





# 2015 Chesapeake Bay Stewardship Fund Grant Slate

#### **NFWF CONTACT**

Jake Reilly, Program Director Jake.Reilly@nfwf.org or 202-857-0166

















#### **ABOUT NFWF**

The National Fish and Wildlife Foundation (NFWF) protects and restores our nation's fish and wildlife and their habitats. Created by Congress in 1984, NFWF directs public conservation dollars to the most pressing environmental needs and matches those investments with private funds. Learn more at www.nfwf.org



**Chesapeake Bay** 

#### **OVERVIEW**

The National Fish and Wildlife Foundation's (NFWF) Chesapeake Bay Stewardship Fund is dedicated to protecting and restoring the Bay by helping local communities clean up and restore their polluted rivers and streams. NFWF advances cost-effective and creative solutions with financial and technical assistance.

This year's Request for Proposals targeted investments in identified priority subwatersheds to simultaneously achieve measurable water quality improvements, fish and wildlife habitat enhancements, and benefit threatened freshwater and marine fish species. The Chesapeake Bay Stewardship Fund includes two distinct grant programs: Chesapeake Bay Innovative Nutrient and Sediment Reduction Grants (INSR), and Chesapeake Bay Small Watershed Grants (SWG). The program is awarding 40 grants, which address three key strategies for the Chesapeake Bay Watershed: 1) Targeted River and Watershed Restoration; 2) Green Infrastructure in Urban Landscapes; and 3) Innovation on Crosscutting Issues. The project slate represents a total award amount of \$11,476,205 which will be leveraged by \$22,150,571 in grantee matching contributions for a total onthe-ground impact of \$33,626,775.

#### ABOUT CHESAPEAKE BAY INNOVATIVE NUTRIENT AND SEDIMENT REDUCTION

This program supports projects that expand the collective knowledge about the most effective and sustainable approaches to dramatically reduce or eliminate nutrient and sediment pollution to the Chesapeake Bay and its tributaries.

(continued)







#### **PROJECTS BY LOCATION**

#### **MULTI-STATE PROJECTS**

#### **INSR GRANTS**

# 1) A Regional Approach to Conserving the Aquatic Resources of the Potomac and Shenandoah Headwaters (WV. VA)

Grantee: Trout Unlimited Total Project: ..... \$1,183,626 Funding Partner: Environmental Protection Agency (EPA)

Trout Unlimited will accelerate the reduction of sediment and nutrients entering the Chesapeake Bay via the Potomac and Shenandoah Rivers by increasing both the participation in Farm Bill Conservation Programs and the implementation of riparian and instream restoration practices.

### 2) USC Integrated Approach to Nutrient Management (NY, PA)

,	
Grantee: Tioga County Soil and Water Conservation	District
NFWF Award Amount:	. \$317,520
Matching Funds:	. \$317,555
Total Project:	\$635,075
Funding Partners: EPA, U.S. Department of Agricult	ure
Natural Resources Conservation Service (NRCS)	

The Tioga County Soil and Water Conservation District will develop a coordinated, integrated and comprehensive nutrient management planning process which includes development of a resource team and the use of nutrient reduction tools for the purposes of increased adoption of Nutrient Management Plans and associated Best Management Practices, and maximizing farm sustainability, profitability and sound resource management. This work will improve the way nutrients are managed, tracked and verified in the field and on the farmstead.

# 3) Accelerating Wetland Restoration (DE, MD, PA, VA) Grantee: The Nature Conservancy

Funding Partner: EPA

The Nature Conservancy will accelerate wetland restoration in priority areas of four states, which will result in improved water quality and wildlife habitat. Research will be conducted to identify and overcome critical barriers in program design and delivery for wetland restoration, and

demonstrate strategic and effective implementation using new approaches that will help to meet the ambitious goals set by federal and state agencies for this key component of Bay restoration.

#### 4) Natural Infrastructure Stream Corridor Rehabilitation (PA, NY)

Grantee: Tioga County Soil and Water Conserva	ation District
NFWF Award Amount:	\$375,000
Matching Funds:	\$383,181
Total Project:	\$758,181
Funding Partner: EPA	

The Tioga County Soil and Water Conservation District will use natural infrastructure rehabilitation to address stream corridor instability in the Upper Susquehanna Basin in New York through use of stream intervention, riparian buffers and prescribed grazing.

