

# Chesapeake Bay Forestry Workgroup

## March 7, 2013



*Accelerating local implementation of the most innovative, sustainable and cost-effective strategies to restore and protect water quality and vital habitats within the Chesapeake Bay watershed.*



NFWF



*A Watershed Partnership*

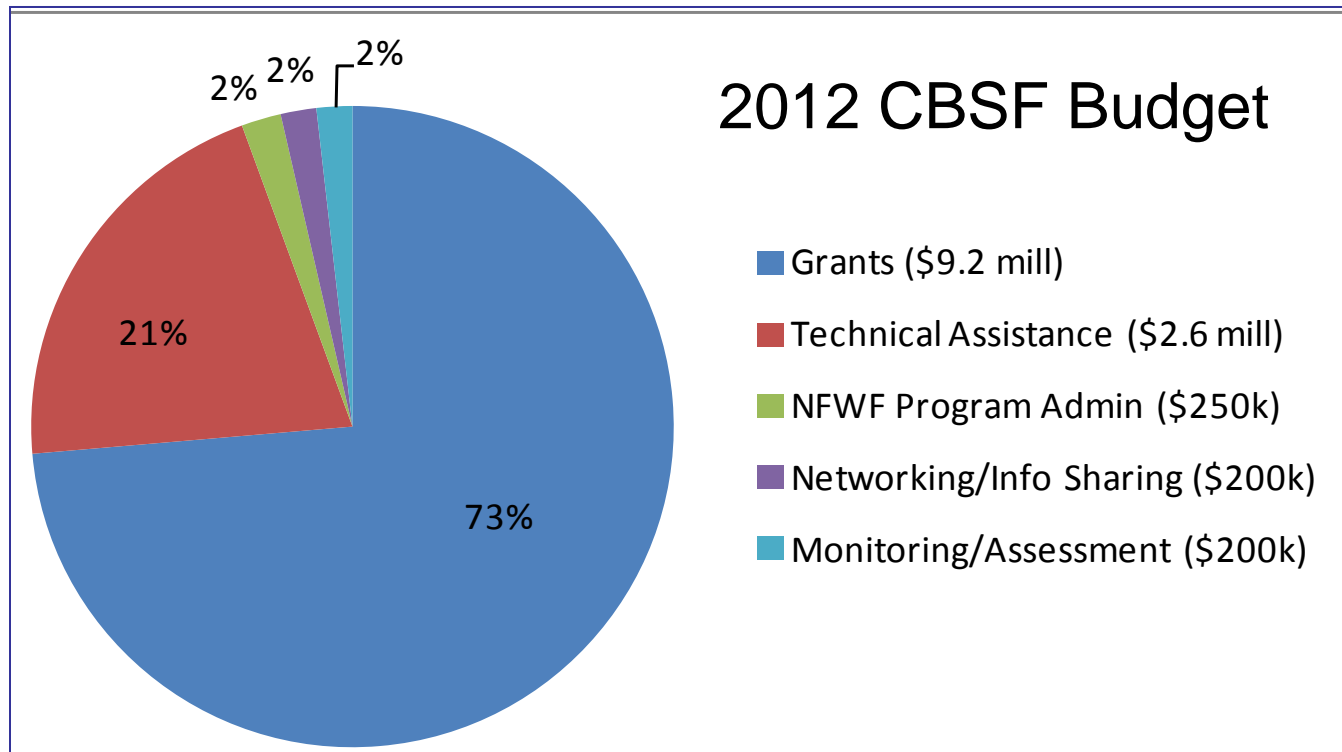
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Chesapeake Bay Stewardship Fund

# Chesapeake Bay Stewardship Fund Overview

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- **Provide Financial Assistance**
- **Provide Technical Assistance**
- **Facilitate Information Sharing and Networking**
- **Monitor Project Success and Assess Program Impact**





