



Delaware Wetland Protection Vision and Strategic Plan

September 25, 2013

ELI Delaware Wetland Program Review

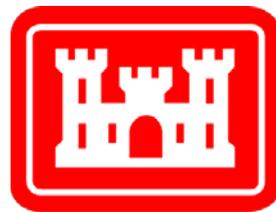
- State Wetland Protection: Status, Trends, & Model Approaches – Delaware State Profile (2008)
- Delaware Wetland Program Review (2010)
- Delaware Wetland Protection Vision and Strategic Plan Interview Results and Assessment (2013)
- Delaware Wetland Protection Vision and Strategic Plan Workshop Report (2013)



DNREC Wetlands Activities

Laws and Regulations

- Clean Water Act §404
- §401 Water Quality Certification



**US Army Corps
of Engineers®**



Delaware Laws and Regulations

- The Wetlands Act (1973)
- The Subaqueous Lands Act (1969)
- The Coastal Zone Act

DNREC's Wetland Related Activities

- Conservation and Protection
- Restoration
- Science
- Education and Outreach
- Regulatory and Permits



Conservation and Protection

	Program	Funding
Delaware Coastal Programs	Delaware National Estuarine Research Reserve	NOAA grants
	Coastal and Estuarine Land Conservation Program	
	Sea Level Rise Adaptation Plan	
	Coastal Management Assistance Grants	
Financial Assistance Branch	Land Conservation Loan Program	Water Pollution Control Revolving Fund
Division of Air Quality	Transportation and Development Planning	
Division of Fish and Wildlife	Management	State funds; competitive federal grants
	Private Lands Assistance Program: Delaware Phragmites Control Cost-share Program, and the Delaware Landowner Incentive Program	
	Private Lands Water Management	
	Marsh Burns	
	Delaware Bayshore Initiative	
Division of Parks and Recreation	Open Space Program	Realty transfer tax, State funds, Real Estate Transfer Tax
	Natural Areas Program	
	Delaware Conservation Trust Fund	Trust-generated interest provides funds for the yearly grant program.
	Wetlands Ownership and Restoration, State Parks System	
Division of Watershed Stewardship	Shoreline and Waterway Management Section	
DNREC in collaboration with the Conservation Fund	Conservation Opportunity Areas	

Restoration

Program		Funding
Delaware Coastal Programs	Delaware National Estuarine Research Reserve	
Division of Fish and Wildlife	Wetland Restoration	State funds (\$500,000 through bond bills in the legislature); competitive federal grants
	Wetland Enhancement	
	Invasive Species Control	
	Delaware Bayshore Initiative	
Division of Watershed Stewardship	Ecological Restoration and Protection Team	
	Drainage and Stormwater Program	
Division of Waste and Hazardous Substances; Division of Watershed Stewardship	WATER	

Science

Program		Funding
Delaware Coastal Programs	Delaware National Estuarine Research Reserve	
	Sea Level Rise Adaptation Plan	
	Coastal Management Assistance Grants	
Division of Energy and Climate	Climate Impact Assessment	Regional Greenhouse Gas Initiative (RGGI) funding
Division of Fish and Wildlife	Natural Heritage and Endangered Species Program	
Division of Watershed Stewardship	Wetland Monitoring and Assessment Program	

Education and Outreach

	Program	Funding
Office of the Secretary	Public Affairs	
Delaware Coastal Programs (DCP)	Delaware National Estuarine Research Reserve: Outreach and the Coastal Training Program	
Division of Fish and Wildlife	Aquatic Resources Education (ARE) program, including the Aquatic Resources Education Center (AREC) and the DuPont Nature Center (DNC)	Sport Fish and Restoration Program, U.S. Fish and Wildlife Service
Division of Water	Wetlands and Subaqueous Lands Section	
Division of Watershed Stewardship	Delaware Wetlands Facebook, Twitter and Pinterest sites	
	Wetland Monitoring and Assessment Program	

Regulatory and Permits

Program		Funding
Delaware Coastal Programs	Coastal Zone Federal Consistency Certification program	
Division of Energy and Climate	Sustainable Planning Section	General Fund
Division of Water, Wetlands and Subaqueous Lands Section	State wetland permitting programs and §401 certification.	
	Mitigation	
Division of Waste and Hazardous Substances	State Superfund Program	
	Cleanup Activities	
	Transporting, storing, and managing solid and hazardous waste	
	Staff training sessions	
	Staff Natural Resource Damage Assessment Biologist	
Division of Fish and Wildlife	Enforcement Section	