#### **SWG GRANTS**

### 1) Permanent Protection of Critical Habitat and Water Quality in Pennsylvania's Chesapeake Bay Watershed (PA)

Grantee: Western Pennsylvania Conservancy	
NFWF Award Amount:	\$196,988
Matching Funds:	\$457,500
Total Project:	\$654,488
Funding Partner: EPA	

The Western Pennsylvania Conservancy will seek to permanently protect riparian buffers, wetlands, forestland and prime agricultural land in priority watersheds in Pennsylvania's Chesapeake Bay watershed by partnering with private landowners to acquire conservation easements on working farms and forests. This project will focus on the following sub-basins: Juniata River, West Branch Susquehanna River, Potomac River, and certain smaller-order tributaries to the Susquehanna River.

#### 2) Upper Susquehanna Coalition I-4 Program (NY, PA)

Grantee: Tioga County Conservation District	
NFWF Award Amount:	.\$199,291
Matching Funds:	.\$132,300
Total Project:	\$331,591
Funding Partner: EPA	

The Tioga County Conservation District (TCCD) will work with seven watersheds and their communities to reduce stream channel nutrient and sediment contributions through the survey, identification, design and implementation of practices and projects on 7,000+ feet of stream corridor. In addition to this, TCCD will build local









**Brook trout** 

capacity through direct education and technical assistance to local governments to help improve stream health and habitat on 2,500 feet of stream channel.

# 3) Upper Potomac Farm Stewardship Program (MD, WV)

Grantee: Chesapeake Bay Foundation, Inc. Total Project: ..... \$295,145

The Chesapeake Bay Foundation (CBF) will work with farmers to adopt agricultural Best Management Practices to improve water quality, increase productivity of farming operations, and enhance wildlife habitat. CBF's project will help farmers implement a wide range of conservation farming practices by installing stream exclusion fencing and implementing riparian buffer and wetland restoration projects on various farms in Maryland and West Virginia.

#### **DELAWARE**

#### **SWG GRANTS**

Funding Partners: EPA, NRCS

# 1) Capturing an Opportunity: A Green Infrastructure Retrofit Demonstration Project in Delaware's Nanticoke **River Watershed**

Grantee: Sussex Conservation District Total Project: ...... \$269,260 Funding Partner: EPA

The Sussex Conservation District will support a green infrastructure retrofit demonstration project at Seaford Village Shopping Center that will decrease quantity

and improve water quality of stormwater flowing into Delaware's Nanticoke River. Seaford Village's high visibility on Route 13 will make it an effective demonstration project for similar commercial properties in the region.

#### **DISTRICT OF COLUMBIA**

#### **INSR GRANTS**

#### 1) Fort Dupont Watershed Restoration (DC)

Grantee: District of Columbia Department of the Environment Total Project: ..... \$4,050,000 Funding Partners: EPA, Altria

The District of Columbia Department of the Environment will implement a sub-watershed wide project to catch and filter stormwater on private property and public space and to restore degraded streams and wetland areas.

#### **MARYLAND**

#### **INSR GRANTS**

# 1) Accelerating Long-term Oyster Restoration Through Innovative Nutrient Management Strategies (MD)

Grantee: Oyster Recovery Partnership, Inc.

Total Project: ..... \$474,850 Funding Partners: EPA, Altria, CSX, U.S. Fish and Wildlife Service (FWS)

The Oyster Recovery Partnership will restore 20 acres of oyster reefs in the Tred Avon River, build community support, and develop a user-friendly web-accessible model







that allows easy estimation of the total maximum daily loads related benefits of an oyster reef.

#### 2) Healthy Streams Farm Stewardship Program: Leveraging RCPP (MD)

The Alliance for the Chesapeake Bay will leverage United States Department of Agriculture Natural Resources Conservation Service Environmental Quality Improvement Program funding to accelerate farm conservation planning and implementation of priority Best Management Practices. The work uses a "raise the bar" approach that provides assistance to farmers based on their willingness to implement riparian forest buffers and exclude livestock from streams.

