

CHESAPEAKE BAY STEWARDSHIP FUND 2018 PROGRAM REPORT







For nearly 20 years, the National Fish and Wildlife Foundation (NFWF) has supported local efforts to protect and restore the Chesapeake Bay watershed. Founded on a partnership with the U.S. Environmental Protection Agency and the Chesapeake Bay Program, programs have since grown to encompass funding and support from numerous federal agencies, state conservation programs, and leading corporate partners invested in a vibrant and sustainable future for the region. These resources and NFWF's public-private funding model allow the Foundation to support local conservation and restoration actions through a combination of competitive grants programs, dedicated capacity building for watershed partners, and investments that help local partners identify and deliver more effective results for their communities and the natural resources that sustain them.

OUR PROGRAM

The Chesapeake Bay Stewardship Fund supports efforts by local communities, farmers and private landowners to restore polluted rivers and streams in the Chesapeake Bay region by advancing cost-effective and innovative solutions by providing financial and technical assistance.

> With 2018 investments, NFWF's grant-making in the region has now surpassed \$160 million, with more than \$230 million in additional local matching resources. Together with local partners, NFWF's conservation impact in the region now stands at more than \$400 million since 2000.

These impressive results do not mean the work is done. Data continues to demonstrate that the Bay watershed is rebounding after centuries of decline, but additional work is needed to finish the job and sustain collective successes.

That's why the Foundation continues to advance next generation approaches to watershed restoration, from improving collaborative models for local action to more farmer-led initiatives to restore the region's soil and water resources.

Working together, the public and private sectors can get the job done.

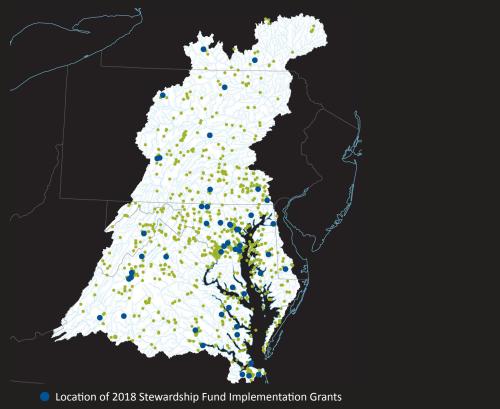


RIGHT The 2018 Chesapeake Executive Council Meeting was held in Frederick Douglass-Isaac Myers Maritime Park in Baltimore.

OUR INVESTMENTS

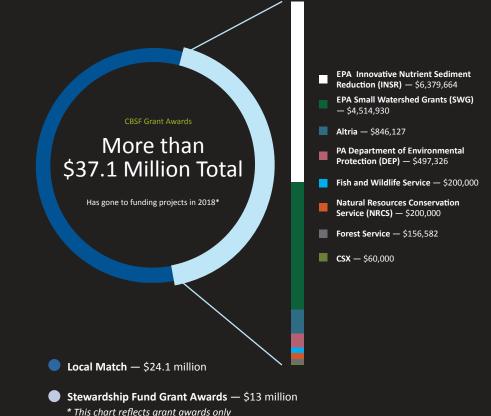
NFWF's Chesapeake Bay Stewardship Fund includes a portfolio of grant programs designed to help local communities clean up and restore polluted rivers and streams in the Chesapeake Bay region. Through a partnership with the U.S. Environmental Protection Agency and the Chesapeake Bay Program, the Chesapeake Bay Stewardship Fund advances cost-effective and creative restoration solutions.

Local Water Quality Investments









OUR IMPACT

Through grants awarded in 2018, the Chesapeake Bay Stewardship Fund will improve the health of Chesapeake Bay watershed by working to restore local rivers and streams.

2018 Highlights

 Awarded \$512,591 to 11 grants through the Small Watershed Grants – Planning and Technical Assistance Program for planning and design work that enhances local capacity for restoration.

 Awarded \$12.5 million to 38 grants through the Small Watershed Grants –
Implementation and Innovative Nutrient and Sediment Reduction Grant Programs to implement restoration projects in the Bay.

 Supported the Chesapeake Bay Watershed Forum, Capacity Building Initiative in partnership with the Chesapeake Bay Trust, and the Land and Waters Initiative in partnership with the Land Trust Alliance, to build capacity for new restoration and promote information sharing across the Bay.

 Hosted the largest All-Bay Agricultural Networking Forum in Lancaster, PA, bringing together 200 practitioners, local government employees, NGOs, and federal partners to share knowledge and expertise on conservation agricultural best practices.



'90,979 Acres

Under BMPs for Nutrient and Sediment Reduction

OUR PROJECTS: CONNECTING COMMUNITIES TO CONSERVATION

In the Octoraro Watershed, connections and relationships with the Plain Sect community are being fostered to achieve conservation goals and a greater understanding of the benefits and needs for best management practices.



