

Habitat Protection & Restoration Reporting Through GPRA

... as an Indicator?

Eric Buehl

Habitat Coordinator

Government Performance & Results Act of 1993

Why:

To report habitat restoration, enhancement, and protection activities consistent with our CCMP.

What:

Has included land purchases, conservation easements, wetland restoration and enhancement projects, reforestation, riparian buffers, fish passages, invasive species control, oyster reef/gardening, etc...

Agencies & Groups Contacted

Who:

U.S. Fish & Wildlife Service “Partners” Program

Delaware Wildlands

Sussex County Land Trust

DeIDOT

Sussex County Public Works

U.S.D.A. Natural Resources Conservation Service

The Nature Conservancy

University of Delaware-College of Marine Studies

Sussex Conservation District

Delaware Department of Agriculture:

Forest Service

Agricultural Land Preservation Foundation

Agencies & Groups Contacted

DNREC Divisions:

Office of the Secretary

Soil & Water Conservation

Nonpoint Source (CREP)

Drainage

Water Resources

Wetlands/Subaqueous Lands

Watershed Assessment (Shellfish/SAV)

Fish & Wildlife

Heritage

Mosquito Control

Assawoman Wildlife Area

Private Lands Assistance Program

Parks & Recreation

Reportable Habitat Categories

- | | | | |
|-----------|--|-----------|-------------------------------|
| 1 | Barrier Island | 13 | SAV |
| 2 | Beach | 14 | Mangrove |
| 3 | Dune | 15 | Rocky Shoreline |
| 4 | Coral Reef | 16 | Riparian |
| 5 | Forested Wetland | 17 | Instream |
| 6 | Freshwater Marsh | 18 | Agricultural Land |
| 7 | Tidal Wetland | 19 | Forest/Woodland |
| 8 | Shrub Swamp (non-mangrove) | 20 | Grassland |
| 9 | Hard Bottom | 21 | Field/Meadow |
| 10 | Soft Bottom/mud | 22 | Pond |
| 11 | Soft Bottom/sand | 23 | Other (please specify) |
| 12 | Shell Bottom (e.g. oyster reef or clam bed) | | |

Project Benefit(s)

- 1 Protect / improve / provide habitat for birds**
- 2 Protect / improve / provide habitat for fish / shellfish**
- 3 Protect / improve / provide habitat for other wildlife**
- 4 improve or protect water quality**
- 5 increase or protect water quantity**
- 6 restore natural hydrology**
- 7 erosion control**
- 8 flood control**
- 9 Improve / increase educational or recreational opportunities**
- 10 protect or preserve open space**

. . . and Project Activity

- ***Enhancement***
- ***Establishment***
- ***Protection / Maintenance***
- ***Re-establishment***
- ***Rehabilitation***

Enhancement: The manipulation of physical, chemical or biological characteristics of a site with a goal to heighten, intensify, or improve specific functions or for a purpose such as water quality improvement, flood water retention or wildlife habitat. Enhancement results in a change in function and can lead to a decline in function, but does not result in a gain in acres. This item includes activities commonly associated with the terms enhancement, management, manipulation, and directed alteration.

Establishment: The manipulation of the physical, chemical, or biological characteristics present to develop a habitat that did not previously exist. Establishment results in gain in acres.

***Protection/
Maintenance:*** Removal or a threat to, or preventing the decline of conditions. Includes mechanisms such as land acquisition, conservation easements, deed restrictions, etc. or other designation to prevent alteration of the site. This term also includes activities commonly associated with the term preservation. Protection/maintenance does not result in a gain of acres or habitat function.

Reestablishment: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic function to a former habitat. Reestablishment results in the rebuilding of a former habitat and a gain in acres for that habitat.

Rehabilitation: The manipulation of the physical, chemical or biological characteristics of a site with the goal of repairing natural/historic functions of the degraded habitat. Rehabilitation results in a gain of habitat function but does not result in a gain of acres for that habitat.

Example from 2006 report

<i>Project Name</i>	<i>Practice/ Type</i>	<i>Acres</i>	<i>Start</i>	<i>NEP Cost</i>	<i>Other Cost</i>	<i>Partners</i>
Dorman	Invasive Control	5	Sept. 05	\$ 0	\$ 159	DNREC/ NRCS
CIB	Invasive Control	11	Sept. 05	\$ 42	\$ 309	DNREC/ NRCS
Edelman	Invasive Control	5	Sept. 05	\$ 0	\$ 159	DNREC/ NRCS

Also includes:

- **Habitat Category (i.e. freshwater marsh or tidal wetland)**
- **Benefit (i.e. protect/improve/provide habitat for birds)**
- **Activity (i.e. rehabilitation)**

GPRA Annual Summary

	<u>2002 / 2003</u>	<u>2003 / 2004</u>	<u>2004 / 2005</u>	<u>2005 / 2006</u>
<i>Acres Protected</i>	1,206.75	508.41	756.78	1,186.21
<i>Acres Restored</i>	1,032.19	73.70	516.90	379.72
<i>Total</i>	2,238.94	582.11	1,273.68	1,565.93

	% of Watershed	
<i>Total Protected</i>	3,658.15	1.79%
<i>Total Restored</i>	2,002.51	0.98%
<i>Total</i>	5,660.66	2.76%

updated: 9/28/2006

Indicator	<i>GPRA Habitat Restored and Protected</i>
Type	<i>4) Communication 6) Progress</i>
Spatial Scale	<i>Subwatershed</i>
Temporal Scale (min) (rpt)	<i>Annually Annually</i>
Validity	<i>Medium</i>
Defensibility	<i>Medium</i>
Communicability	<i>High</i>
Potential for Public Involvement	<i>Medium / High</i>
Existing Data	<i>4 years of data collected. Similar type each year.</i>
Funding Reliability	<i>?????</i>
Reference (now) (future)	<i>Not yet Hopefully</i>
Merit	<i>High</i>