#### 3) Nutrient Incentive Payment (NIP) – A Maryland Chesapeake Bay Pilot Program to Target Long-Term Nutrient Reduction/Ecological Services for Riparian Forest Buffers and Wetlands

The Maryland Department of Agriculture will pilot a Nitrogen Incentive Payment, an innovative method to incentivize wetland and riparian forest buffer enrollments, re-enrollment and permanent easements in high-priority areas to reduce sediment and nutrient loadings in order to improve water quality, wildlife habitat and help meet Maryland's Chesapeake Bay TMDL Watershed Implementation Plan goals. The expected outcome is to increase restoration and long-term protection of riparian forest buffers and wetlands by 650 acres in two high-priority target areas.

#### 4) Deep Blue (MD)

Grantee: Blue Water Baltimore, Inc.	
NFWF Award Amount:	\$500,000
Matching Funds:	\$600,000
Total Project: \$	51,100,000
Funding Partners: EPA, CSX	

Blue Water Baltimore will engage the local community in an initiative that seeks to implement stormwater management

practices within five targeted neighborhoods in Baltimore City. The Deep Blue program is an innovative partnership between the City of Baltimore, Blue Water Baltimore and the Neighborhood Design Center.

# 5) Iron-Enhanced Sand Filter to Accelerate Phosphorus Removal in Stormwater (MD)

Grantee: Carroll County Government - Bureau of Resource
Management
NFWF Award Amount: \$351,868
Matching Funds: \$508,927
Total Project: \$860,795
Funding Partners: EPA, IDEA

The Carroll County Government - Bureau of Resource Management will test an innovative performance enhancing design (iron-enhanced sand filter) to accelerate nutrient removal in stormwater.

#### **SWG GRANTS**

# 1) Sarah's Hope Site Improvement Project (MD)

 Grantee: Parks & People Foundation, Inc.

 NFWF Award Amount:
 \$200,000

 Matching Funds:
 \$800,000

 Total Project:
 \$1,000,000

 Funding Partner: EPA

The Parks & People Foundation will implement a green infrastructure retrofit at the Sarah's Hope facility located at 1114 N. Mount St. in the Sandtown-Winchester community of Baltimore City. It is an effort associated with the \$1.3 million Baltimore City Department of General Services Capital Improvement Program for Sarah's Hope, the largest homeless shelter designated for families in Baltimore City.

# 2) CleanScape Communities (MD)

Grantee: Howard County Office of Community Sustainability	
NFWF Award Amount:	0
Matching Funds:	0
Total Project: \$82,82	0
Funding Partner: EPA	

The Howard County Office of Community Sustainability will increase the buy-in and adoption of residential Best Management Practices (BMPs) in a pilot geographic area in Howard County, Maryland. The project will attempt to eliminate barriers to implementation identified in studies of BMP adoption and aims to include low-income residents. The project will also encourage the development of a more robust BMP landscaping community within Howard County.







3) Riverwise Congregations (MD)

Grantee: The Anne Arundel County Watershed Stewards Academy, Inc.

 NFWF Award Amount:
 \$199,406

 Matching Funds:
 \$80,921

 Total Project:
 \$280,327

Funding Partner: EPA

The Anne Arundel County Watershed Stewards Academy (WSA) will engage underrepresented large/mega congregations in Anne Arundel County in stormwater restoration on congregation property and on the properties of its members, by designing and delivering a compressed Watershed Steward course for up to 75 people from various congregations while supporting these Congregational Stewards to create green ministries in their congregations. Master Watershed Stewards from each congregation will also be certified to provide technical assistance and support for Best Management Practice siting and maintenance.

# 4) Harris Creek Watershed Trees for Public Health (MD)

	•	_
Grantee: Baltimore Tree Trust		
NFWF Award Amount:	\$199,9	917
Matching Funds:	\$74,	593
Total Project:		
Funding Partners: EPA, USFS		

The Baltimore Tree Trust will expand the urban tree canopy and remove impervious surface in Baltimore City. Work will focus on the continuation of the installation of trees along streets in areas identified as concrete-laden, with critically low tree coverage.

# 5) Baltimore City's Gwynns Falls Urban Watershed: Improving Water Quality and Access to Nature Through Green Infrastructure (MD)

Grantee: Parks & People Foundation, Inc.
NFWF Award Amount:
Matching Funds:
Total Project:
Funding Partners: EPA, USFS

The Parks & People Foundation will, in partnership with Baltimore City Recreation and Parks, use Best Management Practices to improve water quality in Gywnns Falls, while improving access to one of the largest urban woodland parks in the eastern United States.