Reducing pollution from farms is the top priority for the Chesapeake Bay restoration effort. Pennsylvania farms send about 64 million pounds of nitrogen into the Bay every year and although that number has dropped since 1985, Lancaster County, home to many small or Plain Sect farmers, continues to have one of the highest per-acre loading rates for nitrogen in the watershed.

Aspects of the lifestyle and farming practices in the county make it challenging to recruit participants for government-funded conservation programs. But, according to Conservation District manager Christopher Thompson, participation in Lancaster County is on the rise. Some local farmers are taking independent action and others are accepting government assistance from nonprofits, including NFWF.

The Octoraro Creek watershed, located in southern Lancaster County, suffers from high nitrate pollution. Here the Alliance for the Chesapeake Bay, originally supported by a 2016 NFWF grant of \$749,000, is working with 25 Plain Sect farmers. Through the implementation of agricultural best management practices (BMPs), the Alliance, the Octoraro

LEFT This field utilizes no-till farming, an example of an agricultural best management practice.

Watershed Association and the University of Maryland Environmental Finance Center are working to implement BMPs on farms, develop messaging and outreach events for farmers, and develop sustainable financing plans. A 2018 increase of \$400,000 to the project allowed for inclusion of additional Plain Sect farmers who have interest, thereby increasing project impact.

Jenna Mitchell, Pennsylvania state director for the Alliance, thinks farmers need choices and independent funding. Through practices such as farmer breakfast meetings for those interested in the cost-share program and Plain Sect "champion" farmers (those that have already implemented BMPs in their Conservation Plans using NFWF cost-share funding), the Alliance is facilitating peer-to-peer discussions where interested farmers can learn from each other about the benefits and need for BMP implementation. In addition to information sharing between farmers and BMP installation on Plain Sect farms, the project is also fostering a formal Source Water Protection Collaborative to drive momentum and lead the continued implementation of agricultural BMPs on Plain Sect farms beyond the grant's lifetime.

RIGHT The Chesapeake Bay Stewardship Fund allows for partners to work with Plain Sect farmers to implement best management practices.



OUR PROJECTS: LEADERS IN REGIONAL COLLABORATION

The Upper Susquehanna Coalition serves as a model for successful regional partnerships implementing watershed restoration and educating local communities.



The Upper Susquehanna Coalition (USC) has created a conservation playbook and provided the leadership to prove there is strength in numbers and teamwork. For USC, more than 30 years of experience in conservation work provides data and support that enables success at the local level. Best practices are shared and staffing can be mobilized across counties and even state lines.

The regional organization, representing one of the largest aggregations of partners in the Chesapeake Bay watershed, works toward sustainable agriculture best practices and stream protection. With funding from INSR 2015 and 2016 awards, USC developed one of the first model wetlands programs and became experts in wetland restoration. USC assisted in grant writing for public and private properties to support wetland protection. They are now replicating the model into a stream focus area. A 2018 Small Watershed Grants Implementation award to the Tioga County Soil and Water Conservation District of New York, the lead organization for the USC, will allow for the additional planting of riparian buffer acreage and the education of riparian buffer stewards for evaluation and assessment.

Key to regional delivery of this expertise are the relationships that USC has built. The organization works with a range of local organizations, creating an expansive resource to scale to implementation. Now with 30 years of data, there is a large reservoir of shared knowledge between members from more than 21 districts.

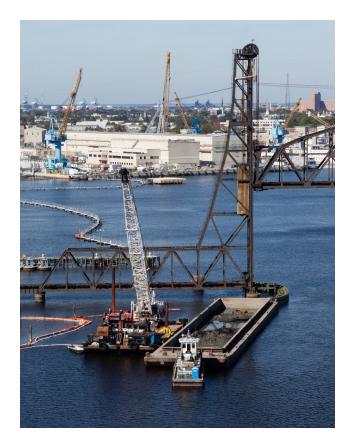
The USC exemplifies the regional priorities and shift that the Chesapeake Bay Stewardship Fund is moving towards, particularly with the Innovative Nutrient and Sediment Reduction Program. USC fosters a culture of teamwork, helping fellow counties within the coalition and offering expertise in areas where other counties may need it, including boots on the ground. The success in the Upper Susquehanna watershed speaks to the success of USC and a regional partnership model.

LEFT Underwater grasses in the Chemung River in Corning, New York **RIGHT** Patrick Raney, a USC member, leads a plant walk to explore newly constructed wetlands at the Parslow Road Conservation Area in Hartwick, New York.



OUR PROJECTS: A NEW HOPEWELL

The city of Hopewell is working to increase urban tree coverage and create accessible watershed restoration projects, showcasing stream and wetland restoration to the public.



Hopewell, Virginia overlooks the confluence of the beautiful James and Appomattox rivers. In 2016, with a \$200,000 Small Watershed Grant, the city began efforts to augment its industrial base to become more walkable and livable. Funding for new permeable paver stones, a concerted urban garden planting effort, and reduction of runoff from an industrial rooftop and parking lot comprised the prioritized projects.

