An Introduction to DoD’s Natural Resources Program

Presentation to AFPMB Board Meeting
November 5, 2013

L. Peter Boice
Deputy Director, Natural Resources
CURRENT HOT ISSUE

Candidate Species
Why Candidate Species?

- Candidate – species that may warrant future protection under the ESA
- Critical Habitat Designation (CHD) can restrict mission and resource management activities and increase costs
- An installation can avoid CHD if it –
  - Has an approved INRMP
  - Implements agreed upon actions
- CHD avoidance requires advance planning, coordination, and proactive actions
Court settlement for 757 species in September 2011 in which USFWS agreed to:
- A 6-year schedule for final listing decisions on 251 species
- Developing initial findings on 506 other species

Formal data call to DoD Components
- Key species
- Level of concern
  - Red – Significant potential to impact military readiness
  - Orange – Moderate potential to impact military readiness
  - Yellow – Minimal potential to impact military readiness
# LEVEL OF CONCERN
## SUMMARY RESULTS

<table>
<thead>
<tr>
<th>LEVEL OF CONCERN</th>
<th>ARMY</th>
<th>NAVY</th>
<th>MARINE CORPS</th>
<th>AIR FORCE</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>RED*</td>
<td>6</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>ORANGE</td>
<td>25</td>
<td>6</td>
<td>1</td>
<td>3</td>
<td>29</td>
</tr>
<tr>
<td>YELLOW</td>
<td>45</td>
<td>38</td>
<td>3</td>
<td>4</td>
<td>71</td>
</tr>
<tr>
<td>TOTALS</td>
<td>72</td>
<td>43</td>
<td>5</td>
<td>6</td>
<td>110</td>
</tr>
</tbody>
</table>

*Red knot; Greater sage grouse; Washington ground squirrel; Taylor’s checkerspot butterfly; Streaked horned lark; Roy prairie pocket gopher; Louisiana pine snake; Lesser Prairie Chicken
### ADEQUATELY ADDRESSED IN INSTALLATION INRMP?
**STATUS AS OF DECEMBER 2012**

<table>
<thead>
<tr>
<th>STATUS</th>
<th>ARMY</th>
<th>NAVY</th>
<th>MARINE CORPS</th>
<th>AIR FORCE</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>47</td>
<td>54</td>
<td>3</td>
<td>5</td>
<td>109</td>
</tr>
<tr>
<td>NO</td>
<td>68</td>
<td>43</td>
<td>3</td>
<td>2</td>
<td>116</td>
</tr>
</tbody>
</table>

Status Report Due at FY 13 Environmental Management Review (EMR)
Next Steps

- Continue to track listings and impacts
- Minimize cost of mitigation measures
- Minimize negative impacts of alternate energy siting decisions
- Evaluate impacts of other natural resources laws and regulations
The Bottom Line: Critical Habitat Designation Avoidance!

<table>
<thead>
<tr>
<th></th>
<th>FY04</th>
<th>FY05</th>
<th>FY06</th>
<th>FY07</th>
<th>FY08</th>
<th>FY09</th>
<th>FY 10</th>
<th>FY 11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Installations</td>
<td>4</td>
<td>29</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>8</td>
<td>0</td>
<td>5</td>
</tr>
</tbody>
</table>

INRMPs and Critical Habitat Exclusions

51 installations and satellites have used INRMP exclusion: 4(a)(3)(B); 22 more than once

- Majority of recent occurrences – Hawaii plants
- 99 total difference species

34 bases used readiness exclusion: 4(b)(2)

1 since 2006 (two coral species)
1. Provide Policy and Guidance
2. Oversee DoD Components' Natural Resources Programs
3. Define Needs and Address Gaps
4. Enhance Outreach and Expand Partnerships
1. POLICY AND GUIDANCE

- DoDI 4715.03 – DoD Natural Resources Conservation Program
- DoDM 4715.03 – INRMP Implementation Manual
- Sikes Tripartite MOU
- Migratory Bird MOU
DoD Policy Issuances

- Natural Resources Conservation Instruction, DoDI 4715.03
  - Integrate mission and stewardship
  - Instill a conservation ethic
  - Facilitate sustained use of natural resources
  - Identify opportunities for improved cooperation

- INRMP Implementation Manual, DoDM 4715.03
  - Guidance for how to implement DoDI 4715.03
  - Streamlined procedures for required annual and five-year INRMP reviews
    - INRMP update vs. INRMP revision
    - Does it trigger NEPA?
  - Submitted for USD (AT&L) signature
Key Updated MOUs

- Sikes Tripartite MOU for Cooperative Integrated Natural Resources Program on Military Installations
  - July 29, 2013

- Migratory Bird MOU
  - Replaces existing Migratory Bird MOU that expired July 31, 2013
  - Eliminates language no longer supportable
  - Adds language for new and emerging threats
  - In formal coordination
2. OVERSIGHT OF NATURAL RESOURCES PROGRAMS

- Focus Area Metrics
- Tied to INRMPs
Why Metrics?