# 6) Clear Creeks: Our Water, Our Heritage, Our Pride (MD)

Grantee: Gunpowder Valley Conservancy, Inc.	
NFWF Award Amount:	\$200,000
Matching Funds:	\$403,125
Total Project:	\$603,125
Funding Partner: EPA	

The Gunpowder Valley Conservancy will mobilize residents to install stormwater Best Management Practices, plant trees and cleanup streams in the Middle River, Tidal Gunpowder and Bird River watersheds to reduce nutrient and sediment runoff, improve water quality, and restore forests and streams. The long-term environmental outcome will be a reduction of 42.03 pounds per year of total nitrogen, 4.646 pounds per year of total phosphorus and 2,222.85 pounds per year of total suspended sediment to the Chesapeake Bay.

# 7) Hawkins Cove Small Watershed Restoration and Sustainability Program (MD)

Grantee: Spa Creek Conservancy, Inc.	
NFWF Award Amount:	\$477,507
Matching Funds:	\$1,906,158
Total Project:	\$2,383,665
Funding Partner: EPA	

The Spa Creek Conservancy will install nine upland watershed stormwater Best Management Practices. Projects will include bioretention cells, filtration systems, bioswales, sand filters and conservation landscaping. Volunteer services will come from engaging the two public housing communities in the watershed. Concurrently Alliance for the Chesapeake Bay will develop and execute a watershed restoration job skills training program to ensure long-term sustainability resources.

#### **PENNSYLVANIA**

#### **INSR GRANTS**

# 1) Chiques Creek Reenvisioned: A Collaborative Watershed Restoration Initiative to Support Pennsylvania's Pilot Alternative TMDL Approach

Pennsylvania State University will facilitate a diverse, dynamic, public/private partnership to assist landowners, municipalities and other local stakeholders in meeting water quality improvement objectives for Chiques Creek,









**Chesapeake Bay** 

an impaired watershed in Lancaster County (PA). This partnership will provide a compliment to Pennsylvania's pilot "alternative total maximum daily load" project in the Chiques, which is presently being spearheaded by PA Department of Environmental Protection and the Susquehanna River Basin Commission.

#### 2) Delivering the NFWF RCPP in Lancaster County, PA

Funding Partners: EPA, Altria, NRCS, USFS

Grantee: Stroud Water Research Center Total Project: ..... \$2,221,990

The Stroud Water Research Center will provide technical assistance to deliver the financial assistance available through NFWF's Regional Conservation Partners Program (RCPP) for Lancaster County, PA. This project will also provide support for the Stroud Farm Stewardship Program, which will accelerate RCPP project identification, planning and development of applications to RCPP, help fill gaps in RCPP financial assistance, incent inclusion of forested buffers and perform related tasks.

# 3) Comprehensive Watershed Conservation in Dairy and Livestock Landscapes of the Chesapeake Bay - Bradford **County Conservation District RCPP (PA)**

Grantee: Bradford County Conservation District Total Project: ..... \$1,950,813 Funding Partners: EPA, NRCS, USFS

The Bradford County Conservation District will implement

a stream, agricultural and dirt and gravel road project in the Wysox Creek watershed to achieve water quality improvements which address local, state and federal standards. An attempt will be made to achieve results to allow these streams to be removed from the 303d impaired streams list.

## 4) Juniata River Basin Whole Farm Project: Regional Conservation Partnership Program (PA)

Grantee: Chesapeake Bay Foundation, Inc. Total Project: ..... \$383,551

Funding Partners: EPA, NRCS, USFS

The Chesapeake Bay Foundation will use a "whole farm" approach to target three agriculturally-impacted waters in the Juniata River Basin of Pennsylvania (Lost Creek, Doe Run and Cedars Springs Run), that would link implementation of Best Management Practices (BMPs) that enable livestock and poultry producers to comply with existing state and federal regulations, with incentives for habitat improvements such as forested buffers. Collectively, the partnership's efforts will work with 10-15 farmers to implement an estimated 40 BMPs that help resolve on-farm nutrient hotspots and runoff risks to streams, including barnyard improvements, waste storage structures, no-till, cover crops and forested riparian buffers.