# NFWF



Chesapeake Bay Program  
A Watershed Partnership

## Chesapeake Bay Stewardship Fund

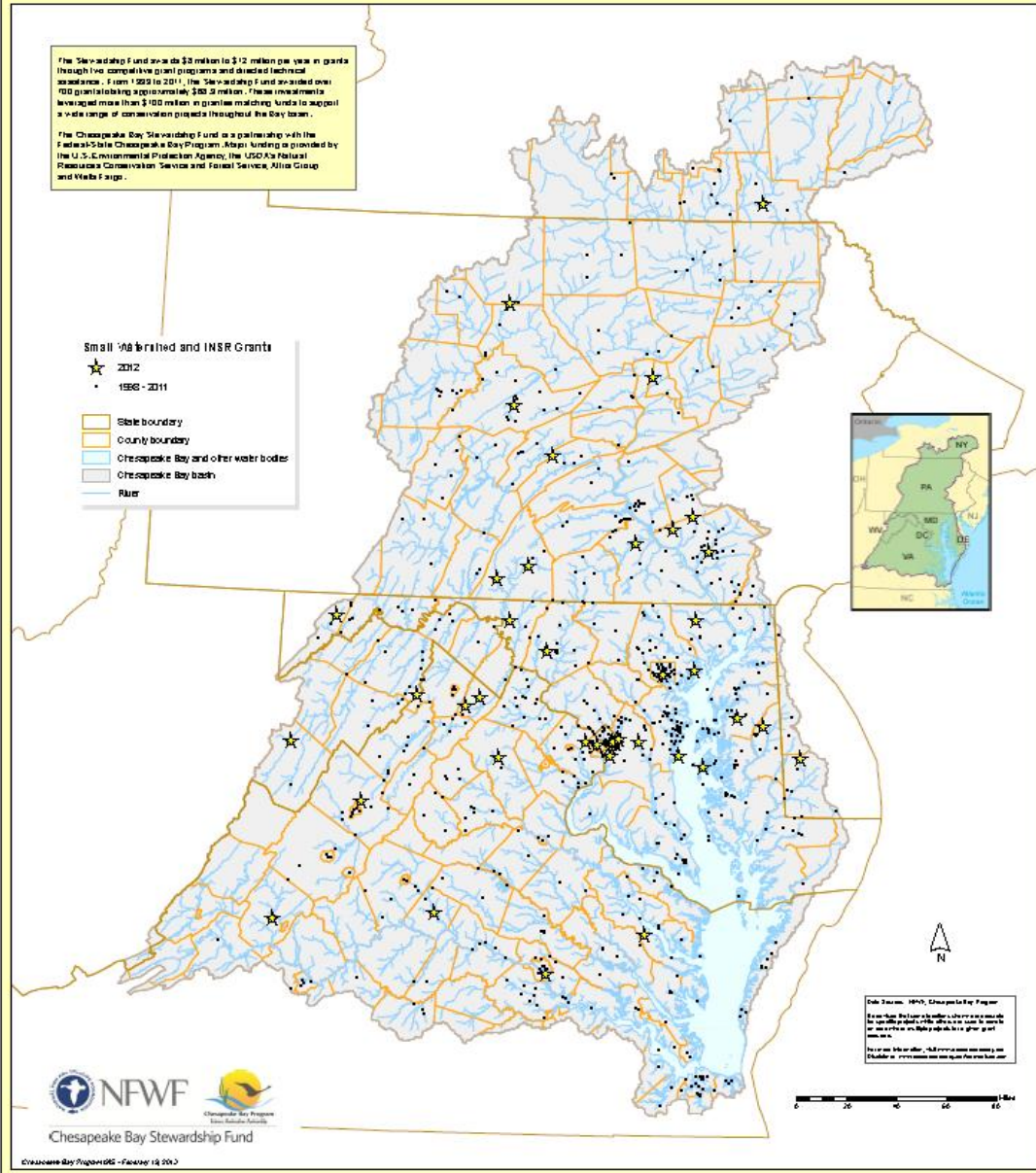
### Investments 1999-2012

- 788 grants totaling over \$84M
- \$121M in matching funds
- Funded c. 30% of requests
- Awarded \$6M - \$12M per year

### Outcomes 1999-2012

- Restored 122k acres of habitat:
  - 1,475 miles of riparian buffer
  - 4,600 acres of wetlands
  - 142 acres of oyster reefs
- Preserved 519k acres
- Engaged over 860k homeowners, farmers and children in conservation
- Reduced 14.4M lbs of nitrogen and 4.1M lbs of phosphorous, 490M lbs of sediment

## Chesapeake Bay Stewardship Fund Grants 1999-2012





# Funding Partners

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Altria



WELLS  
FARGO

Walmart  
Acres for America



FedEx®

DISTRICT  
DEPARTMENT  
OF THE  
ENVIRONMENT

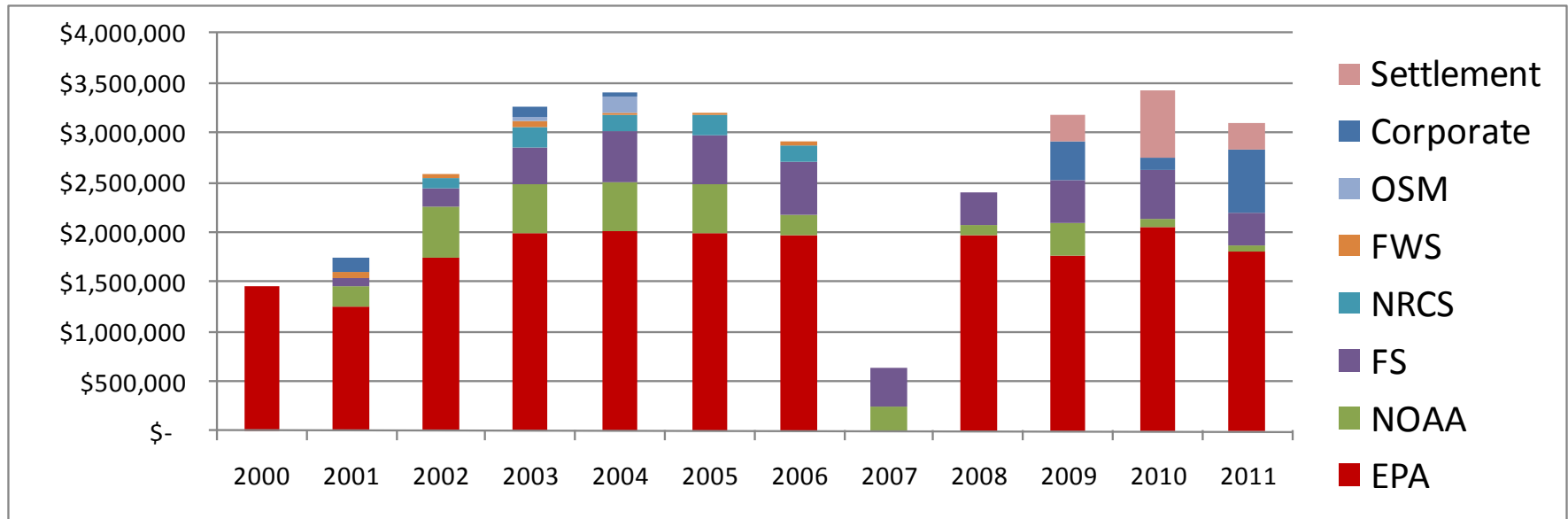


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# Small Watershed Grants: 2000-2011



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# FWG Investments: By the Numbers - 2007-2012\*<sup>6</sup>

## Funding

- ✓ \$998,000 awarded to NFWF
- ✓ \$928,603 awarded in competitive grants
- ✓ \$69,397 (7%) for program management (only \$15,317 (2%) has been expended)
- ✓ Leveraged \$1.5 million in other NFWF grant funds (e.g., EPA, NRCS, Altria)
- ✓ Leveraged \$3.8 million in grantee matching funds

## Outcomes

- ✓ Restored 156 miles or 658 acres of riparian forest buffer
- ✓ Installed 40 miles of livestock exclusion fencing
- ✓ Restored 512 acres of wetlands



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*\*Previous agreement covered 2003-2006*

# Forest Service Funding: Who and What

## Who

### ✓ Local Nonprofits

Clearwater Conservancy, Scenic Rivers Land Trust, Elizabeth River Project, Northern Neck Land Conservancy