- Evaluate effectiveness of natural resources support to the military mission
- Assess overall health and trends of each installation's natural resources program
- Identify and correct potential funding and other resource shortfalls
## DoD Natural Resources Focus Areas

<table>
<thead>
<tr>
<th>Focus Areas</th>
<th>FY09</th>
<th>FY10</th>
<th>FY11</th>
<th>FY12</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INRMP Project Implementation</strong></td>
<td><img src="image1.png" alt="FY09 Pie Chart" /></td>
<td><img src="image2.png" alt="FY10 Pie Chart" /></td>
<td><img src="image3.png" alt="FY11 Pie Chart" /></td>
<td><img src="image4.png" alt="FY12 Pie Chart" /></td>
</tr>
<tr>
<td><strong>Partnership Effectiveness</strong></td>
<td><img src="image5.png" alt="FY09 Pie Chart" /></td>
<td><img src="image6.png" alt="FY10 Pie Chart" /></td>
<td><img src="image7.png" alt="FY11 Pie Chart" /></td>
<td><img src="image8.png" alt="FY12 Pie Chart" /></td>
</tr>
<tr>
<td><strong>Team Adequacy</strong></td>
<td><img src="image9.png" alt="FY09 Pie Chart" /></td>
<td><img src="image10.png" alt="FY10 Pie Chart" /></td>
<td><img src="image11.png" alt="FY11 Pie Chart" /></td>
<td><img src="image12.png" alt="FY12 Pie Chart" /></td>
</tr>
<tr>
<td><strong>INRMP Support of the Installation Mission</strong></td>
<td><img src="image13.png" alt="FY09 Pie Chart" /></td>
<td><img src="image14.png" alt="FY10 Pie Chart" /></td>
<td><img src="image15.png" alt="FY11 Pie Chart" /></td>
<td><img src="image16.png" alt="FY12 Pie Chart" /></td>
</tr>
<tr>
<td><strong>Candidate Species &amp; Species at Risk</strong></td>
<td><img src="image17.png" alt="FY09 Pie Chart" /></td>
<td><img src="image18.png" alt="FY10 Pie Chart" /></td>
<td><img src="image19.png" alt="FY11 Pie Chart" /></td>
<td><img src="image20.png" alt="FY12 Pie Chart" /></td>
</tr>
<tr>
<td><strong>Ecosystem Integrity</strong></td>
<td><img src="image21.png" alt="FY09 Pie Chart" /></td>
<td><img src="image22.png" alt="FY10 Pie Chart" /></td>
<td><img src="image23.png" alt="FY11 Pie Chart" /></td>
<td><img src="image24.png" alt="FY12 Pie Chart" /></td>
</tr>
<tr>
<td><strong>Recreational Use &amp; Access</strong></td>
<td><img src="image25.png" alt="FY09 Pie Chart" /></td>
<td><img src="image26.png" alt="FY10 Pie Chart" /></td>
<td><img src="image27.png" alt="FY11 Pie Chart" /></td>
<td><img src="image28.png" alt="FY12 Pie Chart" /></td>
</tr>
</tbody>
</table>
3. DEFINE NEEDS AND ADDRESS GAPS

- Strategic Planning
- Tools and Training
OSD Strategic Planning Framework

- DoD Natural Resources Program (ongoing)
- DoD Partners in Flight Plan (in review)
- DoD Partners in Amphibian and Reptile Conservation Plan (in draft)
Tools and Training

- Tools
- Courses
- Workshops
- Funding Sources
Tools

- Biodiversity
  - www.Dodbiodiversity.org

- Invasive Species Outreach
  - www.dodinvasives.org

- Bird Conservation
  - www.dodpif.org
Sikes and ESA courses developed and implemented. Now online only:
- www.Dodworkshops.org/Training.html

No additional Legacy–sponsored course offerings projected

FY2013 funding for development of online ESA Training
Informational Workshops

www.dodworkshops.org/Workshops.html

The Department of Defense (DoD) is responsible for creating programs and implementing management strategies to conserve and protect biological resources on its lands.

This website is designed to provide and disseminate information to interested parties about DoD's past and upcoming workshops. This website provides background materials, read aheads, and workshop materials for anyone interested.
NR Funding Sources

- Forestry Reserve Account
  - Reallocation of proceeds received from timber sales.
  - To benefit installation forestry program activities

- DoD Legacy Resource Management Program
  - Funds high priority natural and cultural resource management projects on a competitive basis.
  - www.dodlegacy.org

- SERDP (R&D) and ESTCP (Dem/Val)
  - www.serdp.org; www.estcp.org

- REPI (SERPPAS, WRP)
  - www.repi.mil
4. PARTNERSHIPS AND OUTREACH
Why Partner?