### 5) Private Financing to Accelerate Urban Stormwater Retrofits (PA)

Grantee: City of Lancaster Total Project: ..... \$2,182,500

Funding Partner: EPA







The City of Lancaster will develop and pilot an innovative, privately financed, urban retrofit business model to accelerate the rate of implementation and cost-effectiveness of urban stormwater retrofit on privately owned land.

#### **SWG GRANTS**

# 1) Lost Creek Restoration Initiative: A Watershed Wide **Community Collaboration Uniting Plain-Sect Populations**, Golf Gurus, and Local Leaders in an Effort to Extend **Eastern Brook Trout Range (PA)**

Grantee: Juniata County Conservation District Total Project: ...... \$332,096 Funding Partner: EPA

The Juniata County Conservation District will, through a watershed partnership involving local government entities, universities, non-profits, and other stakeholders, design a watershed restoration site that will be constructed to serve as a community showcase restoration project. Local outreach and capacity building will coincide with the restoration project to raise awareness about watershed enhancement opportunities and identify future project possibilities.

# 2) Wrightsville Borough Riverfront Restoration Project (PA)

Grantee: Wrightsville Borough Total Project: ...... \$637,765 Funding Partner: EPA

The Wrightsville Borough will construct a water quality improvement landscape through restoration and reforestation for the Riverfront Park bordering the Lower Susquehanna River. The plan proposes restoration of native wetlands, forest and meadow areas, as well as the construction of new bioretention facilities within this urban park.

# 3) A Regional Approach to Post-Flood Emergency Stream Intervention in Northern Tier, PA

Grantee: Bradford County Conservation District	
NFWF Award Amount:	\$132,875
Matching Funds:	\$100,400
Total Project:\$	233,275
Funding Partners: EPA, Altria, CSX, FWS, USFS	

The Bradford County Conservation District will provide a pilot for the systemic approach to train Pennsylvania State's post-flood responders in techniques to re-establish channel

capacity, identify where and when not to work and the necessity to maintain floodplain connection. This project also provides educational presentations for legislators, environmental groups, highway supervisors and regulators on stream and floodplain function, changing climate factors, and why channel dredging is ineffective and results in stream instability.

### 4) Continued Outreach & Technical Assistance: Juniata River Basin Agricultural Communities (PA)

<u> </u>	
Grantee: Mifflin County Conserv	ation District
NFWF Award Amount:	\$113,176
Matching Funds:	\$44,385
Total Project:	
Funding Partners: EPA, NRCS	

The Mifflin County Conservation District will continue and build upon previous outreach and technical assistance efforts by extending outreach and technical assistance to the broader underserved agricultural communities including the Plain Sect, farmers, residents, and landowners in Mifflin County and by focusing on the implementation and adoption of riparian best management practices that emphasize comprehensive stream buffer models. These comprehensive stream buffer projects will consider improved habitat (fish habitat structures) and functional buffer plantings.

### 5) Completing Native Brook Trout Habitat Restoration Through Riparian Restoration in the Upper Kettle Creek Watershed (PA)

Grantee: Western Pennsylvania Conservancy	
NFWF Award Amount:	)
Matching Funds:	)
Total Project: \$40,200	)
Funding Partner: EPA	

The Western Pennsylvania Conservancy will work to implement restoration activities identified during work in the upper Kettle Creek Watershed in the past three years. Restoration projects will include riparian reforestation at locations directly impacting streams that support native eastern brook trout.

## 6) Phase 2: Data Driven BMP Implementation in the UNT Mill Creek Watershed, Upper Leacock Township, Lancaster County, PA

Grantee: Lancaster Farmland Trust	
NFWF Award Amount:	\$198,920
Matching Funds:	\$115,500
Total Project:	. \$314,420
Funding Partners: EPA, NRCS	







Lancaster Farmland Trust will implement 20 terrain-specific Best Management Practices (BMPs) on four strategic farms in the Mill Creek in Upper Leacock Township. The nutrient and sediment reductions associated with the implementation of BMPs will assist Upper Leacock Township with meeting the total maximum daily load for Mill Creek and improving water quality in the Mill Creek Watershed and in the Chesapeake Bav.

