

Stewardship of Natural Resources

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I. Stewardship of Natural Resources Overview



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**

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

1. Environment - Stewardship Support Program

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 Branch

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.

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.

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.

Principles will be integrated into the Program Management Business Process and other Corps decision-making.

D. Stewardship of 11.9 million acres land/water

- Involves Over 456 Corps Administered Water Resources Development Projects



- Includes:
 - In Fee Acres: 8.1 million
 - Surface Acres at Conservation Pool: 5.6 million
 - Shoreline Miles in Fee: 41,000

E. Significance of the Natural Resources

1. Waterfowl Habitat- significance

- North American Waterfowl Management Plan (NAWMP)
 - 1989 Cooperative 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 are 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
- 1260 species Federally listed "endangered" or "threatened" in U.S as of Jan 04
 - 516 animals (28 proposed); 744 plants (4 proposed)
 - 1017 (81%) species have approved recovery plans
 - Over 256 species "candidate" for listing
- Coordinate/ consult with Fish and Wildlife Service (FWS) on numerous of species, nationwide
 - 254 species addressed in FY 00

- Corps expenditures for conservation of species protected by the Endangered Species Act
 - FY 00 - \$86,000,000
 - Pacific salmon alone approx. \$20,000,000 each year since 1992
- Recovery Plans for 1017 species – (may be more than 1 species covered in each Plan)
 - Include management actions to recover species
 - Actions range from habitat protection to modifications of structures
- Corps participating in recovery of 81 listed species that have final FWS Recovery Plans
 - 56% of these species found within SAD
 - 293 Corps projects involved

3. Hunting and Fishing - 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. Greenspace/aesthetics - Significance

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

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

E. Natural Resources - How We Manage It

1. 1600 multi-disciplined professionals

- Rangers, Park Managers
- Backgrounds: 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)

- FY 01 - \$75 Million
- FY 02 - \$75 Million
- FY 03 - \$79 Million
- FY 04 - \$84 Million
- FY 05 - \$93 Million (proposed)

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.

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
- **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

- **Archeological and Historic Preservation Act, 1974** - mandates identification, investigation, and recovery of archeological information when Federal activities may cause the loss/ destruction of such resources and authorizes the expenditure of project funds for such studies.
- **Archeological Resources Protection Act, 1979** - provides enforceable permitting and protection program for archeological resources on Federal lands.
- **Native American Graves Protection and Repatriation Act, 1990** - requires Federal agencies to conduct information gathering surveys of all agency curated archeological collections to identify human remains and associated/ un-associated funerary objects, and objects of cultural patrimony. Agencies must then afford recognized Indian Tribes and Native Hawaiian organizations an opportunity to claim and repatriate these items.

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
- HQUSACE approved
- Congress approved

3. Design Memoranda

4. Mitigation Implementation Plans

5. 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 I (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 II natural resources inventory (more detailed)
 - (Level I natural resources inventory necessary in absence of Master Plan)

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 Concepts - (Products)

A. Concept - Mitigation

1. Definition-Mitigation: measures authorized by legislation or approved by HQ to compensate for ecological resources unavoidably and adversely affect by a Corps project (ER 1130-2-540)
2. Corporate Goal: Corps mitigation outputs meet the requirements in authorizing legislation or relevant Corps decision document

3. Mitigation Current Performance Measure:

Percent of mitigation lands (acres) meeting the requirements in the authorizing legislation or relevant Corps decision document. "Mitigation lands" - lands on which mitigation measures are taken to compensate for adverse ecological impacts unavoidably caused by Corps projects or activities. These lands are either authorized by Congress or approved by HQUSACE in a formally documented decision.

B. Concept - Enhancement

1. Definition: Enhancement - those activities which produce an increase or concentration of animal numbers for the purpose of recreational benefits (ER 1130-2-540)
2. Corporate Goal: To be developed
3. Performance Measure: To be developed

C. Concept- Stewardship

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

3. Draft Stewardship Performance Measures:
Under development for implementation in FY 06:

- Percent Corps-operated water resources projects with completed Master Plans in accordance with ER 1130-2-550
- Percent of healthy and sustainable acres on Corps fee-owned property
- Percent of minimum Level 1 Natural Resources Inventory completed on Corps fee-owned acres

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**
- **Other National Focus Plan/Programs**

- **Special Status Species**

- Definition: Any species which is listed, proposed, or candidate for listing as threatened or endangered by the Fish and Wildlife Service (FWS) or National Marine Fisheries Service (NMFS) under the Endangered Species Act; any species covered by the Migratory Bird Treaty; any species listed and protected by State statute in a category implying potential endangerment or extinction (ER 1130-2-540).

- Corporate Goal: Assist in the recovery of Federally listed species and protect/conservate special status species and their habitat.

- **Special Status Species Current Performance**

- Measure: Percent of Corps projects with potential to participate in the recovery of Federally listed species (with final FWS/ NMFS Recovery Plans in which the Corps is designated as an action agency) that are accomplishing the ascribed FWS/ NMFS Recovery Plan requirements.

- **Other National Focus Plans/ Programs**

- Definition: Those plans and programs which do not specifically address special status species such as Recreational Fisheries Conservation Plan, North American Waterfowl Management Plan, Neotropical Migratory Bird Program, etc.

