

Environment Stewardship

Overview

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A. Environmental Stewardship - What is it?

An ethic and practice of maintaining the viability of the Earth and its natural processes.

B. Our General Stewardship Responsibilities

- Manage, conserve, improve natural resources and environment.
- Promote awareness of environmental values.
- Use sound environmental stewardship, protection, compliance and restoration practices.

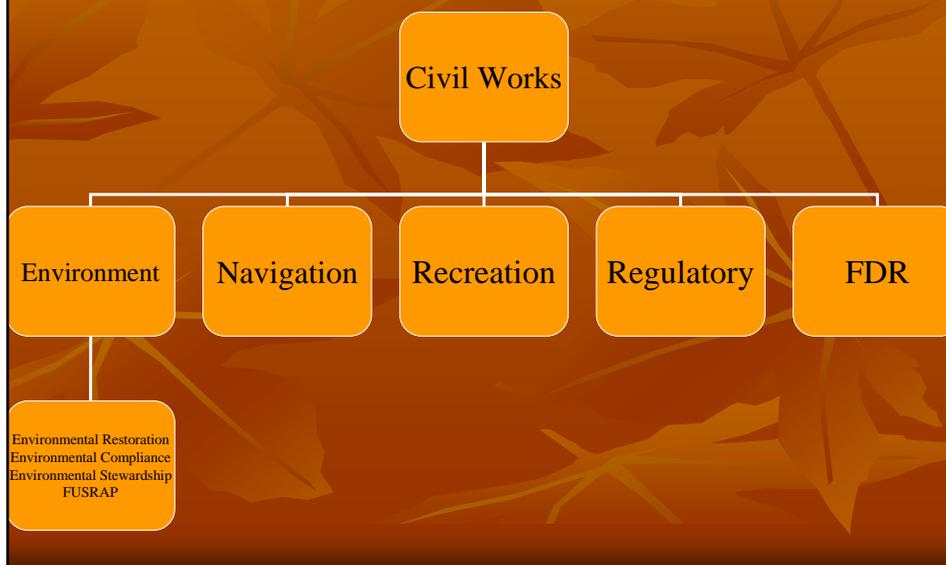
D. Stewardship of 11.9 million acres land/water

- Involves over 456 Corps administered water resources development projects.



- Includes:
 - Fee acres: 8.1 million.
 - Surface acres at conservation pool: 5.6 million.
 - Shoreline miles in fee: 41,000.

Organization of Business Lines



C. Evolution of Stewardship (Natural Resources) Policy

- 1988 White Paper: Three Natural Resources Management Concepts Used by the Corps – Mitigation, Enhancement, and Stewardship.
- 1989 National Task Force assembled to rewrite ER 1130-2-400 Natural Resources Management Regulation.
- 1992 Department of Army Conservation Pillars established.
- 1993 Natural Resources Management Initiative Task Force formed.

- 1994 Operations Performance Indicators established.
- 1996 Operations Performance Measures implemented.
- 1996 Initial development of CW Natural Resources Performance Measures.
- 1996 ER 1130-2-540 Environmental Stewardship Operations and Maintenance Policies.
- 2002 Stewardship Advisory Team for the Stewardship Support Program.
- 2002 Environmental Operating Principles issued by the Chief of Engineers.

II. Natural Resources Management - Mission

As steward of the lands and waters at Corps water resources projects, the Corps Natural Resources Management Mission is to manage and conserve those natural resources, consistent with ecosystem management principles, while providing quality public outdoor recreation, to serve the needs of present and future generations.

1. Environment-Stewardship Support Program (SSP)

Purpose: provide broad support to the Corps Environment-Stewardship business program by:

- assisting in the identification of national program needs
- developing new national program activities
- strategic program planning
- recommending national program funding priorities

Program Administration:

- O&M General funded.
- Managed by HQ,
Natural Resources Management CoP.
Support by ERDC – Scott Jackson



SSP Assisted by Stewardship Advisory Team



- 16 members (8 MSC, 4 District, and 4 Project reps).
- 2 meetings annually to identify stewardship trends and issues, recommend research and management needs, assist in developing funding strategies, and assist in the development of Stewardship Program Strategy.