### 7) Salt Spring Run Aquatic Organism Passage and **Sediment Reduction (NY)**

Grantee: Tioga County Conservation District Total Project: ..... \$542,871 Funding Partners: EPA, FWS

The Tioga County Conservation District will rank culverts on Salt Spring Run, Tioga County, and select two culverts for replacement. This project will open 10.8 miles of habitat and reduce sediment and nutrient delivery to downstream waters, by replacing two undersized and aging culverts that are located within several hundred feet of each other.

#### **VIRGINIA**

#### **INSR GRANTS**

#### 1) Comprehensive Watershed Conservation in Agriculture and Livestock Landscapes of Rockingham County, VA Grantee: Trout Unlimited, Inc.

NFWF Award Amount:	\$332,608
Matching Funds:	\$1,337,956
Total Project:	\$1,670,564
Funding Partners: EPA, Altria, NRCS, USFS	

Trout Unlimited will implement targeted, comprehensive, watershed-scale restoration in Rockingham County, VA. The project will improve water quality in three small watersheds identified as high-priority for eastern brook trout habitat restoration. The project will leverage local and state partner contributions to deploy \$1 million in Regional Conservation Partners Program financial assistance funding on farms in the project area.

# 2) Prioritization and Implementation of Large-Scale BMP Retrofits on Private Lands: A County Perspective (VA)

Total Project:\$	382,000
Matching Funds:	191,000
NFWF Award Amount:	5191,000
Grantee: County of Albemarle	

Funding Partner: EPA

The County of Albemarle will develop procedures to identify and prioritize privately-owned stormwater Best Management Practices for retrofitting in order to address pollutant reduction requirements. The project will also include the design and construction of three top-ranking retrofits. The knowledge gained from the process – including outreach tips and retrofit impediments and costs – will be disseminated through a guidebook and workshop.

# 3) C-CAP (Conservation Credit for Agroforestry Production): Agroforestry Non-point Nutrient Offsets in Virginia's Region of the Chesapeake Bay Watershed

inginia bitegion of the enesapeane bay watershea		
Grantee: Virginia Polytechnic Institute and State University		
NFWF Award Amount:	7	
Matching Funds:	)	
Total Project:		

Funding Partners: EPA, NRCS, USFS

The Virginia Polytechnic Institute and State University will accelerate nutrient management innovation through a public-private partnership that advances nutrient trading of non-point offset water quality credits from agroforestry land use such as multifunctional riparian forest buffers and other upland tree-crop combinations. The project will establish agroforestry conservation projects at a 377-acre farm (Catawba Sustainability Center) and a 900-acre farm (Wildwood Farm) in the Chesapeake Bay watershed to (1) demonstrate nutrient management design, (2) evaluate nutrient flow, and (3) evaluate water quality and financial cost and benefits.

# 4) Maximizing Sediment Reductions in the James River with Cost-Effective Community-Based Strategies (VA)

Grantee: James River Association Funding Partners: EPA, Altria, CSX, NRCS, USFS

The James River Association will reduce sediment in one of NFWF's Targeted Rivers and Watersheds through an innovative, community-based, multi-faceted project. This partnership will work with five Soil and Water Conservation Districts located in areas identified as producing the highest sediment yields within the James River watershed to first identify where sediment reduction practices can make the greatest difference and then implement cost-effective projects that achieve maximum sediment reductions.







#### 5) Collectively Improving Watershed Health and **Nutrient Balance (VA)**

Grantee: Virginia Polytechnic Institute and State University Total Project: ..... \$447,338 Funding Partner: EPA

The Virginia Polytechnic Institute and State University will improve health and nutrient pollution across the Shenandoah and Rappahannock River basins by finding common ground around water quality improvement, soil health and farm-to-table connections.

#### **SWG GRANTS**

### 1) Healthy Yards, Living Waters, Healthy People: Learning How to Protect Your Local Streams by Improving Your Backyard (VA)

Grantee: Alliance for the Chesapeake Bay, Inc. Total Project: ...... \$300,621 Funding Partners: EPA, Altria, CSX

The Alliance for the Chesapeake Bay will reduce stormwater pollution in two areas within the James River Watershed through implementation of green infrastructure Best Management Practices on residential and non-residential properties located in the Thomas Jefferson Soil and Water Conservation District service area and the City of Richmond. Implementation will be targeted in areas that present the greatest opportunity for stormwater pollution reductions and highest potential to influence long-term behavior change among community members.