In comparison to other rivers feeding the Chesapeake Bay, the James River watershed is relatively successful, with the highest level of dissolved oxygen of all tributaries of the Chesapeake Bay. However, the industrial base of Hopewell, as well as the nutrient runoff from farming in the area, have been a cause for concern. Today, city planners are teaming with the Chesapeake Bay Foundation to revitalize Hopewell.

"Hopewell has some of the most beautiful natural areas with bluffs over the water, a marina and parks," said Ann Jurczyk, Virginia outreach and advocacy manager with the Chesapeake Bay Foundation. "This is also a really good time for revitalizing downtown – and planners are starting to realize that Hopewell has beautiful assets being right on the water."

LEFT The industrial legacy of Hopewell, as well as nutrient runoff from farming in the area, continues to cause concern.

"Hopewell wants to be listed as a 'Tree City, USA' and we are looking at the tree population right now for improved canopies," Jurczyk added. "Studies show that people are more willing to stay in town and are attracted to tree-lined areas."

Chesapeake Bay Foundation assisted in planting over 100 trees for erosion control and canopy.

A 2018 Small Watershed Grants Implementation project, "Expanding Green Infrastructure, Urban Stream, and Tree Canopy Restoration in Hopewell (VA)," will continue and expand the work began with the 2016 SWG award. With the new award, Chesapeake Bay Foundation will implement largescale stream restoration and wetland enhancement on an eroding stream channel, re-establish floodplain wetlands adjacent to the stream channel, plant 250 urban trees, and create "conservation corners" to install green features in residential areas with poorly draining soils.

RIGHT Trees provide many benefits for water quality, including reducing stormwater runoff and preventing erosion.





The Cheapeake Bay Stewardship Fund is working to achieve the shared goals of the Chesapeake Bay Program partnership on issues critical to sustained restoration success.

MULTISTATE

Chesapeake Bay Foundation

Mountains to Bay Grazing Alliance: A Collaborative to Increase Rotational Grazing (MD, PA, VA, WV)

Expand and strengthen a network of private and public partners to promote the adoption of rotational grazing systems that enhance soil health, protect and improve water quality, and contribute to farm economic viability. Project will include on-farm demonstrations, peer-to-peer dialog, establishment of local grazing groups, and development of outreach materials that highlight the economic and soil health benefits of grazing. *Grant Amount: \$850,350*

University of Montana

Targeted Implementation in the Chesapeake Bay Watershed through Data Analysis and Partnership Couple proprietary databases of farmer interests with advanced behavior change models and messaging approaches to improve effectiveness of agricultural conservation outreach programs in the Chesapeake Bay Watershed. Project will leverage watershed-wide data sets and coordination

LEFT Blue heron in the Chesapeake Bay

with local nonprofits, conservation organizations, and social scientists to increase adoption of targeted best management practices in priority subwatersheds. *Grant Amount: \$998,094*

Interfaith Partners for the Chesapeake

One Water Partnership (MD, PA)

Replicate proven partnerships with secular and religious institutions, and engage new partners in strategic regions to scale up the engagement of the faith community in watershed restoration efforts in Maryland and Pennsylvania. Project will engage nonprofits, local governments, citizen stewardship groups, and faith-based institutions to enable 36 congregations to install green infrastructure with measurable impacts on local water quality. *Grant Amount: \$1,000,000*

Shorerivers

Envision the Choptank: Expanding and Scaling-Up Regional Partnership (MD, DE) Strengthen and expand the Envision the Choptank partnership by identifying specific locations for best management practices on agricultural lands, providing training and education on high impact restoration techniques, and expanding landowner partnerships and technical assistance offerings. Project will continue to build the partnership of 17 regional and state organizations while implementing 250 acres of best management practices in the Choptank watershed. *Grant Amount: \$999,629*

Stroud Water Research Center

Soil Health Conservation, Engagement and Technical Assistance (MD, PA, VA)

Partner with Cover Crop Coaching to increase access to technical expertise on soil health and increase adoption rates. Project will enable Cover Crop Coaching to direct farmer meetings, host train-the-trainer events, and increase outreach to landowners renting cropland to tenant farmers. *Grant Amount: \$199,976*

Ridge to Reefs

Implementing Targeted Nutrient Management in the Shenandoah Valley and Eastern Shore (MD, VA) Construct four denitrifying bioreactors and 3.6 acres of nontidal wetlands in priority watersheds with high nutrient loads in Maryland and Virginia. Project will improve farms environmental performance, treat legacy nutrients, and will benefit American black duck wintering habitat and eastern brook trout recovery.