### ✓ Regional/National Nonprofits

Alliance for the Chesapeake Bay, Piedmont Environmental Council, Ducks Unlimited, Chesapeake Bay Foundation, The Nature Conservancy, Stroud Water Research Center, Center for Watershed Protection, Potomac Conservancy, Pinchot Institute

### ✓ Conservation Districts and RC&D's

Clinton Co. Conservation District, Pocono RC&D, Capital RC&D, Culpeper SWCD, Adams Co. Conservation District, Western Maryland RC&D

## What

### ✓ Riparian Forest Buffers

### ✓ Urban Tree Canopy

### ✓ Turf to Trees

### ✓ Innovative Policy and Financing

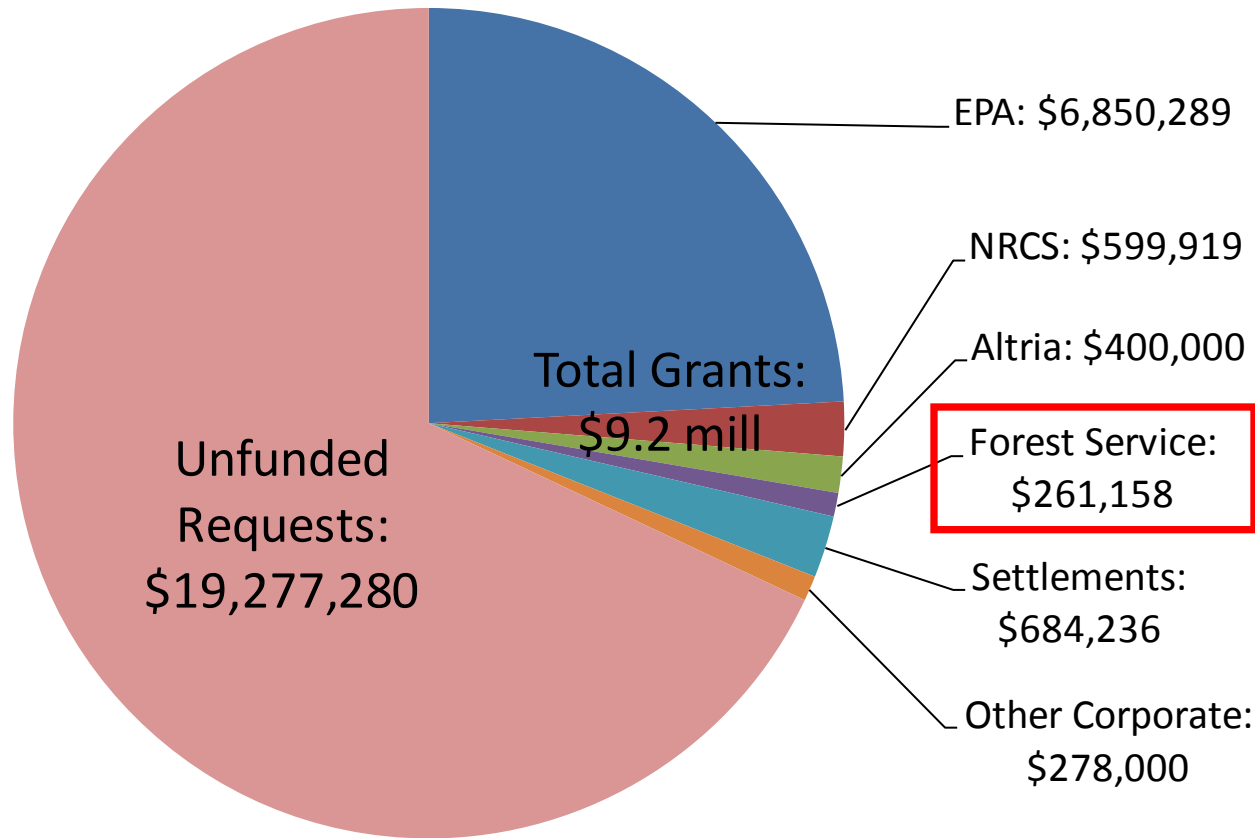


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# 2012 Snapshot: Grants Awarded vs. Requests



- ✓ Projects funded by FS received over \$778k in addition Federal and private funds
- ✓ Over \$3.7 million to projects with buffer and reforestation outcomes
- ✓ Projects will restore 744 acres of riparian buffer along 176 miles of stream



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# Example: Upper Rappahannock Watershed

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NFWF awarded two grants for work in the Upper Rappahannock in 2009. The Piedmont Environmental Council received \$74,926 for an outreach program to promote broader participation in cost-share programs for livestock exclusion fencing and buffer restoration. Trout Unlimited received \$72,933 to remove an aging four foot high, 80 foot long dam on the Thornton River that blocked fish migration.

- Engaged 30 farmers in conservation, 17 of whom were first-time enrollees in cost-share
- Installed 22 miles of livestock fencing, excluding 1700 cows from stream access
- Restored 93 acres of riparian buffer
- Established conservation easements on 2,800 acres
- Opened over 60 miles of upstream habitat to fish

## Project Partners

Piedmont Environmental Council (grantee)