### 2) Town of Kilmarnock Sediment Reduction and Stream Restoration (VA)

Grantee: Town of Kilmarnock Total Project: ..... \$266,666 Funding Partner: EPA

The Town of Kilmarnock will restore nearly 1,000 linear feet of badly eroded headwater streams using Regenerative Stormwater Conveyance step-pool designs. In addition to improving physical habitat and reducing immediate risks to infrastructure, this restoration effort will annually prevent 800 tons of sediment, 700 pounds of nitrogen, and 280 pounds of phosphorus from flowing towards the Chesapeake

#### 3) Shoreline and Tidal Marsh Restoration at Leesylvania State Park (VA)

Grantee: Northern Virginia Regional Commission Total Project: ..... \$280,137 Funding Partners: EPA, FWS

The Northern Virginia Regional Commission will stabilize and protect approximately 800 feet of eroding shoreline along the Potomac River in Leesylvania State Park with a living shoreline. In addition, the project will restore .64 acres of riparian buffer and create a tidal marsh.

#### 4) Children's Farm Water Quality Treatment Plan (VA)

,	,	. ,
<b>Grantee: Maymont Foundation</b>		
NFWF Award Amount:		\$200,000
Matching Funds:		\$118,500
Total Project:		\$318,500
Funding Partners: EPA, Altria		

The Maymont Foundation will construct a bioretention practice, followed by an infiltration step pool conveyance system, that drains to a floodplain wetland, to treat local impervious surfaces. The practice will provide an estimated phosphorus reduction of 12 pounds, nitrogen reduction of 76 pounds, and runoff reduction of 12,735 cubic feet.

# 5) Partnership to Restore Hampton Waterways (VA)

Grantee: Chesapeake Bay Foundation, Inc.	
NFWF Award Amount:	\$200,000
Matching Funds:	\$126,345
Total Project:	\$326,345
Funding Partners: EPA, FWS	

The Chesapeake Bay Foundation will spur oyster restoration efforts in Virginia's Hampton River watershed, help manage stormwater pollution in the city of Hampton, and remediate impairments to the river and its tributaries by working with an array of public and private partners. The project will engage volunteers in hands-on restoration and educational activities regarding oyster restoration as well as stormwater issues and solutions.







#### **WEST VIRGINIA**

#### **SWG GRANTS**

#### 1) Branching In Native Nursery (WV)

Grantee: Eastern Panhandle Planning and Development

Council

Total Project: ...... \$131,500

Funding Partner: EPA

The Eastern Panhandle Planning and Development Council will transform an impervious brownfield site into a plant nursery to cultivate native species for local green infrastructure projects. Irrigation for the nursery will be provided by treated effluent from a local waste water treatment plant.



Blue crab

#### **PROJECTS BY TYPE**

#### TARGETED RIVER AND WATERSHED RESTORATION

The following projects seek to improve water quality consistent with state Watershed Implementation Plans, as well as habitat restoration and species recovery goals for targeted species that include eastern brook trout, river herring, and native oysters. Projects will improve stream health and water quality in agricultural and urban landscapes through Best Management Practices and couple habitat restoration with efforts to mitigate the threat of future degradation. In this category, \$5,007,859 in NFWF funds were awarded, for a total on-the-ground impact of \$13,725,258.

1) Continued Outreach & Technical Assistance: Juniata River Basin Agricultural Communities (PA)