Grant Amount: \$199,787

College of William and Mary, Virginia Institute of Marine Science

Farm Resiliency Education for At-Risk Coastal and Riparian Agricultural Lands (MD, VA) College of William and Mary, Virginia Institute of Marine Science will host a series of workshops with to develop a strategy and work plan for managing farming landscapes, outline projects that could be undertaken for piloting practices, develop proposals for implementation, and target potential sites. Project will address farmlands at risk to rising sea levels and will bring together agricultural economists, experts on alternative cropping systems, and ecosystem specialists to provide expertise on how to transition vulnerable agricultural landscapes.

Grant Amount: \$49.994

DELAWARE

University of Maryland **Environmental Finance Center**

Leveraging Partnership and Data in the Nanticoke for Stormwater Best Management Practices (DE) Use existing collaborative structures in the watershed to collect and analyze data about demographics and landownership to identify needed changes and gaps. Project will assist Nanticoke Watershed Alliance in developing recommendations for stormwater management to increase participation in programs and implementation, meet total maximum daily load goals across regulated and unregulated parts of the region, and fit the communities' financing capacity. Grant Amount: \$49,996

DISTRICT OF COLUMBIA

Department of Energy and Environment

Freshwater Mussel Restoration in the Anacostia (DC) Improve and study water quality conditions in Kingman Lake, Nash Run and Watts Branch using three native species of freshwater mussels: eastern elliptio, alewife floater and eastern pondmussel. Project will educate 400 young people per year on the importance of freshwater mussels for ecosystem services and develop a freshwater mussel restoration plan for the District of Columbia based on work performed during this grant and prior to this grant. Grant Amount: \$200.000

MARYLAND

Baltimore Tree Trust Trees for Public Health in the Harris Creek Watershed (MD)

Expand the urban tree canopy and remove impervious surfaces, focusing on planting trees along streets in neighborhoods identified as concrete-laden, with critically low tree coverage. Project will result in 275 newly planted street trees and the removal of 8.800 square feet of impervious surface. Grant Amount: \$200,000

Low Impact Development Center Supporting Community-Based Municipality Stormwater Retrofit Plans in Prince George's County (MD) Create partnerships and provide capacity to the 12 municipalities within the Anacostia Watershed to assist in meeting National Pollutant Dischare Elimination System permit requirements. Project will engage elected officials, community leaders, citizens, staff and businesses resulting in the planning, selection, and design of stormwater retrofit best management practices. Grant Amount: \$146,100

Town of New Market

Converting a Fire Pond into a Step Pool Storm Conveyance in the Town of New Market (MD) Retrofit the Town of New Market's fire pond. converting the pond into a step pool storm conveyance system to mitigate future flood risk. Project will capture and treat runoff from 25.8 acres of land and will improve local water quality and nutrient and sediment loads. Grant Amount: \$150,159

Blue Water Baltimore Green Infrastructure and Water Quality Monitoring in Gwynns Falls (MD)

Implement green infrastructure in Gwynns Falls, planting 700 new trees and constructing stormwater retrofits to treat 2 acres of impervious surfaces. Project will engage residents on local environmental issues and will link water quality monitoring data to restoration activities at 14 non-tidal locations while studying pre- and post-pollution levels at large-scale restoration project sites. Grant Amount: \$200.000

OUR 2018 GRANTS

South River Federation

Stream and Habitat Restoration in Kings Branch Flat Creek Greenway Natural Area (MD)

Restore a rapidly eroding 3,270 linear foot stream bank and enhance non-tidal wetlands, thereby reconnecting the floodplain. Project will reduce nutrient and sediment pollution loads, benefit local residents and visitors by protecting hiking trails in the Kings Branch Flat Creek Greenway Natural Area, and restore lost habitat and stream functions. Grant Amount: \$199.650

Nanticoke Watershed Alliance

Cambridge Residential Stewardship Initiative II (MD)

Work with local partners to install 10 best management practices on residential lands in the Choptank River Watershed, complete a community needs survey and a stormwater financing feasibility study, and engage local decision makers in stormwater management. Project will reduce nutrient and sediment loads entering the Choptank River and increase future funding options for stormwater best management practice implementation. *Grant Amount: \$109,871*

St. Mary's River Watershed Association Oyster Reef Restoration in the St. Mary's River Shellfish Sanctuary (MD)

Construct and install 5 acres of three-dimensional reef structures and traditional oyster restoration structures in the St. Mary's River Shellfish Sanctuary Project will engage 200 volunteers on site and an additional 600 STEM and public school students. Grant Amount: \$71,436

St. Vincent de Paul Roman Catholic Congregation Micro-Bioretention at St. Vincent de Paul Roman Catholic Church (MD)

Construct three micro-bioretention facilities in St. Vincent de Paul Roman Catholic Church's parking lot. Project will capture and treat stormwater and pollutants that run off from the parking lot into Jones Falls River and Baltimore Harbor. Grant Amount: \$136,677

South River Federation

Living Shoreline and Ovster Reef Ball Restoration in the Turnbull Community (MD)

Stabilize 748 feet of shoreline through rock sills and oyster reef balls; reef balls will be placed along the bottom of rock sills and set with oyster spat to study oyster population success. Project will prevent 97 pounds of nitrogen, 56 pounds of phosphorus, and 144 tons of sediment from reaching the South River annuallv.