Registered Hypermap

Natural Resources Management Gateway

to the future . . .

Environmental Stewardship

The US Army Corps of Engineers is the steward of nearly 12 million acres of public lands and waters. The mission of the program is to manage and conserve natural resources consistent with ecosystem management principles, while providing quality public outdoor recreation experiences to serve the needs of present and future generations. The management of natural resources by utilizing a stewardship concept ensures the conservation, preservation, or protection of Corps land and water resources.

This page is for the Environmental Stewardship Community of Practice. Environmental Stewardship is one component of the knowledge-management-based NRM Gateway. If you would like to get involved, procedures for field participation are in place. At the bottom of each topic area's cover page, the name of the identified [Content Subject Matter Expert \(SME\)](#) is listed. If you are interested in assisting with content development for that area, contact the SME directly. If no SME is listed, there is an opportunity to [volunteer for that position](#).

Env. Stewardship

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2. Environmental Operating Principles

Corps Vision Statement states: *“As an integral part of our mission, the Army Corps of Engineers will be a national leader in environmental and natural resource stewardship for present and future generations”*

- Development initiated by Chief of Engineers in April 2001.
- Launched formally in March 2002.
- Principles are broad
 - to apply the current range of Corps activities.
 - to guide environmental responsibilities of the Corps in the future.

“At our best, we will seek to accomplish outcomes that future generations will judge as having been within their best interests. We must think in terms of our legacy and not just efficiency to meet today’s needs.”

17 April 2001 LTG Flowers challenges USACE to implement Environmental Operating Principles

Environmental Operating Principles

- 1. Strive to achieve Environmental Sustainability.** An environment maintained in a healthy, diverse, and sustainable condition is necessary to support life.
- 2. Recognize the interdependence of life and the physical environment; proactively consider environmental consequences** of Corps programs; and act accordingly in all appropriate circumstances.
- 3. Seek balance and synergy among human development activities and natural systems** by developing economic, environmental, and social solutions that support and reinforce one another.
- 4. Continue to accept corporate responsibility and accountability under the law** for activities and decisions under our control that impact human health and welfare and the continued viability of natural systems.

5. Seek ways and means to assess and mitigate cumulative impacts to the environment; bring systems approaches to the full life cycle of our processes and work.

6. Build and share an integrated scientific, economic, and social knowledge base that supports a greater understanding of the environment and impacts of our work.

7. Respect the views of individuals and groups interested in Corps activities; listen to them actively, and learn from their perspective in the search to find innovative win-win solutions to the Nation's problems that also protect and enhance the environment.



E. Significance of the Natural Resources

1. Waterfowl Habitat- significance

- North American Waterfowl Management Plan (NAWMP)
 - 1989 Coop. Agreement of Interior and Corps
 - Objective: Identify extent that NAWMP goals may be accomplished on Corps project lands.
- 43% of Corps acreage (4,300,000 acres) that is available for management has significant waterfowl use or development potential.
- Corps responsible for 8.8% of acreage (1,700,000 acres) within NAWMP Joint Venture Areas.
 - Acreage represents 15% of total Corps property.
 - 66 projects within eight of the Joint Venture Areas.



2. Endangered Species Habitat - Significance

- Key habitat (water, edge, forage, cover) at many projects. Nationwide decrease in songbirds, bats, amphibians, etc.
 - Eagles a success story - moved from endangered to threatened.
 - Coordinate/ consult with Fish and Wildlife Service (FWS) on numerous of species, nationwide.
 - Corps expenditures for species protected by the Endangered Species Act FY 00 - \$86,000,000.
 - Pacific salmon alone approx. \$20,000,000 each year since 1992.
 - Corps participating in recovery of 84 listed species. 306 Corps projects involved

3. Fishing and Hunting - Significance

- Corps lands/ waters accommodate over 100 million (and increasing) fishing visits annually.
 - Represents about 15% of all fishing trips in the U.S.