- 2) Salt Spring Run Aquatic Organism Passage and Sediment Reduction (NY)
- 3) Phase 2: Data Driven BMP Implementation in the UNT Mill Creek Watershed, Upper Leacock Township, Lancaster
- 4) Completing Native Brook Trout Habitat Restoration Through Riparian Restoration in the Upper Kettle Creek Watershed (PA)
- 5) Partnership to Restore Hampton Waterways (VA)
- 6) Juniata River Basin Whole Farm Project: Regional Conservation Partnership Program (PA)
- 7) Comprehensive Watershed Conservation in Dairy and Livestock Landscapes of the Chesapeake Bay - Bradford County Conservation District RCPP (PA)
- 8) A Regional Approach to Conserving the Aquatic Resources of the Potomac and Shenandoah Headwaters (WV, VA)
- 9) Permanent Protection of Critical Habitat and Water Quality in Pennsylvania's Chesapeake Bay Watershed (PA)
- 10) Lost Creek Restoration Initiative: A Watershed Wide Community Collaboration Uniting Plain-Sect Populations, Golf Gurus, and Local Leaders in an Effort to Extend Eastern Brook Trout Range (PA)
- 11) Delivering the NFWF RCPP in Lancaster County, PA
- 12) Chiques Creek Reenvisioned: A Collaborative Watershed Restoration Initiative to Support Pennsylvania's Pilot Alternative TMDL Approach
- 13) Healthy Streams Farm Stewardship Program: Leveraging
- 14) Comprehensive Watershed Conservation in Agriculture and Livestock Landscapes of Rockingham County, VA
- 15) Accelerating Long-term Oyster Restoration Through Innovative Nutrient Management Strategies (MD)
- 16) Upper Potomac Farm Stewardship Program (MD, WV)
- 17) Accelerating Wetland Restoration (DE, MD, PA, VA)
- 18) Natural Infrastructure Stream Corridor Rehabilitation (PA, NY)

#### **GREEN INFRASTRUCTURE IN URBAN LANDSCAPES**

The following projects seek to build local government capacity for advancing green infrastructure strategies, better integrate green infrastructure into existing local government programs, and/or accelerate adoption of green infrastructure practices on private lands. All Green Infrastructure projects will result in quantifiable reductions in the volume of stormwater runoff and nutrient and sediment loads delivered to the Chesapeake Bay. In this category, \$3,869,845 in NFWF funds is being recommended for award, for a total on the ground impact of \$12,704,497.

- 1) Fort Dupont Watershed Restoration (DC)
- 2) Hawkins Cove Small Watershed Restoration and Sustainability Program (MD)







- 3) Clear Creeks: Our Water, Our Heritage, Our Pride (MD)
- 4) Wrightsville Borough Riverfront Restoration Project (PA)
- 5) Children's Farm Water Quality Treatment Plan (VA)
- 6) Deep Blue (MD)
- 7) Prioritization and Implementation of Large-Scale BMP Retrofits on Private Lands: A County Perspective (VA)
- 8) Baltimore City's Gwynns Falls Urban Watershed: Improving Water Quality and Access to Nature Through Green Infrastructure (MD)
- 9) Capturing an Opportunity: A Green Infrastructure Retrofit Demonstration Project in Delaware's Nanticoke River Watershed
- 10) Branching In Native Nursery (WV)
- 11) Harris Creek Watershed Trees for Public Health (MD)
- 12) Riverwise Congregations (MD)
- 13) CleanScape Communities (MD)
- 14) Sarah's Hope Site Improvement Project (MD)
- 15) Shoreline and Tidal Marsh Restoration at Leesylvania State Park (VA)
- 16) Town of Kilmarnock Sediment Reduction and Stream Restoration (VA)
- 17) Healthy Yards, Living Waters, Healthy People: Learning How to Protect Your Local Streams by Improving Your Backyard (VA)

#### **INNOVATION ON CROSS-CUTTING ISSUES**

The following projects are investments 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. In this category, \$2,598,506 in NFWF funds is being recommended for award, for a total on the ground impact of \$7,197,028.

- 1) Iron-Enhanced Sand Filter to Accelerate Phosphorus Removal in Stormwater (MD)
- 2) Maximizing Sediment Reductions in the James River with Cost-Effective Community-Based Strategies (VA)
- 3) A Regional Approach to Post-Flood Emergency Stream Intervention in Northern Tier, PA
- 4) Upper Susquehanna Coalition I-4 Program (NY, PA)
- 5) USC Integrated Approach to Nutrient Management (NY, PA)
- 6) C-CAP (Conservation Credit for Agroforestry Production): Agroforestry Non-point Nutrient Offsets in Virginia's Region of the Chesapeake Bay Watershed
- 7) Nutrient Incentive Payment (NIP) A Maryland Chesapeake Bay Pilot Program to Target Long-Term Nutrient Reduction/Ecological Services for Riparian Forest Buffers and Wetlands
- 7) Private Financing to Accelerate Urban Stormwater Retrofits (PA)
- 8) Collectively Improving Watershed Health and Nutrient Balance (VA)