Challenges

Challenges

- *A lack of comprehensive non-tidal freshwater wetland protection.*
- *Gaps in the state tidal wetland maps that leave some tidal wetlands unprotected.*
- *A need to improve the enforcement of existing regulations.*
- *A need for more information on the environmental impacts of approved permits and better tracking of data on permits and certifications*
- *A need for more and better coordination with local land use decision-makers.*
- *A need for more and better coordination with local landowners.*
- *The effects of climate change and sea level rise on wetland protection.*



Improving Wetland Protection in Delaware

Recommendations for improving wetlands protection – existing programs

- Improve enforcement
- Improve data on existing impacts, including flood risk
- Expand the use of best management practices for drainage projects
- Improve coordination with local governments
- Adopt a statewide no net loss of wetlands acres and functions policy
- Update mitigation policies and consider developing a state in-lieu fee program
- Update data tracking systems
- Tie identification of priority wetland sites to the regulatory program

Recommendations for improving wetlands protection – new programs

- Adopt new wetland protections for all non-tidal wetlands
- Develop a programmatic general permit for areas covered by the Wetlands and Subaqueous Lands Acts and future non-tidal wetland protection authority
- Reissue Executive Order 56
- Improve enforcement under existing programs by adding administrative penalties to the Wetland and Subaqueous Acts.
- Update tidal wetlands maps to fill any gaps in jurisdiction and better regulate tidal wetlands.

Wetland Protection Strategy

- Develop Department-Wide Wetland Protection Priorities
- Determine Regulatory Priorities and a Structure for a Program
- Develop a Toolbox of Landowner Incentives
- Develop a Conservation and Restoration Strategy
- Develop a Coordinated Outreach Campaign
- Improve Coordination in the Department

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DNREC Program Protection Priorities

- Coastal and Estuarine Land Conservation Program
- Wetlands Restoration, Wildlife Section
- Delaware *Phragmites* Control Cost-share Program, Delaware Private Lands Assistance Program, Wildlife Section
- Delaware Landowner Incentive Program, Delaware Private Lands Assistance Program, Wildlife Section
- Wetlands Restoration and Enhancement, Mosquito Control Section
- Delaware Bayshore Initiative
- Natural Areas Program
- Open Space Program
- Ecological Restoration and Protection Team, District Operations Section
- Chesapeake Watershed Implementation Plan
- Conservation Opportunity Areas
- Sea Level Rise Plan