- Corps lands and waters accommodate about 9 million (decreasing) hunting visits annually.

4. Green space/ aesthetics - Significance

- Federal lands are only public lands in many locations.
- Increasing population and expanding development make open space more critical (for human and wildlife).

5. Natural resources are the base for tremendous recreational opportunities.



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E. Natural Resources - How We Manage It

1. 1600 multi-disciplined professionals

- Rangers, Park Managers
- Backgrounds: e.g. forestry, fish/ wildlife management, biology, ecology, parks and recreation management



2. Cooperate with States and Fish and Wildlife Service

- Leases and license agreements
- State Heritage Offices

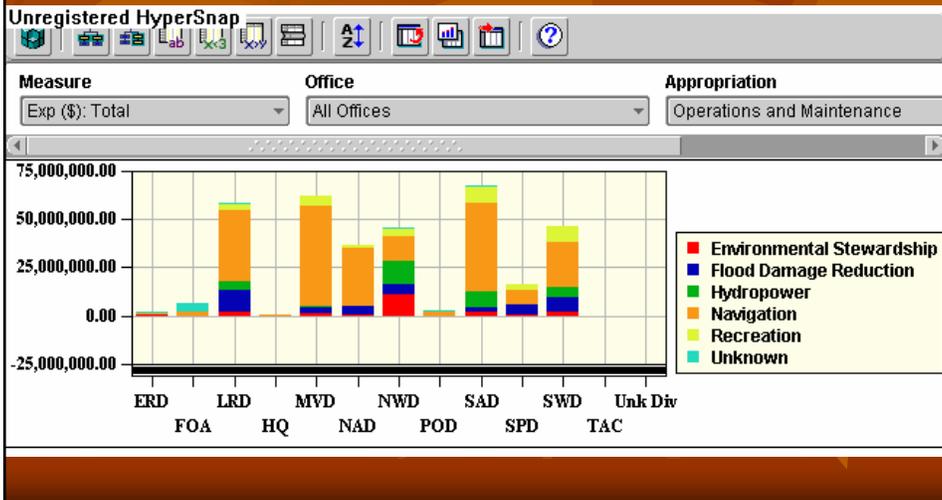


3. Cooperate with NGO's on environmental improvement

- Challenge Partnership opportunities
- Contributions
- Volunteer efforts



F. Natural Resources Stewardship Budget O&M Funded - (Static Budget)



III. Natural Resources Stewardship – Vision and Goals

A. Vision: Healthy Project Lands and Waters for Future Generations.

B. Goals:

- Manage natural resources to assure a healthy and sustainable condition, and protect and preserve cultural resources and historic properties.
- Foster healthy lands and waters by balancing public uses and needs .
- Become a recognized environmental steward.

IV. Natural Resources Management – Authorization

A. General Authorities - “Umbrella” Stewardship

- **Migratory Bird Treaty Act, 1918** (16 USC 730) - identifies the migratory birds to be protected and conserved by the U.S. Government.
- **Flood Control Act, 1944** (16 USC 460d) - provides for facilities in reservoir areas for public use, including recreation and conservation of fish and wildlife.
- **Fish and Wildlife Coordination Act, 1958** (PL 85-624) - provides for use of civil works projects for conservation, maintenance and management of fish and wildlife resources and wildlife habitat; General Plans.

- **Water Resources Development Act of 1990** (PL 104-640) - establishes the Corps "environmental protection" mission in the planning, design construction, operations and maintenance of water resources projects.
- **Army and Corps Regulations and Policy ER 1130-2-540.**
- **Antiquities Act, 1906** - provides for protection of archeological resources on Federal lands.
- **Historic Sites Act, 1935** - Established National Register of Historic Places and a national policy to preserve for public use historic sites, buildings, and objects for the inspiration and benefit of the people of the U.S.
- **National Historic Preservation Act, 1966** - governs preservation of historic and archeological resources of national, regional, state and local significance.