- **Fish and Wildlife Habitat Management**

Definition: Section 2 of the Forest Cover Act provides Corps a authority to manage project lands and waters for any or all conservation purposes, including fish and wildlife conservation. Activities are conducted which seek to maintain populations of target species through manipulation and management of habitat (ER 1130-2-540)

Draft Corporate Goal: Fish and wildlife habitat is optimally producing a diversity of fish and wildlife on a sustained basis

Performance Measure: To be developed

- **Forest Management**

Definition: The Forest Cover Act provides the mandate for multiple use forest management, or other vegetative cover management, on project lands/waters. Management is applied to develop, maintain, protect, and/or improve vegetation conditions for timber, fish, wildlife, soils, recreation, water quality and other beneficial uses (ER 1130-2-540).

Draft Corporate Goal: Forest is optimally producing forest values (timber, forage, fish and wildlife, soils, water quality, air quality, soil, recreation, aesthetics) and other beneficial outputs on a sustained basis.

Performance Measure: To be developed

- **Grassland Management**

Definition: Mandated by the Forest Cover Act, includes activities to protect and develop vegetative cover other than forests, as well as establish conservation measures for its maintenance. Management techniques will be applied whenever the opportunity exists to protect native grasslands or prairie, and/or improve vegetative conditions as a soil conservation, watershed protection, fish and wildlife habitat or range management practices

Draft Corporate Goal: Grassland is optimally producing grassland values (e.g. forage, water quality, air quality, soil, fish and wildlife, recreation, aesthetics, and other beneficial outputs) on a sustained basis

Performance Measure: To be developed

- **Wetland Management**

Definition: The Forest Cover Act provides for development of other vegetative cover, such as wetlands, so as to yield maximum benefit and otherwise improve such areas

Draft Corporate Goal: Wetlands are optimally producing wetland values (e.g. water/air quality, flood control, water supply recharge, fish and wildlife, recreation, aesthetics) on a sustained basis

Performance Measure: To be developed

- **Soils Management**

Definition: All land management prescriptions developed for use at water resources project will integrate the constraints and favorable characteristics associated with specific soil types and land use capabilities

Draft Corporate Goal: Soils are physically stable and the biological productivity is maintained

Performance Measure: To be developed

- **Cultural Resources Stewardship**

Definition: Management and protection of cultural resources Corps civil works projects, as well as establishing a Historic Preservation Program for construction and O&M activities at these locations

Draft Corporate Goal: Cultural resources and associated information are protected

Performance Measure: To be developed

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 management goals
 - “Big bucks” not always required
 - Challenge Partnerships
 - Volunteers give “hands-on” support

C. Memoranda of Understanding (MOU's) and Agreement (MOA's)

B.A.S.S.	6/1996	MOU between the Bass Anglers Sportsman Society and U.S. Army Corps of Engineers
Ducks Unlimited, Inc.	7/2002	MOU between Ducks Unlimited, Inc. and U.S. Army Corps of Engineers

Interagency MOU on Endangered Species Act 9/1994

MOU of the Department of Agriculture, Forest Service; Department of Defense; Army Corps of Engineers; Department of Commerce, National Marine Fisheries Service; Department of the Interior, Bureau of Mines, Bureau of Land Management, Bureau of Reclamation, Fish and Wildlife Service, Minerals Management Service, and National Park Service; Department of Transportation, Coast Guard, Federal Aviation Administration, Federal Highway Administration; and the Environmental Protection Agency to preserve threatened and endangered species and the ecosystems on which they depend.

National Fish and Wildlife Foundation	3/1998	MOU between the National Fish and Wildlife Foundation, the Department of the Army, and the U.S. Army Corps of Engineers
National Wild Turkey Federation	1/1999	MOU between the National Wild Turkey Federation and U.S. Army Corps of Engineers

The Nature Conservancy	12/1988	Cooperative Agreement between the The Nature Conservancy and the Department of Defense (DoD)
The Nature Conservancy	12/2000	Memorandum of Understanding between the Nature Conservancy, the Department of the Army, and the U.S. Army Corps Of Engineers

VIII. Public Involvement



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

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

C. Advantages

- Increase effectiveness/efficiencies
- Enhance Corps image
- Mission accomplishment

D. Stewardship Stakeholders Meetings

- Regional and local meetings recommended
- To listen, and obtain feedback from key stakeholders
- Objectives for Stakeholder Meetings
 - Foster understanding among stakeholders and public of Corps role in stewardship of the nation's natural resources.
 - Listen to stakeholder concerns with the purpose of discovering ideas for improving stewardship
 - Obtain input to further develop Strategic Plan for Corps Stewardship business program of the future.

IX. Success Stories



A. Fern Ridge Flood Control Project, Eugene, OR

1. 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.
2. 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. Haserway Wetland Management Area, Grenada Lake, MS

Description: Wetland and wildlife management and demonstration area with moist soil management, seasonal and permanent waterfowl impoundments, nesting boxes and wildlife plantings, woodlands and nature trail on 330 acres

Partners: Ducks Unlimited (DU), FWS, contributions received through DU from area schools, businesses and local Chamber of Commerce

**C. “Lands and Waters: Value to the Nation”
national brochure released in 2002.**

- Tells our story through successes in the management of the nation’s natural resources on Corps administered lands and waters.
- HQUSACE to release similar brochures for each of the other Corps business programs.

D. Corps actions to assist recovery of the Bald Eagle have significantly contributed to de-listing of species.

X. Summary

**Bottom Line - Corps has adequate
authorities and ample opportunities for
managing our natural and cultural resources
.... that said, it is our stewardship
responsibility to just do it!**