Trout Unlimited

Culpeper Soil and Water Conservation District

Virginia Cooperative Extension

Rappahannock, Culpeper and Madison Counties

RappFLOW

Earth Sangha

Turkey Mountain Flyfishing Club

National Park Service



# Example:

## Whole Watershed Approach in Lancaster County

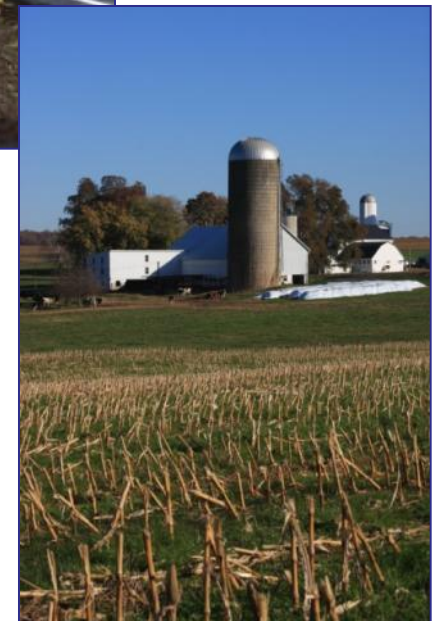
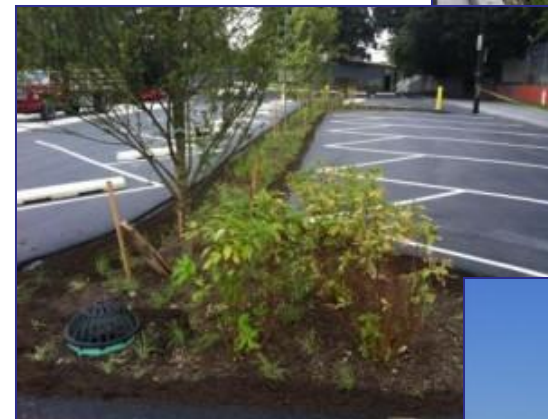
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NFWF has awarded 18 grants between 2007 and 2012 totaling \$6.6 million, and leveraging over \$12 million in matching funds.

- Restoring over 140 miles of streamside forest buffers
- Installing over 35 miles of livestock exclusion fencing
- Restoring 110 acres of wetlands
- Implementing BMP's on 9,500 acres of farmland
- Treating runoff from 91 acres of developed lands using innovative green infrastructure strategies
- Engaging 3000 volunteers in on-the-ground restoration
- Reducing pollution to the Chesapeake by 1.2 mill lbs of nitrogen, 560k lbs of phosphorous and 6,900 tons of sediment per year

### Grantees

Lancaster Farmland Trust  
Lancaster County Conservation District  
Chesapeake Bay Foundation  
Environmental Defense Fund  
American Farmland Trust  
Stroud Water Research Center  
Pennsylvania State University  
City of Lancaster  
LIVE Green  
Center for Watershed Protection





# Example: Restoring Stream Corridors in Centre County, PA

Five grants totaling over \$540,000 awarded between 2007 and 2012 targeting Spring and Spruce Creeks

- Restoring over 12 miles of streamside forest buffers
- Installing 6 miles of livestock exclusion fencing
- Stabilizing a quarter mile of stream bank
- Engaging 17 landowners in conservation on their lands

## Grantees

ClearWater Conservancy

Local Trout Unlimited Chapter

Centre County Conservation District



## Working, then fishing



Above: Joe Chandler, left, and Alex Theodorou place a log along the banks of Spring Creek near Fisherman's Paradise on Tuesday. The Fish & Boat Commission is finishing work on fish habitat devices along the creek after about three weeks of construction. The devices create new habitats and help stabilize eroding streambanks. Right: Scott Kuchka helps place fabric lining on the logs. The Fish & Boat Commission has been working with several volunteer groups on the project, including Boy Scout Troop 370 of Bellefonte, ClearWater Conservancy and Trout Unlimited's Spring Creek chapter.



# NFWF Ches Bay Business Plan: 2013-2025

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## 1. Focus on High Priority Targeted Watersheds

Using a science-based approach, NFWF has identified 16 watersheds where investments will result in measurable increases in species populations, and improvements in water quality and local stream health.



## 2. Support Innovation on Cross Cutting Issues

Invest in innovative methods and new technologies that hold the promise to drive down costs, expand the effectiveness of restoration practices and accelerate the pace of recovery.



## 3. Advance Local Government Green Infrastructure Solutions

Over 1800 units of local government have authority over decisions that will determine the future of the Chesapeake Bay. NFWF helps local governments restore their rivers and streams while meeting the challenges posed by Chesapeake restoration.



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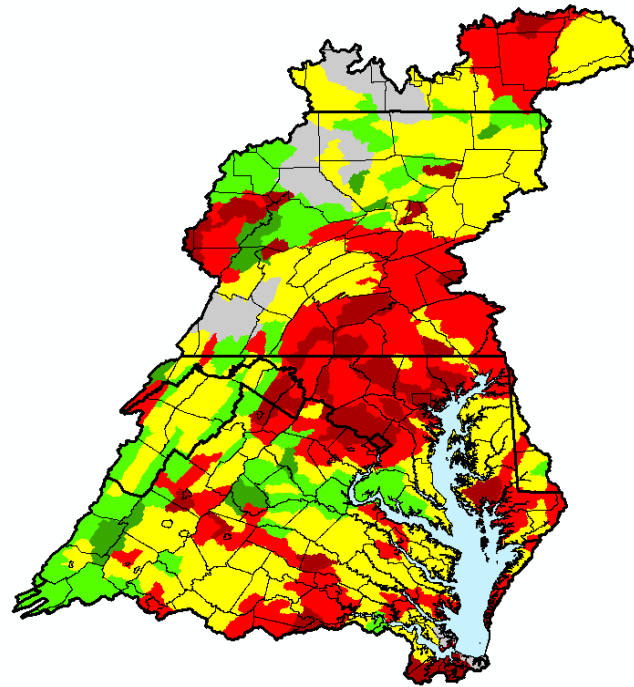


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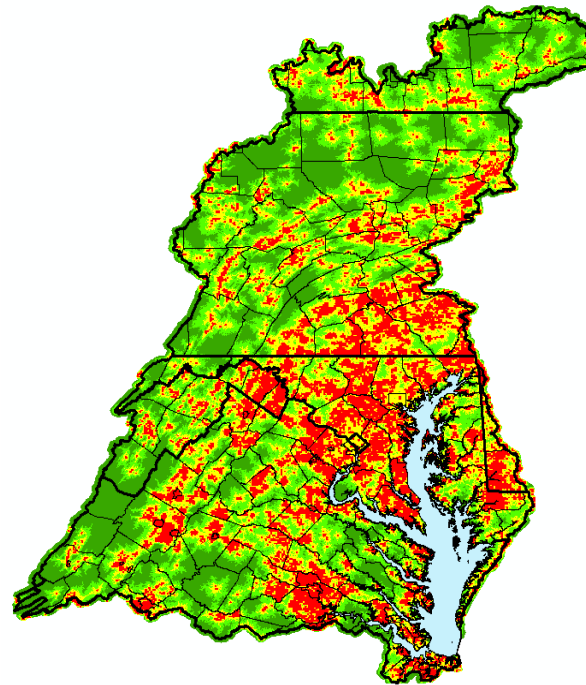
Chesapeake Bay Stewardship Fund