- Improve understanding of DoD mission and stewardship needs
- Place DoD lands into larger regional context, and leverage resources across boundaries
- Enhance resource sharing and cost efficiencies
- Ease INRMP approval and implementation
- Increase management flexibility
- Demonstrate DoD’s community engagement
National Military Fish and Wildlife Association (NMFWA)

- Coalition of military installation natural resource managers and contractors
- Future: more webinars and other online resources
Cooperative Ecosystem Studies Units (CESUs)

- A member of all 17 CESU units
- New Regions for 2013
  - Pacific Northwest, Great Basin
- Ft. Worth District
  - FY13: 48 new and 80 continuing projects
  - $29.5M
  - ~$6M O/H savings
Example NGO Efforts

- **Wildlife Conservation Society (WCS)**
  - *Caught in the Crosshairs: Combating the Illegal Wildlife Trade in Iraq & Afghanistan*
  - [www.wcswildlifetrade.org/military](http://www.wcswildlifetrade.org/military)

- **Pollinator Partnership**
  - Variety of project funded, primarily through National Public Lands Day
  - [www.pollinator.org](http://www.pollinator.org)

- **National Wildlife Federation**
  - *Scanning the Conservation Horizon: A Guide to Climate Change Vulnerability Assessment*
  - [www.nwf.org/vulnerabilityguide](http://www.nwf.org/vulnerabilityguide)

- **The Wildlife Society**
  - New Military Working Group
  - [www.wildlife.org/subunits/working-groups](http://www.wildlife.org/subunits/working-groups)
Cooperative Conservation

Regional Partnerships
- SE Regional Partnership for Planning and Sustainability (SERPPAS) and Western Regional partnership (WRP)
- Cooperative Invasive Species Management Areas

Locally Implemented Partnerships
- National Public Lands Day
- National Wild Turkey Federation
- Ducks Unlimited
Outreach

- Websites
  - DoDNaturalResources.net
  - DENIX.osd.mil/NaturalResources
  - DoDLegacy.org

- Natural Selections Newsletter

- Publications/Brochures

- YouTube Animations
  - The DoD Natural Resources Program
  - DoD Responding to Climate Change

- Social Media
  - DoD Facebook and Blog
  - Twitter: @DoDNatRes
REAL WORLD EXAMPLES
Impacts to DoD

- Mission
  - Increased fire risk
  - Obstructed line of sight

- Ecological
  - Altered ecosystems
  - Increased erosion

- Health/Safety
  - Insects; e.g., RFA
  - Toxic plants
Amphibian Disease

- “Do Frogs still get their Kicks on Route 66?”
- 1/5 of world’s amphibians face extinction
- Chytridiomycosis (Bd) – a major factor
- Phase I – systematic sampling of 15 installations, E–W
- Phase II – 15 additional surveys, N–S
Monitoring to Prevent BASH

- BASH: Bird/Animal Aircraft Strike Hazard
- Satellite biotelemetry and geospatial referencing to quantify bird–strike risk of migrating ospreys
- Langley AFB, 6 others
- Determine migration routes, habitat use, effectiveness of management actions
Habitat Improvement

- Only 3% of longleaf pine (LLP) remains
- Quality habitat for gopher tortoise, Red-cockaded woodpeckers, other listed species

Actions include:
- Prescribed burns
- Replanting
- Off-base partnering to increase LLP acreage
West Indian manatees – vulnerable to collisions

Cannot detect or locate approaching watercraft

Compiled sound perception measurements and behavioral data

Developed prototype mechanism to alert manatees to approaching slow moving boats
Monitoring an At-risk Species

- Western burrowing owl
- Partnered with Canada, Mexico, state agencies, NGOs
- Determined migratory linkages across their range, including 39 military installations
- Species-specific management added to INRMPs
- Important because these owls often select habitats adjacent to runways on military airfields
- Winner: 2013 Presidential Migratory Bird Federal Stewardship Award
Species At-Risk Protection

- San Nicholas Island fox
- Automated monitoring technique
  - Detect threats in time to prevent population declines to critical levels
  - Avoid future listing/CHD
  - Minimize monitoring costs
  - Technique transferable to other bases
Groundwater Protection

- Riparian woodlands in the desert SW
  - <1% of desert landscape
  - >50% of region’s breeding birds
- Three-year study to
  - Quantify impacts of groundwater withdrawal from the San Pedro
  - Determine the extent to which both surface water and riparian health influence abundance and diversity of riparian birds
  - Better predict impacts of future withdrawals
Annual “Mud Ops” exercise at MCB Hawaii
- Conducted since 1982
- AAVs kill invasive pickleweed and create a “moat and island” terrain
- Allows federally endangered Hawaiian stilt to nest successfully
Questions?

l.p.boice.civ@mail.mil