B. Project Authorizations - “Project Specific”

1. Land Allocation - Project Specific

- Authorization tells how land is to be acquired.
- Usually for project purposes.
- Sometimes specifically for fish and wildlife, or recreation.

2. Project Purposes - Traditional

- Hydropower
- Flood control
- Navigation
- Fish and wildlife
- Recreation



C. Project Documentation

1. Feasibility Reports

- Fish and Wildlife Coordination Act Reports

2. Decision Reports

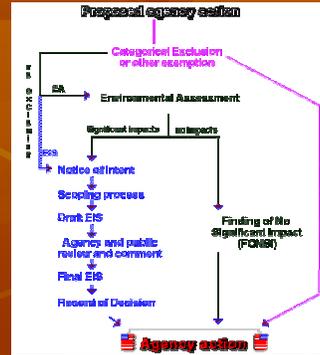
- ROD's
- HQ approved
- Congress approved

3. Design Memoranda

4. NEPA Documents

5. Mitigation Implementation Plans

6. Others



V. Documents Driving Natural Resources Stewardship at the Project (Process)



A. Master Plan - identifies resource use objectives

1. Conceptual, broad based.
2. Means to organize natural resources.
3. Land classifications -need completed Level One (general) inventory of natural resources.

B. General Plans

1. Prepared/ approved pursuant to Fish and Wildlife Coordination Act.
2. Covers existing project lands used for fish and wildlife purposes.
 - Under the administration of other agencies.
 - On lands acquired for fish and wildlife mitigation.

C. Operational Management Plan (OMP)

1. For implementation of management.
2. A planning tool.
3. Monitor status - need Level Two (more detailed) Natural Resources Inventory.

D. O&M Budget

1. Annual Budget EC
2. Means to resource the Operational Management Plan.
3. To be “performance based” -- tied to performance measures.

VI. Natural Resources Stewardship Stewardship Concepts - (Products)

1. Definition: **Stewardship** - management to sustain healthy ecosystems, natural biodiversity, and to conserve natural resources, such that Corps lands and waters are left in a condition equal to or better than the condition when acquired, and such that those natural and cultural resources are available to serve the needs of present and future generations (ER 1130-2-540).

2. Stewardship Corporate Goal: Healthy lands and waters for future generations

- Land management within watersheds consistent with ecosystem management principles.
- Stewardship activities comply with applicable environmental laws and regulations.
- Project lands are retained for the life of the project.



Performance Measure Development

■ Past

- Authorized Mitigation
 - portion of the project
 - performance may have been determined by another agency.
- Recovery plans
 - only those projects with T&E and recovery plan responsibilities
- Less than 50 percent of projects

■ Present

- Completion of Level One Inventory
 - Consistent Nationwide
- Master Plan updates
- Condition of Lands
- Mitigation Requirements
- 100 percent of projects!!

3. Stewardship Performance Measures

Beginning FY 05:

- Percent Corps-operated water resources projects with completed Master Plans in accordance with Engineering Regulation (ER) 1130-2-550.
- Percent of “minimum” Level One Natural Resources Inventory completed on Corps fee-owned property real property (acres).
- Percent of Corps administered mitigation lands (acres) meeting the requirements in the authorizing legislation or relevant Corps of Engineers decision document.

Beginning FY 07:

- Percent of healthy and sustainable acres on Corps fee-owned property.