Grant Amount: \$117,125

Epping Forest **Retrofitting Epping Forest's** Community Clubhouse (MD)

Retrofit Epping Forest's community clubhouse drainage ditch by widening the ditch. Project will improve water quality in the adjacent Severn River and will address localized flooding and erosion problems.

Grant Amount: \$131.000

Maryland Association of Soil Conservation Districts

Increasing Consistent Training for Local Soil Conservation Districts (MD)

Increase the planning, design and technical assistance capacity of Maryland's soil conservation districts, which provide services in agricultural and urban landscapes through consistent training. Project will increase the capacity for conservation planning and implementation in order to increase conservation and reach Maryland's Phase III Watershed Implementation Plan goals. Grant Amount: \$45,296

Carroll County Government -Bureau of Resource Management Stormwater Retrofit Design at Woodsvde Estates (MD)

Design the retrofit of two existing stormwater management facilities in the Woodsyde Estates subdivision to provide water quality treatment for 59 acres of drainage area and design a stabilization and restoration of 1.600 linear feet of steam within the South Branch of the Patapsco River. Project design, when implemented, will improve water quality as well as provide protection of the downstream receiving stream. Grant Amount: \$50,000

Shorerivers

Reconnecting Floodplains and Stream Restoration in the Upper Sassafras (MD)

Produce a fully permitted stream and wetland restoration design that addresses an eroding 4,800 linear foot stretch of forested perennial stream in



the headwaters of the Sassafras River. Project will result in designs for a stream that receives runoff from surrounding highways and a weigh station, as well as 370 acres of surrounding agricultural land. *Grant Amount: \$47,025*

CityScape Engineering

Developing a Privately-Managed Upland Restoration Plan for Gwynns Falls (MD)

Perform a minimum of 16 green infrastructure audits and individual restoration site plans, providing a capital improvement planning tool for individual property owners, including anticipated costs for design, construction and maintenance of best management practices with recommended funding mechanisms.

Grant Amount: \$32,939

NEW YORK

Tioga County Soil and Water Conservation District of New York

Sustainable Streamside Buffer Establishment in the Upper Susquehanna (NY)

Support the Upper Susquehanna Coalition Buffer Program to plant additional riparian buffer acreage and facilitate management on riparian buffer practice acres. Project will educate and manage riparian buffer stewards to evaluate and assess buffers throughout the watershed to determine plant survival and management needs and to facilitate management activities. Grant Amount: \$200,000

The Nature Conservancy Stream Restoration and Brook Trout Habitat Improvement in the Cohocton River (NY)

The Nature Conservancy will improve two culverts, conduct streambank restoration on a key tributary, and increase river management capacity training and continuous water quality monitoring to inform strategic interventions in the watershed. Project will improve brook trout habitat and increase connectivity to and between already identified high-quality eastern brook trout habitat. *Grant Amount: \$178,076*

PENNSYLVANIA

Alliance for the Chesapeake Bay

Turkey Hill Clean Water Partnership: Building a Market-Driven Model for Conservation Action (PA) Build on existing partnership with Turkey Hill Dairy and the Maryland and Virginia Milk Producers Cooperative Association to accelerate conservation planning and practice implementation Project will provide farmers with technical and financial assistance necessary to meet Turkey Hill commitments for sustainable milk production. *Grant Amount: \$1,000,000*

Blair County Conservation District Lakemont Park Green Infrastructure and Urban Runoff Management (PA) Construct green infrastructure in Lakemont

Park, including three rain gardens, a vegetated permeable pavement lot, a rain water harvesting system for stormwater re-use, and a riparian buffer. Project will manage upland urban runoff and will become part of the maintenance program for the park/recreational area. The project also provides opportunity for education and examples for additional community green infrastructure redevelopment.

Grant Amount: \$195,000

Capital Resource Conservation and Development Area Council

Increasing Rotational Grazing and Crop Cover Practices through Farmer and Community Engagement (PA)

Support the adoption of cover crop grazing and other rotational grazing practices both on four study farms and an additional six to ten farms, transitioning land to rotational grazing. Project will result in 200 acres of best management practices and innovation in rotational grazing. *Grant Amount: \$194,431*

Western Pennsylvania Conservancy

Fish Passage Improvement and Culvert Replacement in the Upper Sinnemahoning Creek Watershed (PA)

Western Pennsylvania Conservancy will replace four culverts at priority locations for native brook trout populations in the upper Sinnemahoning Creek watershed. Project will result in 4 miles of stream opened to fish passage and restored. *Grant Amount: \$136,466*

