



# Backgrounder

410 Severn Avenue, Suite 109 · Annapolis, MD 21403

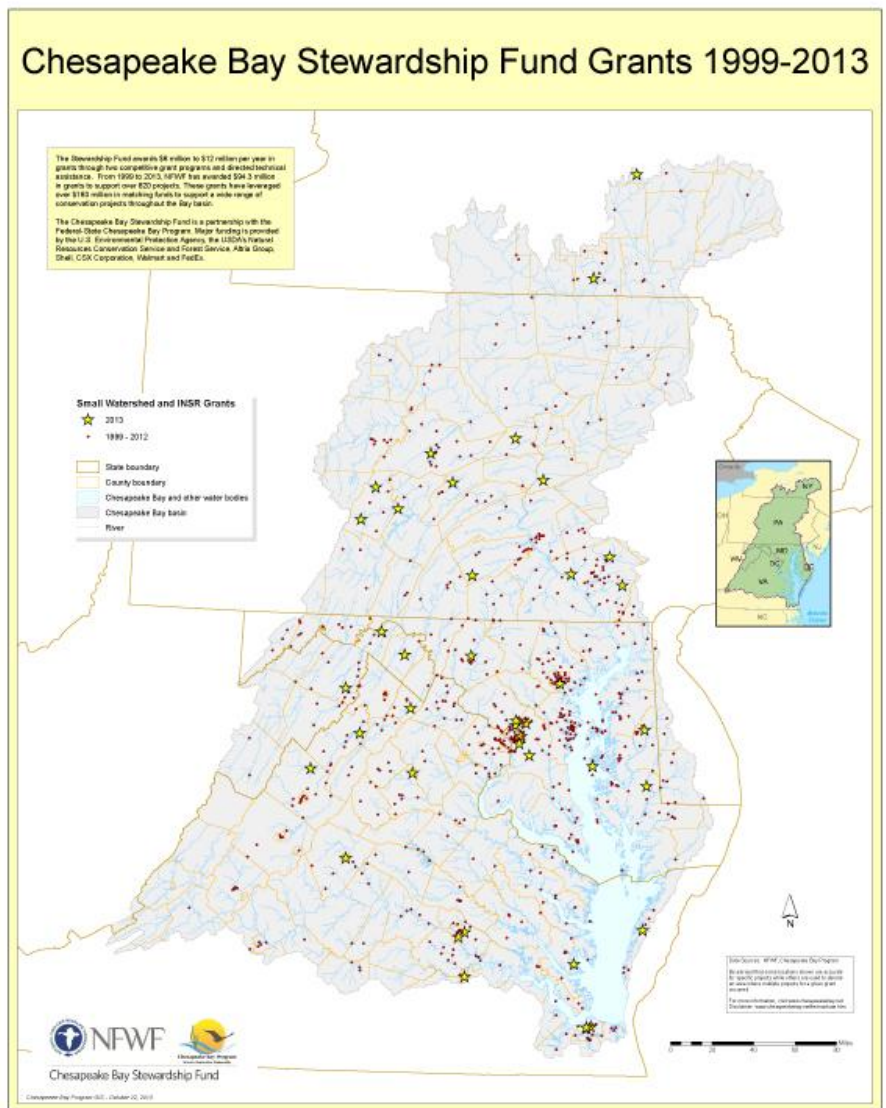
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## SMALL WATERSHED GRANT (SWG) and INNOVATIVE NUTRIENT AND SEDIMENT REDUCTION (INSR) GRANTS

### 2013 AWARDEES and PROJECTS

Forty projects in the Chesapeake Bay watershed received \$9.2 million in grants from the Chesapeake Bay Stewardship Fund, which is administered by the National Fish and Wildlife Foundation (NFWF). The Small Watershed Grants (SWG) Program awarded \$2.6 million to 20 nonprofit organizations and local governments working to improve the condition of their local watersheds

The Innovative Nutrient and Sediment Reduction (INSR) Grants Program awarded \$6.6 million to 20 innovative and cost-effective projects that dramatically reduce or eliminate the flow of nitrogen, phosphorus, and sediment pollution into local waterways and Chesapeake Bay. Following are project descriptions by grant, state and type.