Budget Process - Performance Measures

Vision - Healthy lands and waters for future generations
Goal - Manage Natural resources for a sustainable condition
Objective - Complete Level One Inventory

Utilize tools such as NRM Gateway to interchange ideas
provide policy descriptions, track trends, technology transfer

Utilize GIS/CADD technology center
for potential funding and assistance in
implementing Level 1 and 2 Corps-wide

OMBIL
Inputs to include NVCS categories, wetland, soils, SSS (Level 1)
to input into OMBIL

Initial - Budget 60 percent
Work Packages - increment 2
Complete Level One Vegetation Coverage

Performance Measure
Percent of Inventory Complete
ES BEST
Codes in ABS and Prism

Project 1
work package increment
\$ 25,000 increase PM 15 %

Project 2
work package increment
\$ 50,000 increase PM 10 %

Evaluated by
District, Division and HQ
Approved
Project completes work to increase PM

not approved
PM stable

4. Stewardship functional responsibilities – management:

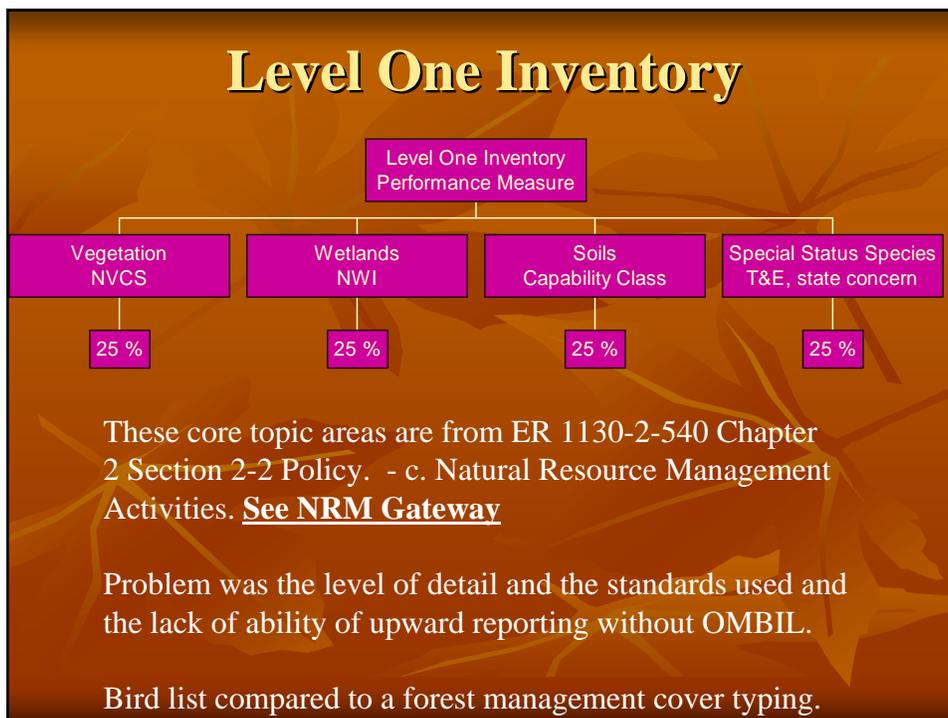
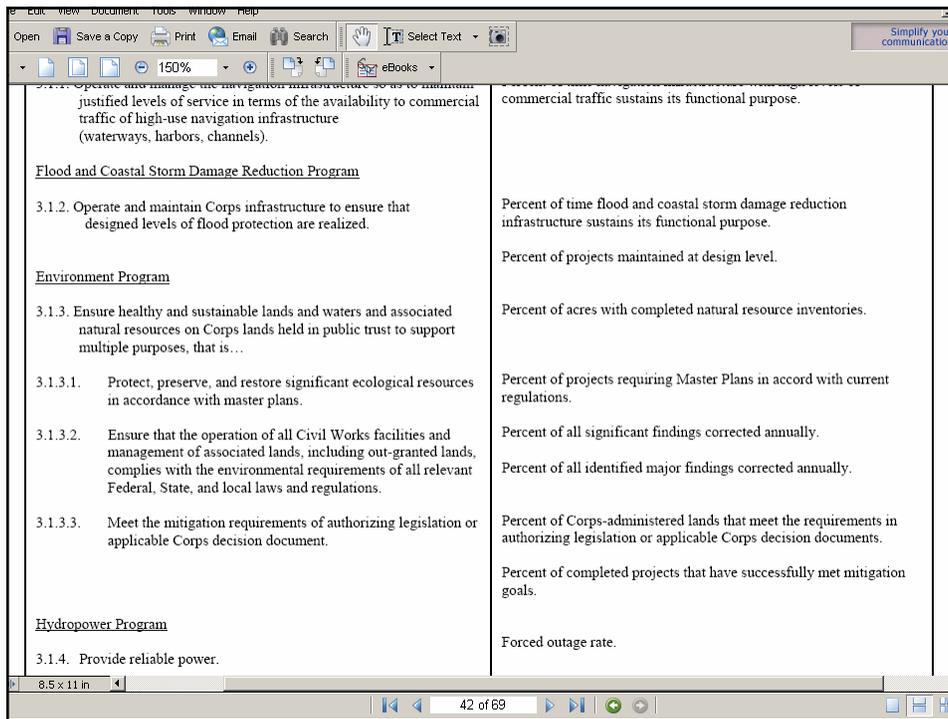
- **National Focus Plans/ Programs** –