LEFT Blue crab

Lancaster Farmland Trust

Engaging the Plain Sect Community and Market for Clean Water (PA)

Lancaster Farmland Trust will increase adoption of farm conservation practices through engaging Plain Sect community leaders, creating learning farms to provide peer-to-peer understanding and enthusiasm for conservation, and implementing best management practices on farms. Project will engage market demand for sustainability via dairy supply chain players under increasing pressure from consumers to address sustainability and create replicable model that can scale more broadly across the watershed. Grant Amount: \$198,463

National Wildlife Federation

Train the Trainer: Increasing Efficiency of Agricultural Outreach (PA)

National Wildlife Federation will host a webinar series and six messaging and communications training events for agricultural outreach professionals within the Chesapeake Bay Watershed in Pennsylvania. Project will increase the efficiency of agricultural outreach professionals by providing the tools and cultural frameworks needed to influence farmers to use water-quality best management practices. Grant Amount: \$49,750

University of Maryland Environmental Finance Center Continuing Momentum to Reduce Stormwater Pollution in the Oxford Region (PA)

Support the Oxford Regional Planning Committee in their efforts to address stormwater pollution

in both the regulated and unregulated parts of municipalities. Project will develop a partner structure for program delivery and will translate pollution reduction goals to the local level while providing a sustainable financing strategy to support initiation and continued implementation of programming throughout the watershed. Grant Amount: \$49,950

Tioga County Conservation District of Pennsvlvania

Identifying and Designing Restoration in Tier II Eastern Brook Trout Patches (PA)

Identify, prioritize, design and permit habitat restoration projects within two Tier II eastern brook trout patches, the Tioga River and Babb Creek. Project will enhance the ability of the Tioga County Conservation District to implement effective priority habitat restoration and sediment reduction projects, motivate individuals and local governments to implement projects, and increase benefits to water quality and eastern brook trout habitat. Grant Amount: \$37.640

Western Pennsylvania Conservancy Unassessed Waters Initiative (PA) - IV

Conduct 1,000 fish surveys on previously unassessed streams, coordinating priorities, data collection, and data management. Project will provide data on previously unassessed streams in order to ensure proper stream classification, which is vital to successfully protecting Pennsylvania's water resources. Grant Amount: \$50,000

WEST VIRGINIA

Trout Unlimited

Securing and Expanding Brook Trout Habitat in the Cacapon and Potomac South Branch (WV) Strengthen and expand stronghold patches of brook

trout by restoring in-stream and riparian habitat, mitigating barriers to aquatic organism passage, and increasing the number of agricultural producers implementing streamside best management practices. Project will restore riparian forest buffers and fish passage, recruit 200 volunteers to assist in environmental stewardship projects, and provide conservation planning and technical assistance to 30 new landowners.

Grant Amount: \$192.934

VIRGINIA

The Elizabeth River Project

Increase Collective Impact on the Elizabeth River through Strengthened Partnership (VA) Reinvoigorate the Elizabeth River Project partnership to further coordinated stormwater management and ecosystem restoration in Chesapeake, Norfolk, Portsmouth and Virginia

Beach, Virginia. Project will establish a leadership roundtable and summit to formally adopt a new watershed action plan, explore regional financing options, and improve coordination of green infrastructure projects at a variety of scales. Grant Amount: \$750.000

OUR 2018 GRANTS

Alliance for the Chesapeake Bay Expand the RVA H20 Regional Partnership

to Scale-Up Green Infrastructure in Richmond (VA) Enhance the structure and function of the RVA H20 regional water management partnership to implement stormwater best management practices in the City of Richmonds. Project will bring together the Richmond region government agencies and local partners to implement green infrastructure, with a specific focus on local public school sites and education.

Grant Amount: \$999,963

James River Association

Formalizing and Growing the Middle and Upper James Riparian Consortium (VA)

Formalize an existing multi-party partnership structure designed to improve coordination and delivery of riparian conservation programs and practices in the middle and upper James River watershed. Project will utilize a consortium model to build individual organizational capacity of partners, coordinate project prioritization, and implement 200 acres of riparian buffers. Grant Amount: \$750,000

Science Museum of Virginia Foundation Stormwater Pollutant Mitigation and Green Infrastructure at the Science Museum of Virginia Mitigate sewer overflow events by removing 3 acres of impervious surface, installing an advanced bioretention system, enhancing existing green

stormwater infrastructure education and outreach. and developing a predictive model of future green

site and stormwater management projects. Project will reduce nutrient and sediment loads discharging into the James River and will demonstrate effective stormwater management practices. Grant Amount: \$200,000

Chesapeake Bay Foundation Restoration of the Eastern Ovster in the Lynnhaven River (VA)