(continued)

## **PROJECTS BY LOCATION**

### **MULTI-STATE PROJECTS**

#### **INSR GRANTS**

- *The Nature Conservancy* (\$368,497) will accelerate wetland restoration in priority areas of four states to improve water quality and wildlife habitat while identifying and overcoming barriers in program design and delivery to reduce costs and produce more effective outcomes.
- *Tioga County Soil and Water Conservation District* (\$375,000) will use natural infrastructure rehabilitation to address stream corridor instability in the Upper Susquehanna Basin in New York.
- *Virginia Polytechnic Institute and State University* (\$250,000) 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.
- *Metropolitan Washington Council of Governments* (\$250,000) will install Smart Integrated Stormwater Management Systems (SISMS) in the Anacostia watershed to demonstrate the improved nutrient removal rates of stormwater BMPs with networked real-time controls.
- *The Elizabeth River Project* (\$456,000) will reduce lawn over-fertilization within the Chesapeake Bay, which contributes to excessive nutrient loading by working with Virginia communities to standardize and expand this innovative enhancement of nutrient management while making it more cost-effective.
- *Chesapeake Stormwater Network, Inc.* (\$250,000) will implement training programs in under-served populations including MS4 Best Management Practice (BMP) implementers, Urban Nutrient Management plant writers, contractors who design and install residential stewardship practices, BMP inspectors, industrial site compliance managers, and green infrastructure innovators.
- *Potomac Conservancy* (\$367,435) will establish a new riparian buffer initiative to accelerate the implementation of forest buffers in the Potomac and Susquehanna River Basins.
- *Sustainable Chesapeake* (\$190,000) will continue work to reduce excess land application of manure in four of the Chesapeake's "phosphorus hot spots" by accelerating adoption of innovative manure-to-energy technologies and the creation of marketable fertilizer products that generate farm income.

### **DISTRICT OF COLUMBIA PROJECTS**

#### **INSR GRANTS**

- *District of Columbia Department of the Environment* (\$500,000) will design and implement a comprehensive small watershed restoration project that will reduce in-stream bank erosion and improve upland stormwater management thereby restoring habitat features and improving water quality.

#### **SWG GRANTS:**

- *Anacostia Watershed Society* (\$200,000) and its partners will work to restore more than 10 acres of tidal wetlands in the Anacostia River, improving flood control in the National Capital region and increasing areas for outdoor recreation.

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## MARYLAND PROJECTS

### INSR GRANTS

- *Low Impact Development Center, Inc.* (\$249,873) will work with 8 to 10 communities in Prince George's County in the Anacostia and urban watersheds as a liaison with Prince George's Department of Environmental Resources and the development community to implement superior water quality solutions that enhance the sustainability and economic viability of the community.
- *Frederick County, Maryland* (\$445,882) and partners, including Trout Unlimited and the U.S. Fish and Wildlife Service, will launch a comprehensive restoration program for brook trout restoration projects in the targeted Upper Monocacy watershed.
- *Oyster Recovery Partnership*, a subsidiary of Chesapeake Appreciation, Inc. (\$430,000) will repopulate at least 40 acres of oyster reefs with 175 million oysters, collect data to support better quantification of oyster reef benefits for nutrient pollution and build community support in Harris Creek area, one of NFWF's targeted tributaries for oyster restoration.
- *Blue Water Baltimore, Inc.* (\$248,573) will engage religious partners in discussions of how they can reduce their stormwater fees while also embracing the Care of Creation ethic, becoming greater stewards of their environment. This effort is based on recent demand from religious institutions concerned about the financial impact of the new stormwater utilities.
- *Center for Urban Environmental Research and Education* (\$323,553) will continue work to assemble a showcase portfolio of green infrastructure projects that advance applications of pervious concrete and subsoiling in urban landscapes. Projects will target key institutional obstacles to adopting these technologies, including specifications, training, performance monitoring, and long-term maintenance.