Definition: Natural resources plans/programs which apply nationwide and which identify declining or “at risk” species groups or habitat type which are to receive management emphasis. Programs are designated by law, executive order, national plans/ agreements, or multi-agency plans/ agreements.

- **Special Status Species**

- **Performance Measures**

- Level One Inventory, Master Plans, Mitigation, sustainable lands, recovery plans.



OPERATIONS AND MAINTENANCE BUSINESS INFORMATION LINK

Action Edit Query Record Field Help Window

PROJECT SITE VEGETATION CLASSIFICATION

Project Site: POTOMAC RIVER AT ALEXANDRIA
 Fiscal Year: 2006

Project Fee-Owned Area: 21000

**** THE FOLLOWING CLASSIFICATION INFORMATION (EXCLUDING CONDITIONS) IS DERIVED FROM THE NATIONAL VEGETATION CLASSIFICATION SYSTEM ****

Division	Order	Class	Sub-Class	Sub-Class Acreage	Condition
VEGETATED	Shrub Dominated	Shrubland (Scrub)	Evergreen shrubland (scrub)	200	Condition
VEGETATED	Herb Dominated	Herbaceous Vegetation	Annual graminoid or forb vegetation	100	Condition
VEGETATED	Tree Dominated	Closed Tree Canopy	Deciduous closed tree canopy	1200	Condition
VEGETATED	Tree Dominated	Closed Tree Canopy	Evergreen forest	650	Condition
VEGETATED	Shrub Dominated	Shrubland (Scrub)	Deciduous shrubland (scrub)	480	Condition
VEGETATED	Herb Dominated	Herbaceous Vegetation	Perennial forb vegetation	500	Condition
Total Classified Acreage				3130	
Total Unclassified Acreage				17870	

More Info

Fiscal Year for the Vegetation Classification information

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OPERATIONS AND MAINTENANCE BUSINESS INFORMATION LINK

Action Edit Query Record Field Help Window

PROJECT SITE LAND (SOILS) CAPABILITY CLASSES

Project Site: POTOMAC RIVER AT ALEXANDRIA
 Fiscal Year: 2006

Project Fee-Owned Area: 21000

**** THE FOLLOWING CLASSIFICATION INFORMATION IS DERIVED FROM THE NATURAL RESOURCES CONSERVATION SERVICE ****

Class	Land Capability Class Definition	Class Acreage
1	Soils in this class have few limitations that restrict their use. The soils are deep, well drained and the land is ne ...	50
2	Soils in this class have some limitations that reduce the choice of plants or require moderate conservation pract ...	20
3	Soils in this class have severe limitations that reduce the choice of plants or require special conservation pract ...	35
4	Soils in this class can be used for cultivation but there are very severe limitations on the choice of crops. This ...	60
5	Soils in class V to VIII are generally not suited to cultivation. Soils in class are generally subject to frequent stre ...	50
6	Soils in this class have severe limitations that restrict their use to pasture or range, woodland or wildlife. Limita ...	40
7	Soils in this class are very severe which restrict use to grazing, woodland or wildlife. Physical limitations same ...	10
8	Soils in this class should not be used for any kind of commercial plant production. Use is restricted recreation, ...	50
Level One Conservation Pool Area		11000
Total Unassessed Project Fee-Owned Acreage		9685