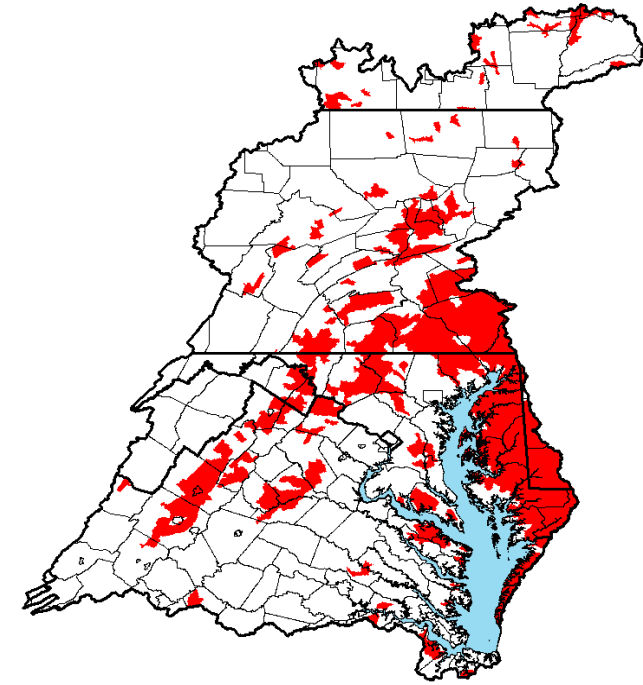
# 1. Focus on High Priority Targeted Watersheds



**Improve Stream Health**  
*(EPA IBI Data)*



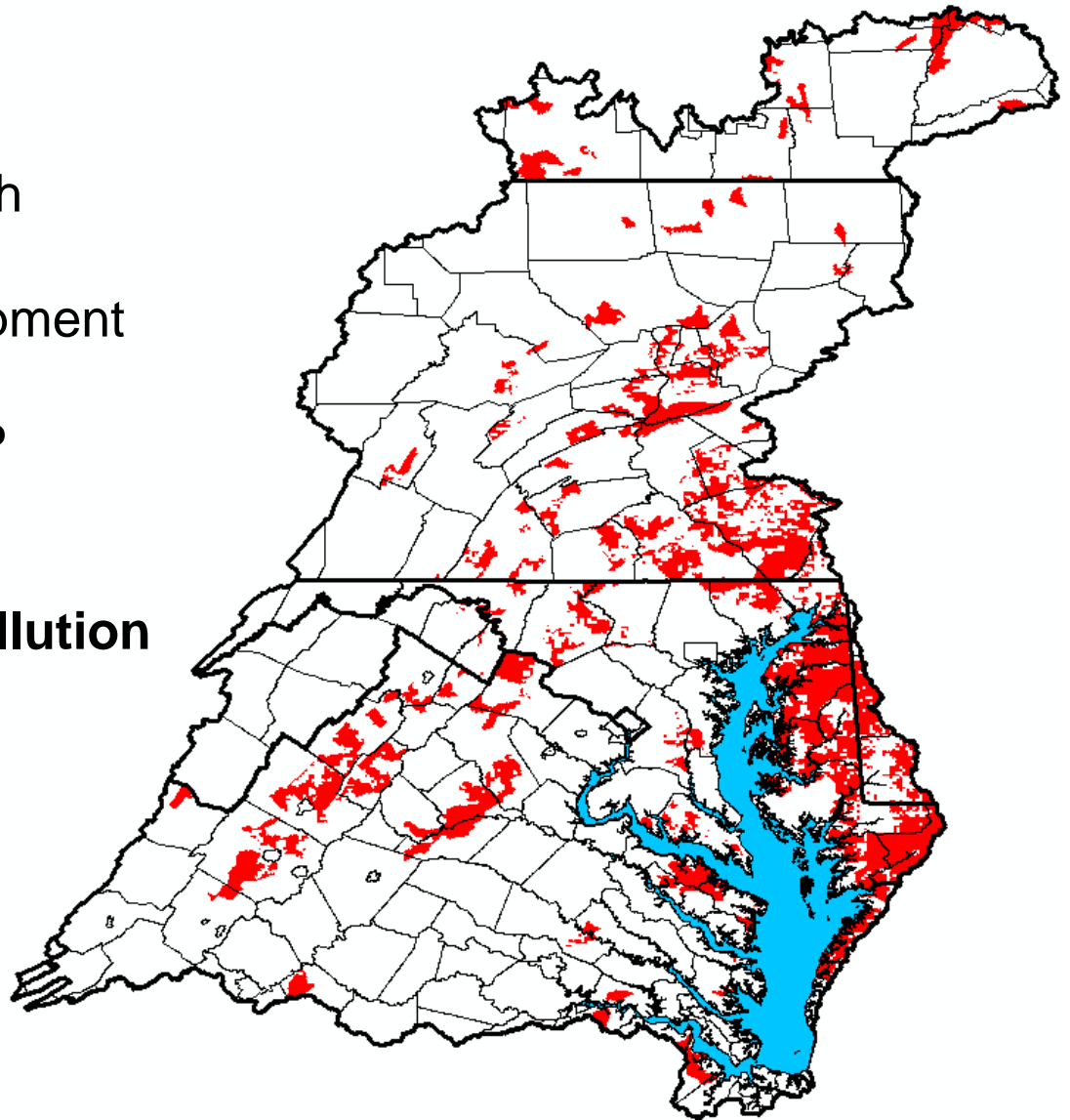
**Minimize Vulnerability**  
**from Development**  
*(USGS Resource Lands*  
*Assessment Data)*