### SWG GRANTS

- *City of Takoma Park* (\$168,750) will install 15 bio-retention facilities along Flower Avenue in Takoma Park. The project will involve streetscape improvements including upgrading sidewalks, improving pedestrian crossing and bus access, and energy efficient street lighting.
- *University of Maryland* (\$62,347) will measure nutrient uptake by switchgrass that has been planted over septic drain fields and determine the effect of the grass's root systems in addressing septic nutrient losses.
- *City of Greenbelt* (\$147,960) will build on existing partnerships to remove 17,000 square feet of asphalt from the city and install permeable, articulating concrete block. The project will serve as a model for future public parking lot retrofit projects.

## PENNSYLVANIA PROJECTS

### INSR GRANTS

- *Alliance for the Chesapeake Bay, Inc.* (\$285,802) will accelerate the implementation of green infrastructure and stormwater Best Management Practices in Blair County. The project will result in a list of Green Infrastructure Priority Sites for the county and will identify at least one critical project site for each of the 13 MS4 communities in which to incorporate green infrastructure and stormwater BMPs.
- *The ClearWater Conservancy of Central Pennsylvania* (\$300,000) will expand the Riparian Conservation Program to improve water quality and restore forest, riparian, and instream habitats in six watersheds through substantial partner and volunteer involvement.

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- *Blair County Conservation District* (\$421,424) will work with MS4 municipalities in Blair County to develop and implement watershed restoration plans to improve water quality in the headwaters of the Juniata River.
- *Chesapeake Bay Foundation, Inc.* (\$200,000) will demonstrate practical and effective solutions for reducing nutrient and sediment pollution from agriculture operations in the north-central Pennsylvania portion of the Susquehanna River watershed by linking forest buffer implementation with other comprehensive BMP approaches.

### **SWG GRANTS**

- *Western Pennsylvania Conservancy* (\$105,000) will identify the potential, most “at risk” wild trout streams in Pennsylvania. This initiative will sample 3,000 unassessed waters over the next five years, add appropriate, newly-sampled waters to PFBC’s Listing of Streams Supporting Natural Reproduction of Trout, and educate the public and promote the project through outreach.
- *Mifflin County Conservation District* (\$102,237) will improve targeted outreach to underserved farming communities in the Juniata River Basin, including the Plain Sect community, who may not participate in State and Federal cost-share programs.
- *The Trust for Tomorrow* (\$200,000) will restore 50 acres of wetlands through two projects, restoration of 3,720 linear feet of stream and 14 acres of riparian buffer, along Polar Run, an important native trout fishery and a Juniata River tributary.
- *PA Fish and Boat Commission* (\$80,000) will work to restore fish passage in Chickies Creek, located just upstream from its confluence with the Susquehanna River and approximately 45 miles from the Chesapeake Bay.

### **NEW YORK PROJECTS**

#### **SWG GRANTS**

- *Onondaga County Soil & Water Conservation District* (\$58,514) will help area farms reduce water quality impairment in the Chesapeake Bay through a minimum 40% cost share commitment to implement two intensive rotational grazing systems over approximately fifty acres.

### **VIRGINIA PROJECTS**

#### **INSR GRANTS**

- *James River Association* (\$400,000) will help communities understand the importance of, and make commitments to, reducing nutrient and sediment runoff from developed lands to improve water quality in local Virginia rivers and streams and the Chesapeake Bay.
- *Eastern Shore Soil and Water Conservation District* (\$350,300) will assess farm compliance with the Virginia Chesapeake Bay Preservation Act to help meet county assessment requirements, including verification of existing farm conservation implementation and evaluation of farm needs for Resource Management Plans on Virginia’s Eastern Shore.

#### **SWG GRANTS**

- *Rivanna Conservation Society, Inc.* (\$153,360) will work at numerous sites along polluted Moores Creek, south of Charlottesville, to complete an extreme stream makeover during a six day blitz in April 2014. The project will make the Rivanna’s health the center of community focus during this period, and will serve as an opportunity to educate and engage the public and community leaders.