More Info

Fiscal Year of the Land Capability information

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Level One Inventory Performance Measure Report

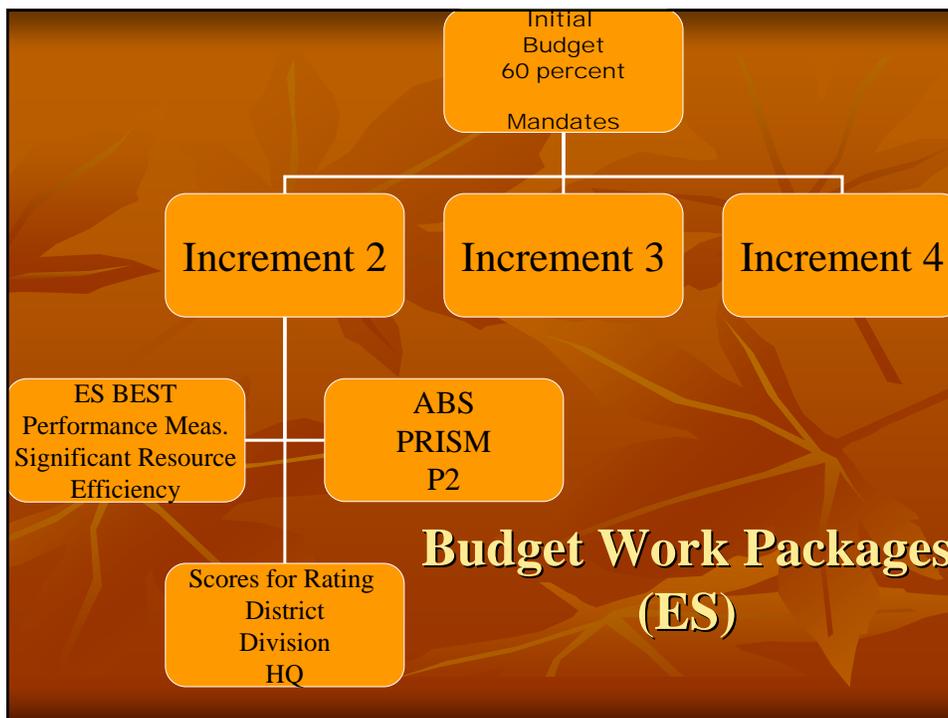
Level One Natural Resources Inventory Performance Measure Report for Fiscal Year 2005

Division NORTH ATLANTIC DIVISION
 District BALTIMORE
 Project Site POTOMAC RIVER AT ALEXANDRIA
 Fiscal Year 2005

Fiscal Year Soils	= (Sum All Soil Types / (Project Fee Owned Acreage - Fee Land Submerged)) * 100 (315 / (21000-11000)) * 100 = 3.15%
Fiscal Year Vegetation	= (Sum Vegetation Sub-Classes / Project Fee Owned Acreage) * 100 (300 / 21000) * 100 = 1.43%
Fiscal Year Wetland	= ((Sum Wetlands + Non-Wetlands) / Project Fee Owned Acreage) * 100 ((9230 + 0) / 21000) * 100 = 43.95%
Fiscal Year Species	= (Count Species Listed and Confirmed / Count Species Listed) * 100 (6 / 6) * 100 = 100.00%
Fiscal Year Level One Completion Index	= (Fiscal Year Soils + Fiscal Year Vegetation + Fiscal Year Wetland + Fiscal Year Species / 4) * 100 = .4215