Establish 2.5 acres of new ovster reef. construct and plant 200 reef balls, and place 5.5 million young oysters in the Lynnhaven River. The project will be conducted in partnership with Lynnhaven River Now oyster reef construction, enhancing the population of native eastern ovsters and engaging approximately 500 volunteers in a wide array of hands-on ovster restoration activities. Grant Amount: \$199,987

Lynnhaven River Now

Restoration of the Eastern Oyster in the Lynnhaven River Western Branch (VA)

Construct a 3-acre oyster reef using crushed concrete substrate, the first alternativesubstrate reef, in the Lynnhaven River. Project supports an overall goal of 60 acres reef habitat in the Lynnhaven River, in partnership with the Chesapeake Bay Foundation. Grant Amount: \$200.000

Friends of the Rappahannock

Oyster, Shoreline, and Stream Restoration in the Rappahannock Tidal Tributaries (VA) Restore Carter's Creek and Urbanna Creek through

oyster restoration on the river bottom, living shorelines and grasses to reduce shoreline erosion, and green infrastructure to address polluted stormwater runoff. Project will engage schools and community volunteers in restoration work, educating the community about the importance of water quality.

Grant Amount: \$91.573

Northern Neck Planning District Commission

Low Impact Stormwater Retrofit in the Town of Warsaw (VA) Convert an abandoned and paved shopping center to a stormwater pond with green space, rain gardens, bioretention areas, walking trails, native plants and interpretive signage. Project will be a living and visible demonstration site that invites pedestrians into the downtown area and informs residents, students and visitors of the positive impact of green infrastructure. *Grant Amount: \$200,000*

Middle Peninsula Planning District Commission Engaging Local Landowners

in Living Shorelines and Shoreline Management (VA) Target landowners with contiguous repetitive loss properties to create a 500- to 700-foot stretch of living shoreline and develop rural coastal flooding resiliency plans utilizing sand from other dredging projects. Project will improve coastal resiliency and mitigation efforts, while simultaneously improving water quality and managing shoreline erosion and marsh loss.

Grant Amount: \$199.914

Town of Woodstock PROJECT LiNK: Stormwater Management in Shenandoah Towns (VA)

Construct two biofiltration projects, incorporate permeable pavers into a retrofit of court square area, and foster broader adoption and better maintenance of stormwater facilities by the localities in the Shenandoah River Friendly Towns collaboration through a series of related outreach and training efforts. Project will demonstrate benefits of green infrastructure in Shenandoah localities.

Grant Amount: \$200,000

Chesapeake Bay Foundation

Expanding Green Infrastructure, Urban Stream and Tree Canopy Restoration in Hopewell (VA) Implement large-scale stream restoration and wetland enhancement on an eroding stream channel be, re-establish floodplain wetlands adjacent to the stream channel, plant 250 urban trees, and create "conservation corners" to install green features in residential areas with poorly draining soils. Project will engage more than 250 community volunteers and develop Meaningful Watershed Education Experiences for students to takes advantage of the large-scale stormwater management project proximity. *Grant Amount: \$199,999*

The Piedmont Environmental Council

Reconnecting and Restoring Brook Trout Habitat at Public Road-Stream Crossings (VA) Replace restrictive culverts with improved streamsimulation road-stream crossings for full aquatic organism passage in Piedmont. Project will improve instream habitat by restoring 0.30 riparian acres of habitat, reconnecting 4 miles of stream, and removing two barriers to fish passage. *Grant Amount: \$199,057*

Valley Conservation Council

Land Conservation and Nutrient Management Planning in the Central Shenandoah Valley (VA) Provide technical assistance to 10 or more farm landowners with donated conservation easements through the creation of nutrient management or resource management plans. Project will permanently protect property and secure buffers/ livestock exclusion on 6 to 10 miles of streams and associated buffers. *Grant Amount: \$199,063*

Environmental Concern

From Design to Construction: Scaling-Up to Meet Demand for Living Shorelines on the Lower Bay (VA) Increase the capacity of the Elizabeth River Project for in-house design and construction of living shorelines, rain gardens, wetlands, and other green infrastructure. Project will address a lack of available and affordable construction firms to meet an increasing demand for this work on the lower bay. *Grant Amount: \$50,000*





2018 BUSINESS PLAN UPDATE

In 2014, the federal government and watershed jurisdictions renewed their commitments to Chesapeake watershed restoration and protection through the Chesapeake Bay Watershed Agreement, outlining shared goals and outcomes across a broad range of conservation and community engagement efforts. The 2018 update to the 2012 Business Plan is aimed at maximizing alignment of NFWF's Chesapeake Bay investments with the new agreement.

NFWF is committed to the vision of "an environmentally and economically sustainable Chesapeake Bay watershed" set forth in the Chesapeake Bay Watershed Agreement. To that end, NFWF's Chesapeake Bay Business Plan has been developed to provide measurable contributions to goals and outcomes of the Chesapeake Bay Program and the Chesapeake Bay Watershed Agreement associated with:

- Water quality improvement through nutrient and sediment reduction to serve as the foundation for healthy fisheries, habitats and communities across the Chesapeake Bay region;
- 2. Restoring and protecting key Chesapeake Bay species and their habitats; and
- 3. Fostering an engaged and diverse citizen and stakeholder presence that will build upon and sustain progress.