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- *Gloucester County* (\$58,995) will install a living shoreline at the John's Point Public Boat Landing, in partnership with the Department of Parks, Recreation and Tourism, the Virginia Institute of Marine Science, the Virginia Department of Transportation, a local volunteer contractor and community volunteers.
- *Rappahannock-Rapidan Regional Commission* (\$49,533) will educate homeowners on practices they can implement in their backyard to benefit their local watershed through publication of a customized regional homeowners' guide on stormwater management, septic maintenance, urban nutrient management and landscaping with native plants.
- *Trout Unlimited, Inc.* (\$199,070) will increase the number and size of Eastern brook trout patches in the Shenandoah Valley, focusing on degraded and less than intact spring fed streams. They will also provide enhanced technical assistance to landowners on coldwater spring creeks in an effort to reduce the cost of repairing degraded streams.
- *Valley Conservation Council, Inc.* (\$170,000) will target acquisition of whole-farm conservation easements on Shenandoah Valley farms with Best Management Practices such as livestock stream exclusion and riparian forested buffers, to improve water quality and native eastern brook trout habitat.
- *Church Hill Activities and Tutoring* (\$90,418) will demonstrate how implementing stormwater Best Management Practices, including innovative approaches for edible rain gardens, can have an immediate and positive impact on communities.
- *Chesapeake Bay Foundation, Inc.* (150,000) will conduct whole-community watershed restoration, education, and conservation activities that will improve the quantity of and awareness about green infrastructure practices in the Broad Rock neighborhood, located in an impoverished and under-served area of urban Southside Richmond, Virginia.
- *Chesapeake Bay Foundation, Inc.* (\$200,000) will implement a multi-faceted program to foster the creation and restoration of native oyster species and oyster reef ecosystems in Lafayette Creek.

## **WEST VIRGINIA PROJECTS**

### **SWG GRANTS**

- *Town of Bath* (\$50,000) will integrate "green" solutions within the Greenway Cemetery to revitalize the natural space while helping mitigate adverse effects local erosion has on Warm Spring Run, the Potomac River, and the Chesapeake Bay. The project will include converting unutilized impervious surfaces to bio-retention, increasing overall tree canopy, and training town and cemetery employees in beneficial landscaping techniques to reduce stormwater flow and erosion.
- *Canaan Valley Institute* (\$184,101) will remove a current fish passage barrier and stabilize 950 feet of streambank on Tuscarora Creek. Floodplain improvements will help reduce sediment pollution reaching Chesapeake Bay.
- *Trout Unlimited, Inc.* (\$128,182) will use recent brook trout science, restoration techniques and targeted outreach to increase the brook trout populations in the Whitehorn and Cacapon watersheds, using this charismatic species to raise awareness of conservation techniques and sustainable agricultural practices among local landowners and community leaders.

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## **PROJECTS BY TYPE:**

### **1) Innovation/Issues, 2) Restoration or 3) Green Infrastructure in Urban Areas**

#### **INNOVATION AND CROSSCUTTING ISSUES:**

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- *Chesapeake Bay Foundation, Inc.* (\$200,000) will demonstrate practical and effective solutions for reducing nutrient and sediment pollution from agriculture operations in the north-central Pennsylvania portion of the Susquehanna River watershed by linking forest buffer implementation with other comprehensive BMP approaches.
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- *Sustainable Chesapeake* (\$190,000) will to continue work to reduce excess land application of manure in four of the Chesapeake’s “phosphorus hot spots” by accelerating adoption of innovative manure-to-energy technologies and the creation of marketable fertilizer products that generate farm income.
- *Center for Urban Environmental Research and Education* (\$323,553) will continue work to assemble a showcase portfolio of green infrastructure projects that advance applications of pervious concrete and subsoiling in urban landscapes. Projects will target key institutional obstacles to adopting these technologies, including specifications, training, performance monitoring, and long-term maintenance.

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

- *Low Impact Development Center, Inc.* (\$249,873) will work with 8 to 10 communities in Prince George’s County in the Anacostia and urban watersheds as a liaison with Prince George’s Department of Environmental Resources and the development community to implement superior water quality solutions that enhance the sustainability and economic viability of the community.

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## TARGETED RIVER AND WATERSHED RESTORATION

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