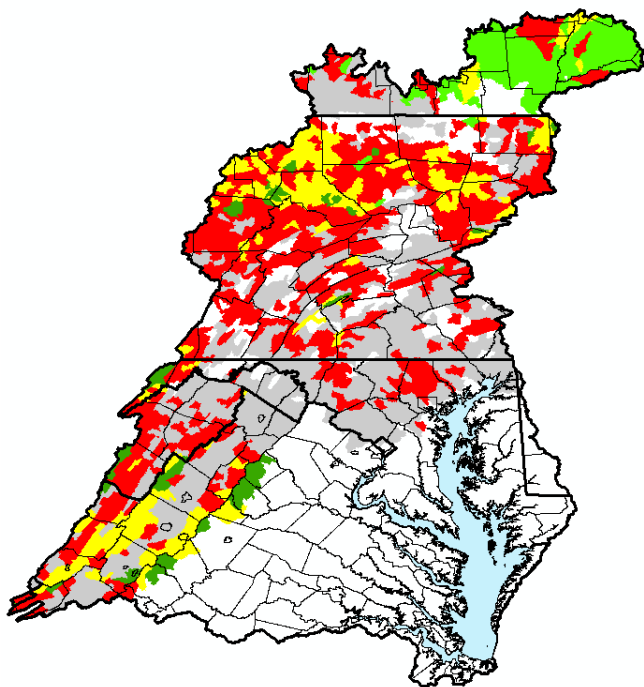
**Target Significant Sources**  
**of Nutrient Runoff**  
*(CBP 2012 Priority*  
*Agricultural Watersheds)*

# Establishing Our Criteria

Moderate Stream Health  
**AND**  
Low Vulnerability to Development  
**AND**  
Priority Areas for N & P  
=  
**Potential Areas for  
Stream Restoration and Pollution  
Reduction**

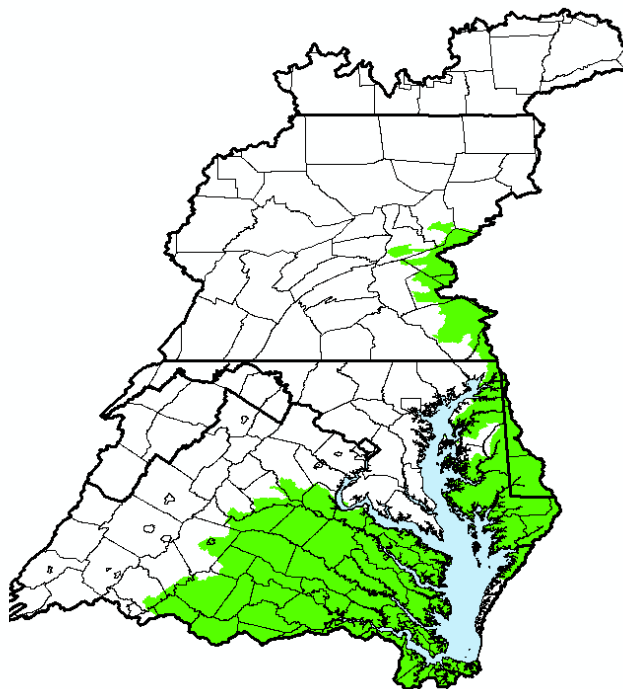


# Overlay Opportunities to Recover Keystone Species 15



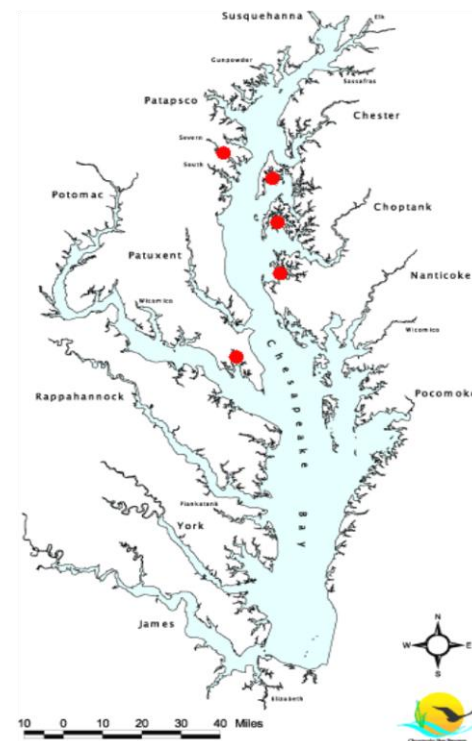
**Eastern Brook Trout  
Population Status**