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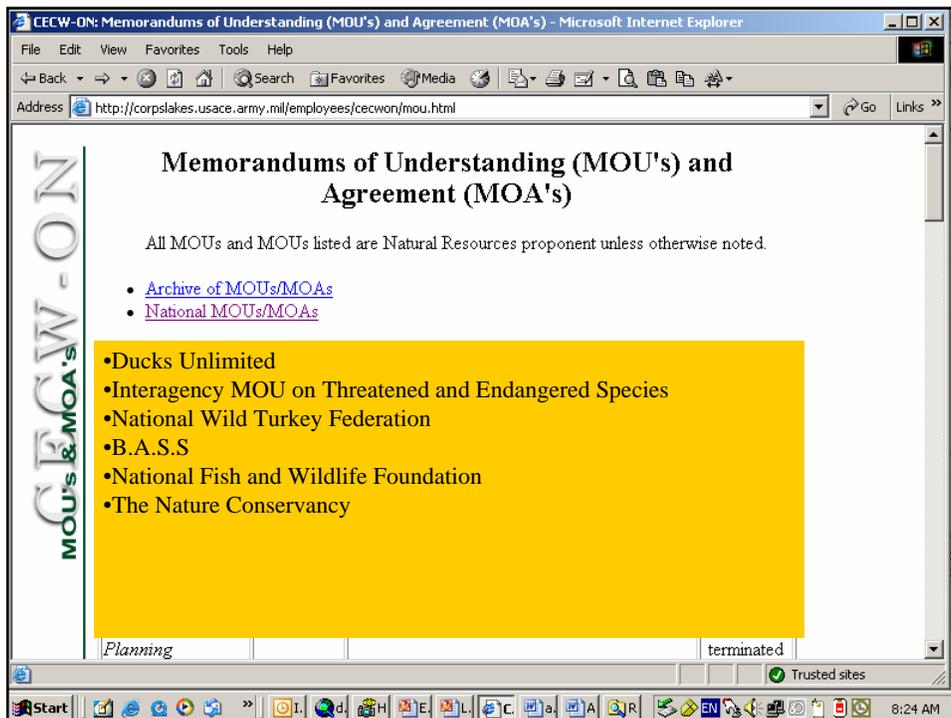
VII. Stewardship Program Assets

A. Project Staff

- Highly qualified, professional, enthusiastic.

B. Interest and Support

- Public interested – they like what we do.
- Public is a friend - not an enemy.
- Corps has natural resources and goals.
- Opportunities exist for the public to help accomplish our natural resources stewardship goals.
 - “Big bucks” not always required.
 - Challenge Partnerships.
 - Volunteers give “hands on” support.



VIII. Public Involvement



A. Operations Project Manager is a “lightning rod” for project stewardship activities.

B. Public Interfaces - take advantage of opportunities – build support/constituencies.

C. Advantages

- Increases effectiveness/ efficiencies.
- Enhanced Corps image.
- Mission accomplishment.

IX. Success Stories



A. Fern Ridge Flood Control Project, Eugene, OR

Description: A combination of wetland, grasslands and upland habitats managed towards maintaining a rich diversity in biota including Special Status Species such as the endangered Blue Fender Butterfly and the Western Pond Turtle.

Partners: Private Conservation Groups, Oregon State University, Oregon Department of Fish and Wildlife, U. S. Fish and Wildlife Service and the U. S. Forest Service.

B. Raystown Lake

- Non Traditional Funding
- AmeriCorps\Pennsylvania Conservation Corps\ Prisoners
- Friends of Raystown Lake
- Student Conservation Corps
- Turkey Federation/Grouse Society/DU/Pheasants Forever
- U.S. Forest Service
- Over 1.6 million in 10 years.



X. Summary

Bottom Line - Corps has adequate authorities and ample opportunities for managing our natural and cultural resources.

...It is our stewardship responsibility to just do it!