Protection Priorities

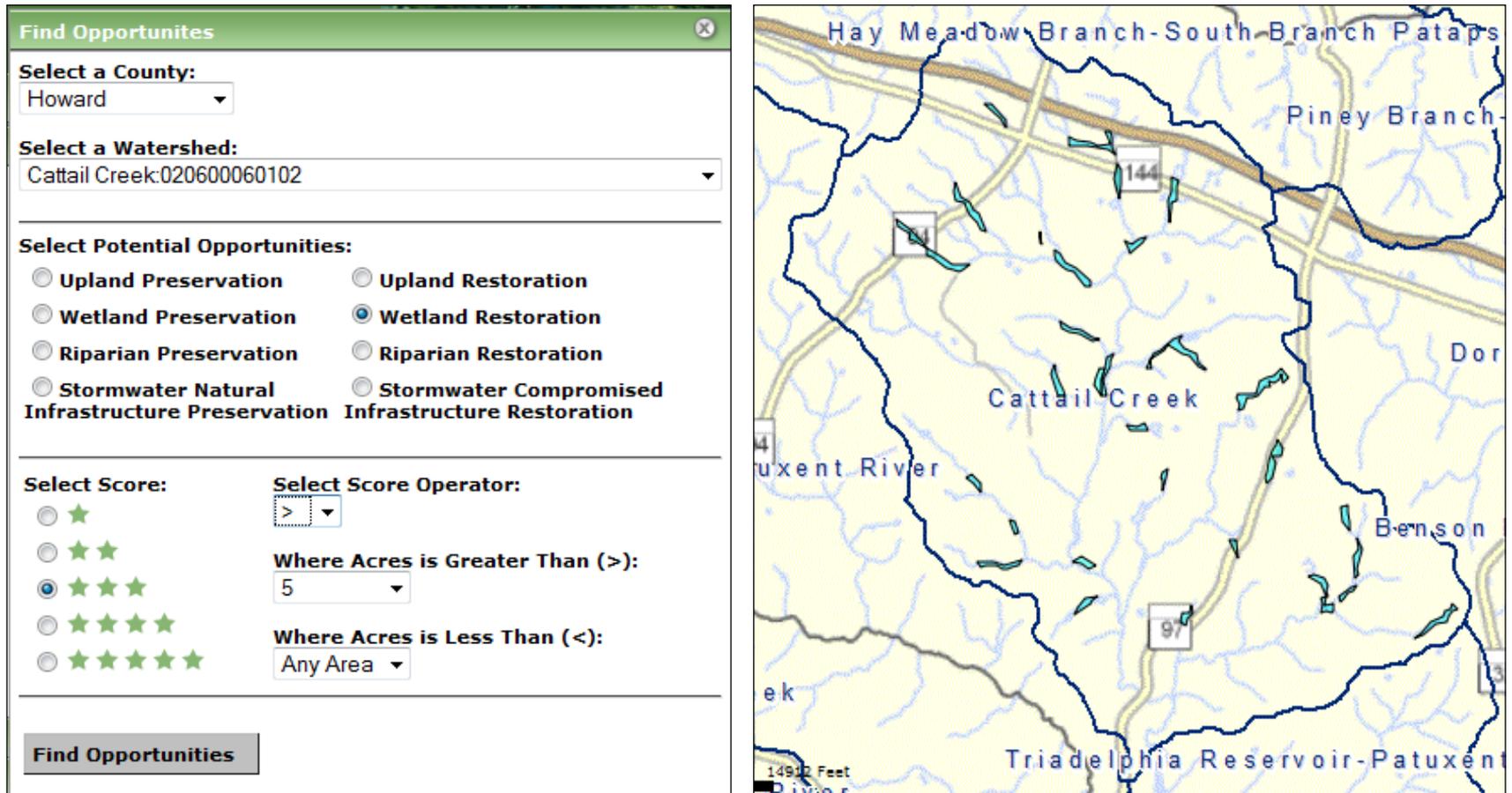


Figure 2. By entering wetland parameters for location, opportunity of interest, score, and size, users of WRR's interactive map can find wetland polygons that meet their needs. In the example application above, all wetlands larger than 5 acres and ranked higher than three out of five for wetland restoration (left), were selected within Cattail Creek, a HUC-12 watershed in Howard County, MD (right).

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Regulatory Priorities

- protect only the very wet wetlands (i.e., those that are easily identified as wetlands),
- protect only the best quality wetlands (e.g., Category 1 wetlands),
- protect only mapped wetlands (as the tidal wetlands law does),
- protect only isolated wetlands, or
- vary protection standards and mitigation requirements based on a tiered classification system as in the 1990s legislation.

Regulatory Structure

- adopt amendments to the state's Environmental Control Statute.
- build on existing §401 certification authority.
- enact a more comprehensive wetland statute.
- assume the §404 Program.

- develop a programmatic general permit for areas covered by non-tidal wetland protection authority.

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Toolbox of Landowner Incentives

- tax incentives
- direct acquisition funding
- loan incentives
- state rental or technical assistance programs
- federal rental or technical assistance programs
- federal grant programs
- strategic direction of enforcement or natural resource damage payments
- expanded use of wetland mitigation banking
- regulatory incentives

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Conservation and Restoration



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Outreach



- develop messages that resonate with target audiences
- engage the conservation community to improve public and landowner outreach
- reach out to non-traditional partners
- improve coordination with local governments

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Coordination





DNREC Workshop

Long-Term Wetland Protection Goals

- Achieve net gain of wetland functions statewide
- Develop a unified outreach strategy to promote the importance of wetlands to Delaware
- Create a comprehensive restoration and conservation program
- Integrate wetland protection programs within DNREC

Near-Term Actions

1. Develop Science-Based Prioritization Criteria and Select Statewide Protection Priorities
2. Promote New Wetland Protection Regulations/Legislation
3. Review DNREC's Existing Outreach Strategy to Inform Development of Expanded, Department-Wide Wetland Outreach Campaign
4. Develop Wetland Metrics, Including Economic Values
5. Promote New Legislation to Require Administrative Penalties for Wetland Violations
6. Develop a Wetland Delineation Registry and Train Local Consultants
7. Promote Wetland Protection at the Local Level
8. Improve Coordination with Federal Agencies
9. Continue to Actively Protect Priority Wetland Areas through Acquisition, Easements, and Other Avenues
10. Measure Progress toward Achieving Near-Term Actions and Long-Term Goals

The Future of Wetland Protection in Delaware

- Coordinated
- Comprehensive
- Supported
- Strategic
- State of the art
- Innovative
- Clearly articulated/understandable
- Protective
- Conservation
- Sustainable (wetlands and funding)
- Healthy
- Science-based
- Respected
- Focused
- Practicable/doable/realistic (financially and technically achievable)
- Protection of public health and property



Questions and Discussion