The Business Plan update revises goals and outcomes established in 2012. Progress to date has allowed NFWF to increase selected goals and outcomes as a reflection of accelerated progress, new data and information have allowed NFWF to better focus its investments, and revised partner goals adopted in the 2014 Chesapeake Bay Watershed Agreement warrant better reflection in NFWF's own strategic program.

Specifically, NFWF will focus investments on achieving the following outcomes:

WATER QUALITY

Reduce: 1) nitrogen pollution by 10 million pounds annually, or 13 percent of the nitrogen load reduction required by the Chesapeake Bay TMDL; 2) phosphorus pollution by 1 million pounds annually, or roughly 25% of the phosphorus load reduction required by the Chesapeake Bay TMDL; and 3) sediment pollution by 200 million pounds annually, or 6% of the sediment load reduction required by the Chesapeake Bay TMDL.

CAPACITY AND PLANNING

Motivate 40,000 individuals in the watershed to adopt behaviors that benefit water quality, species and habitats.

EASTERN BROOK TROUT

Maintain and increase eastern brook trout populations in six stronghold patches.

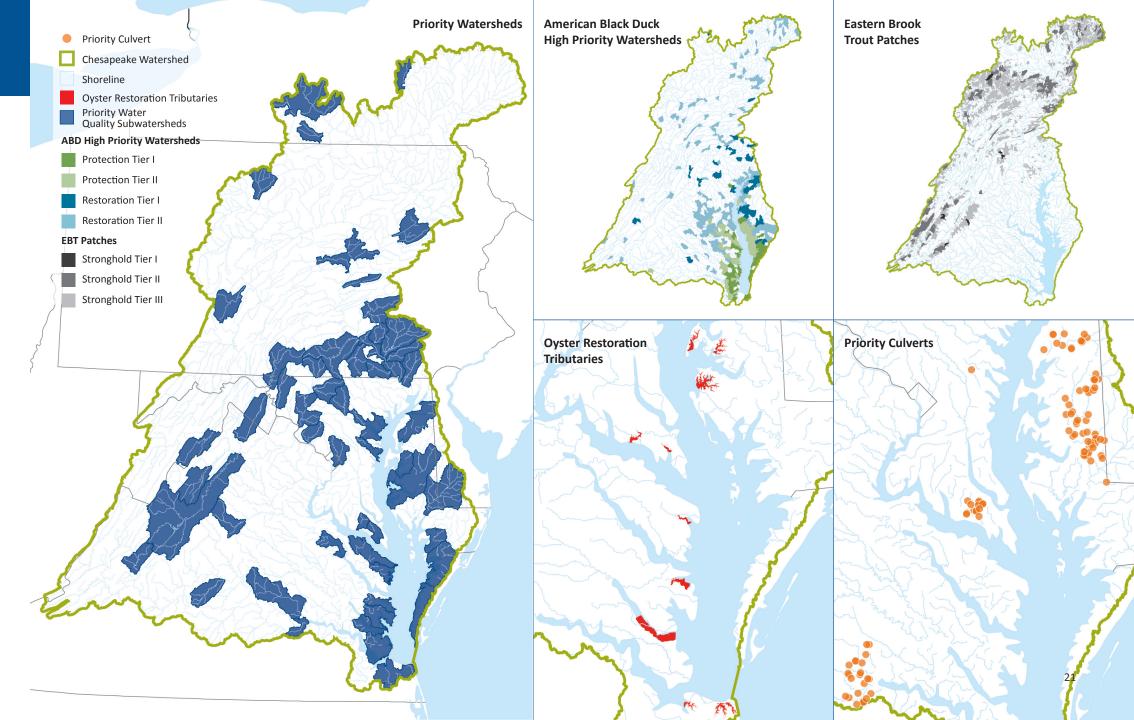
AMERICAN BLACK DUCK

Increase wetland habitat and available food to support 5,000 wintering black ducks, or 5 percent of the Chesapeake Bay Watershed Agreement goal for wintering black duck populations.

RIVER HERRING

Restore access and use of 200 additional miles of high quality migratory habitat, or roughly 10 percent of the Chesapeake Bay Program goal.

To view the full Chesapeake Bay Business Plan, visit https://bit.ly/chesapeakebizplan.

















FOR ADDITIONAL INFORMATION ABOUT THE CHESAPEAKE BAY STEWARDSHIP FUND, PLEASE CALL: 202-857-0166 OR VISIT: WWW.NFWF.ORG/CHESAPEAKE

NATIONAL FISH AND WILDLIFE FOUNDATION

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