Source: Eastern Brook Trout  
Joint Venture



**Priority Watersheds for River  
Herring Conservation**

Source: USDA-NRCS

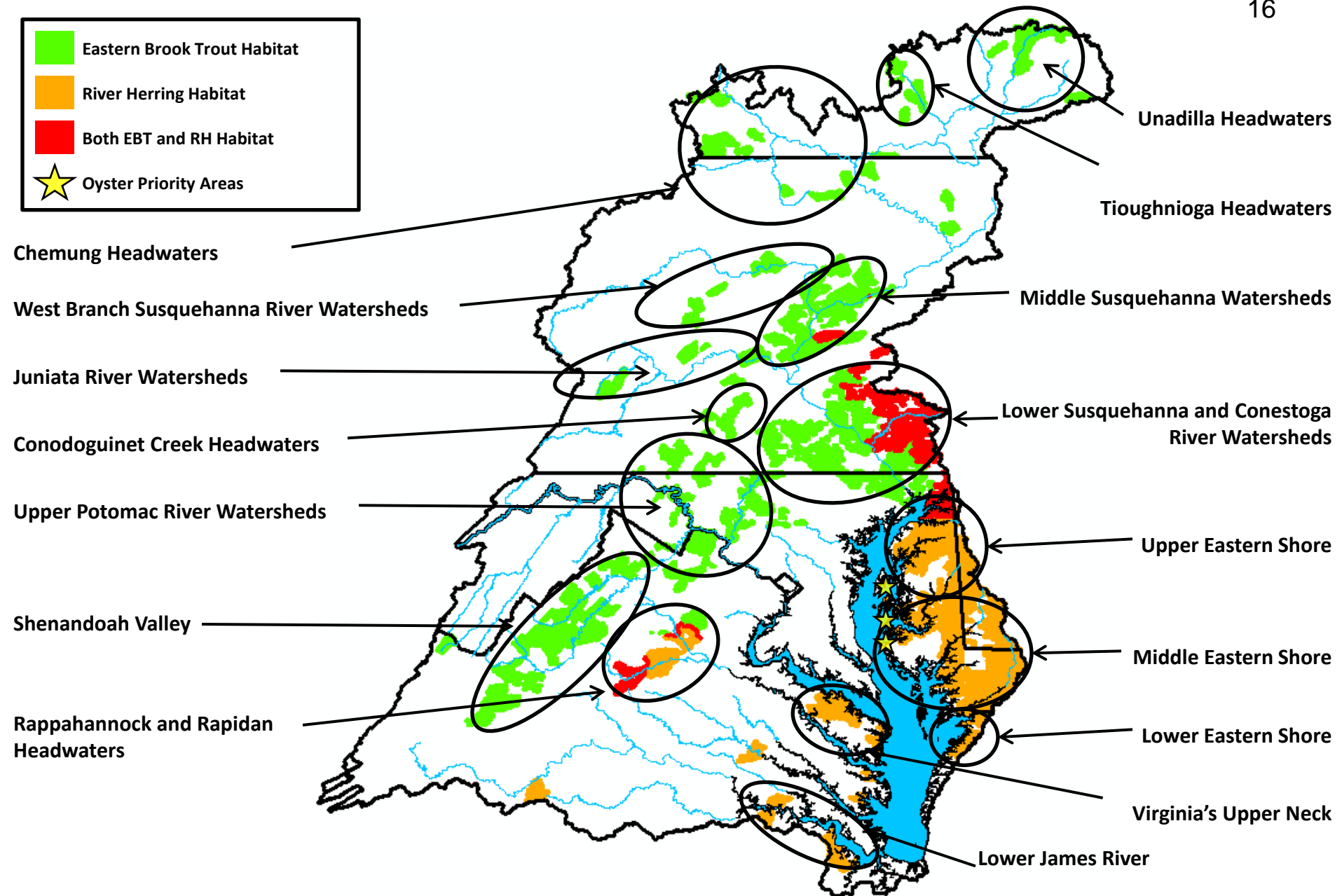
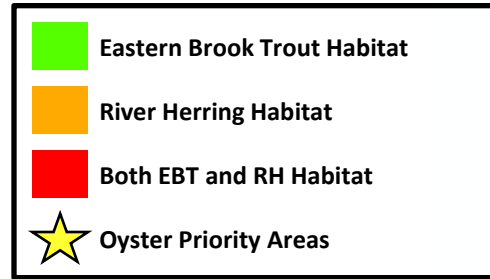


**Priority Investment Areas for  
Oyster Reef Restoration**

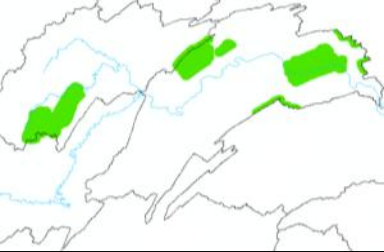
Source: MD DNR

# Chesapeake Bay Stewardship Fund Targeted Watersheds

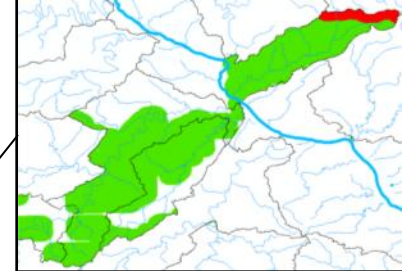
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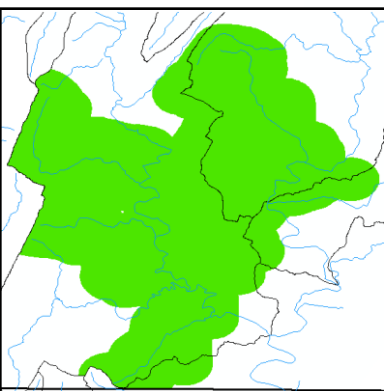




