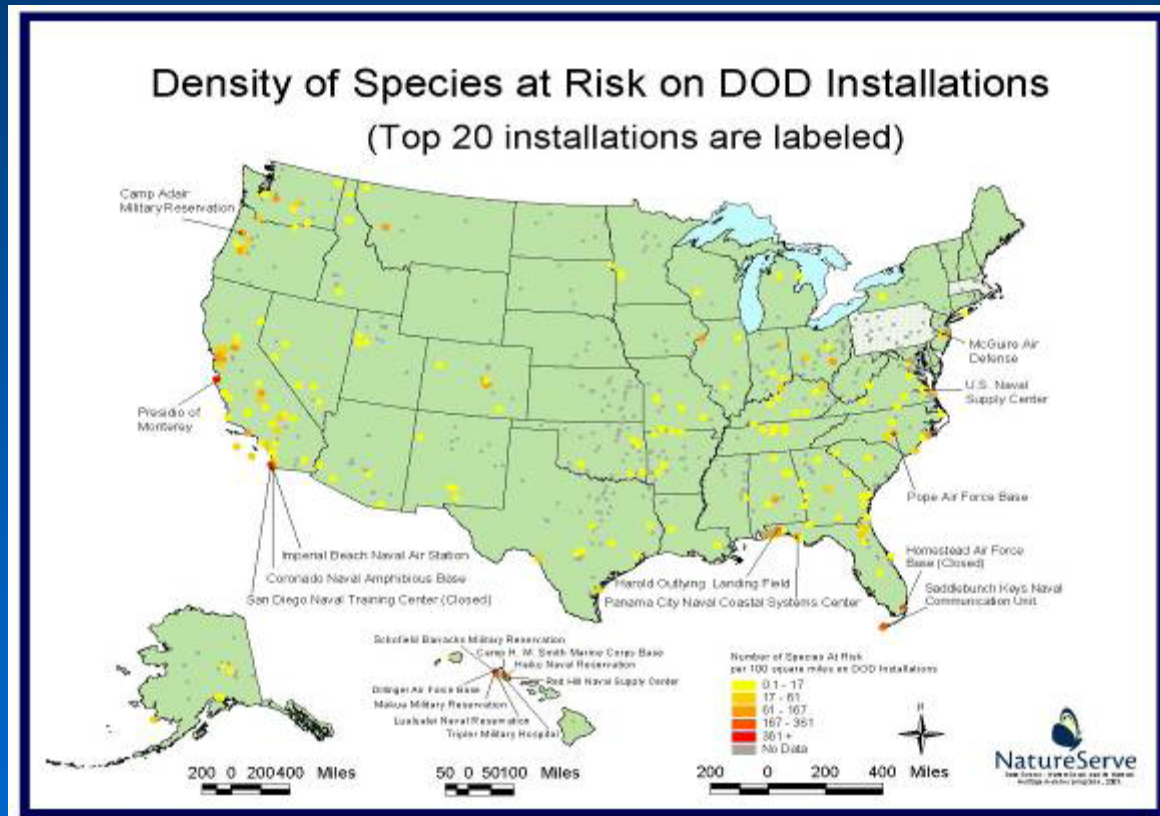
Endangered and Imperiled Species on Federal Agency
Lands Source: Stein et al. 2008

Species at Risk on DoD Lands: Key Findings



Total # Species at Risk	523
Critically Imperiled (G1/T1)	136
Imperiled (G2/T2)	340
Federal Candidates	47
Species with all known occurrences (100%) found on one DoD installation	24
Species with at least half of all occurrences (50%) found on one DoD installation	82

Species at Risk on DoD Lands



Global Climate Change

- Assessment?
- More SARs?
- Greater need for adaptation?
- Mitigation?



Ecosystem Services

- Energy?
- Pollination?
- Other natural resources services?
- Applications of Ecosystem Services
 - Carbon banking?
 - Wetlands banking?
 - Recovery credits?



DoD's Conservation Goal

- Support the military mission by ensuring sustained access to land, air and sea resources while:
 - Protecting important natural and cultural resources
 - Meeting all legal requirements
 - Promoting compatible multiple uses
 - Managing in a cost-effective manner



Sikes Act and INRMPs



A Brief History of the Sikes Act

- **Sikes Act of 1960**
 - Implemented Engle Act
 - Authorized tripartite cooperative plans
 - Voluntary, but mutually agreed upon plans
 - Focus on fish & game propagation
 - Funded through user fees, not appropriations
- **Sikes Act Improvement Act (SAIA) of 1997**
 - **Authorizes** DoD to carry out a program for the conservation and rehabilitation of natural resources on military installations



Key Provisions of SAIA

- Military Departments required to prepare **and implement** INRMPs for relevant installation...unless an installation does not have **significant natural resources**
- Scope of plans enlarged
 - Previous program discretionary, self-imposed, and dictated by internal policy
 - Previous program focused on fish and game conservation
- INRMPs made mandatory
 - “Must fund” requirements



Key Provisions of SAIA

- Retained requirements for
 - Cooperative preparation with FWS and states
 - Mutual agreement on conservation measures
- Program and INRMPPs must
 - Be consistent with the use of installation natural resources to ensure military preparedness
 - Ensure no net loss in capability of installations to support the military mission



Required INRMP 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



Required INRMP Elements

[CONTINUED]

- Public use of natural resources
- Public access
- Enforcement of natural resource laws
- No net loss in mission capability
- Other activities determined by the Secretary

Procedural Requirements

- Provide opportunity for public comment on (at least the initial) INRMP
- Cooperative development
- 5-year reviews for operation and effect
- Annual performance reviews strongly recommended
- Defense and Interior must report annually to Congress

INRMP Adequacy

- INRMP project implementation
- Partnership effectiveness
- Sustain the installation's mission
- Status of listed species and critical habitat designation
- Maintain ecosystem integrity
- Fish and wildlife management and public use
- Team adequacy



Other SAIA Features

- Ensures sufficient numbers of professionally trained natural resource managers
- Authorizes fee collection for hunting and fishing permits
- Authorizes cooperative agreements
- Authorizes conservation law enforcement
- 1998 amendment: Disabled Sportsmen's Access

Opportunities

- Baseline Inventories
- Habitat Restoration
- Management Plans
- Regional Ecosystem Partnerships
- Pilot Projects
- Conservation Banking

Questions?



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