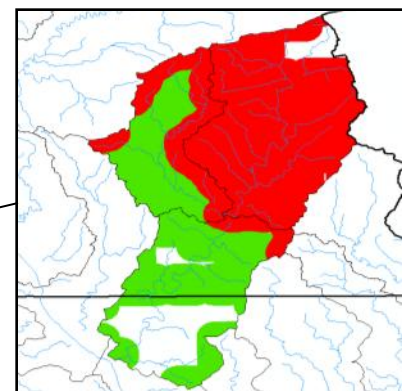
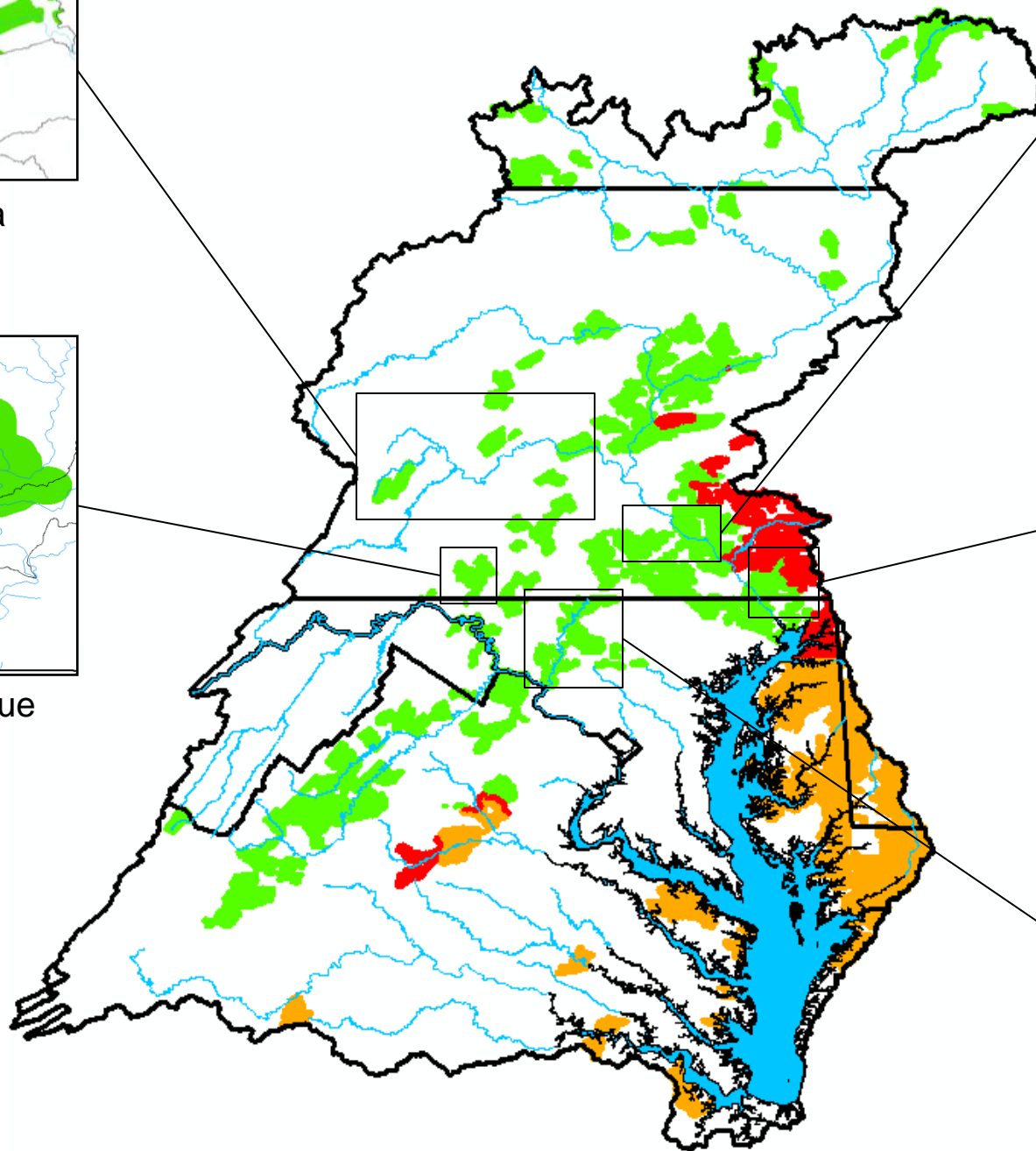
Little Juniata



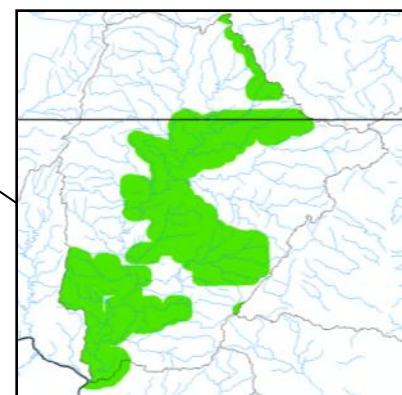
Conewago and  
Little Conewago



Conococheague



Octoraro Creek



Monocacy

## 2. Support Innovation on Cross Cutting Issues

1. Advance **Market-Based Solutions to Manage Manure**
2. Support **Innovative approaches to Manage Fisheries**, including Blue Crabs and Native Oysters
3. Support **Policy Development and Emerging Solutions** that tackle stormwater finance challenges and drive all costs down
4. Strengthen **Technical Assistance**, nurture emerging eco-system markets and better align financial incentives to private landowners



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# 3. Advancing Local Government Green Infrastructure Solutions

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- Showcase how green/environmental solutions can be woven into capital improvement projects already on the books
- Develop financing strategies that help local governments determine the most appropriate and effective solutions to funding long-term environmental needs
- Build technical capacity/expertise to enhance and lower the cost of implementation
- Support local government networking so that they can share and learn from one another



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### Species Outcomes:



**Alewife**

*Alosa pseudoharengus*



**Blueback Herring**

*Alosa aestivalis*



**Eastern Brook Trout**

*Salvelinus fontinalis*



**Chesapeake Blue Crab**

*Callinectes sapidus*



**American Oyster**

*Crassostrea virginica*

### Other Outcomes:



**Water Quality**

### Goal

### Progress

200 additional miles of stream occupied

**0%**  
of goal

Improve status of 12 subwatersheds

**0%**  
of goal

New populations in 15 subwatersheds

**0%**  
of goal

215 million spawning-age females

**0%**  
of goal

Restore populations in 5 subwatersheds

**6.7%**  
of goal

Reduce Nitrogen pollution by 6.3M pounds

**2.9%**  
of goal

Reduce Phosphorous pollution by 1M pounds

**1.6%**  
of goal

### Initiative Strategies:

### Goals

#### Habitat Conservation:

0 acres

TBD

Acres protected under long-term easement

#### Habitat Restoration:

10 acres

150

Acres of oyster reef restored in 5 priority rivers

60 acres

400,000

Acres of land restored in targeted watersheds

164 miles

2,500

Miles of riparian buffer restored in watersheds

13 miles

200

Miles of opened to fish passage

152 acres

7,500

Acres of wetlands restored

#### Habitat Management:

40 miles

2,000

Miles of livestock exclusion fencing installed

#### Capacity, Outreach, Incentives:

177,632

TBD

Private landowners reached through technical assistance

5

50

Local govs with developed financing strategies

#### Species-specific Strategies :

50 million

2 billion

Oyster spat planted in the 5 priority subwatersheds

#### Planning, Research, Monitoring:

TBD

TBD

Key streams being monitored

0

100

Percent of prioritization of stream barriers complete

0

TBD

Research studies completed to develop innovative approach to establishing counts of migratory river herring

0

2

Sustainable community-based quota management system developed for the Chesapeake Bay Blue Crab fishery



# Timeline for 2013 Grants

- Issue RFP April 8
- Webinar for Applicants May 3
- Proposals Due May 30
- Committee Reviews 6/1 – 7/19
- Congressional/Board Notification 7/26 – 8/25
- Grants Announced Late Aug/Early Sept
- Grant Agreements Issued Sept – Nov



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