

**State Fiscal Year 2014**  
**319(h) Nonpoint Source Pollution Control Project Descriptions**

**Request for Proposals and Selection Process**

The Department posted a request for proposals (RFP) establishing priorities for SFY2014 319(h) funding. Projects ranked highly if they improved resiliency to storm events like Superstorm Sandy and were consistent with the Department's priorities of addressing combined sewer overflows (CSOs), via implementing non-point source (NPS) reduction strategies, including green infrastructure and living shorelines. Consideration was also given to projects in the Barnegat Bay and the non-tidal Raritan River watersheds with approved watershed based plans. Proposals were evaluated and ranked relative to the criteria established in the RFP. The Department selected applicants that demonstrated the ability and expertise to successfully complete the grant project, cost effectively addressing Total Maximum Daily Load (TMDL)/Use Impairments, or other priority issues such as runoff volume reduction in urban areas with CSO discharges. The result of the review process was provided to Assistant Commissioner Kennedy prior to finalizing the award decisions and developing this spending plan. Current EPA guidelines require states to direct 50% of the 319(h) funds to the implementation of approved watershed plans and TMDL allocations. This spending plan proposes to award \$1,242,305 to meet this requirement (slightly higher than the \$1,237,000 (50%) required by the guidance).

**Projects Recommended for Pass Through Grants:**

**1. Green Infrastructure for the City of Perth Amboy**

*Grantee: Rutgers University*

*Funding Amount: \$489,156*

This grant will support the implementation of green infrastructure strategies to reduce stormwater runoff and the frequency of CSO discharges in the City of Perth Amboy. This grant will build upon the techniques and lessons learned in (2) similar projects implemented by the Water Resources Program (WRP) of Rutgers University in the cities of Newark and Camden, supported by 319 grant funds from SFY2009 and 2011, respectively. This project proposes to reduce runoff volumes that contribute flows to drainage systems associated with CSO discharges, through the implementation of green infrastructure techniques such as rain gardens, rain water reuse, community gardens and infiltration structures. This grant will mirror the youth and adult hands on education programs, focusing on the design and construction of these types of projects piloted in the cities of Newark and Camden. The WRP at Rutgers University has been a valuable watershed partner and is responsible for, or has contributed to, the development and successful implementation of many watershed plans.

The WRP at Rutgers University provides a unique and specific skill set to the design and implementation of green infrastructure and the development and coordination of watershed partners that other state universities are not currently able to provide. Rutgers University was selected as the grantee for this project due to their past success on the Newark and Camden projects, the unique expertise available through the WRP, and their

commitment to provide \$100,000 of in-kind services as a match to the requested grant funds.

## **2. Implementation of the Metedeconk River Watershed Plan, School House Branch/Duck Pond Sub-watersheds**

*Grantee: American Littoral Society (ALS)*

*Funding Amount: \$465,733*

The Metedeconk River watershed, including the North Branch, South Branch and main stem of the Metedeconk River, encompasses eleven (11) HUC14 drainage basins and a total area of 78.3 square miles, ultimately discharging to Barnegat Bay. The Brick Township Municipal Utilities Authority (BTMUA) relies on the Metedeconk River for 80% of their raw water supply. The entire fresh water area of the Metedeconk River has been designated as a Category One waterway due to its exceptional water supply significance. The watershed encompasses portions of Millstone, Freehold, Howell and Wall Townships in Monmouth County, and Jackson, Lakewood and Brick Townships in Ocean County.

This project as proposed will build upon the Metedeconk Watershed plan implementation already underway by the BTMUA, supported by previous 319(h) and Corporate Business Tax (CBT) grant funds. This grant fund award will support the design and implementation of a series of linked green infrastructure projects, consisting of a bio-retention swale, living shoreline, curb-side tree boxes, stream bank stabilization and a floating wetland island that will work in unison to decrease NPS pollutant loading to the Metedeconk River, and ultimately the Barnegat Bay. This project will be conducted at Ocean County Park in Lakewood, located within the North Branch of the Metedeconk River watershed, is consistent with the recommendations of the approved plan and proposes to address the pathogen and phosphorus TMDL allocations.

Project partners will include Ocean County Department of Parks (OCDP), Georgian Court University (GCU) and the BTMUA, who will assist in the development and review of the project design plans. ALS has a long history of environmental protection and restoration and has been a consistent partner in the effort to restore Barnegat Bay

## **3. Implementation of the Sourlands Watershed Plan, Targeted Stormwater Management in the Back Brook Headwaters**

*Grantee: East Amwell Township*

*Funding Amount: \$446,000*

The Sourland Mountains are a unique and special natural feature spanning southern Hunterdon, southwestern Somerset and northwestern Mercer counties. The Sourlands are centralized in East Amwell Township, but also included the Townships of Hillsborough, Montgomery, and Hopewell. The Sourlands serve as the headwaters for the Neshanic River, the Stony Brook and the Millstone River that ultimately discharge to the non-tidal portion of the Raritan River. The approved watershed plan focuses on the first and second order streams among these waterways. The project as proposed implements a series of rain gardens to compliment a stormwater basin retrofit in Clawson Park, a rain garden at the East Amwell elementary school, and rain gardens and grass swales at the East Amwell municipal complex. The project will implement green infrastructure

techniques to reduce storm water runoff through infiltration and are consistent with the recommendations of the approved plan through the reduction of nutrients, sediment, and pathogens. The implementation of green infrastructure ultimately will provide for some reduction of the phosphorus levels required of the approved TMDL for the non-tidal portion of the Raritan River. East Amwell Township was the lead entity, stakeholder coordinator and grantee for the 319(h) grant supported Sourland watershed plan development project. East Amwell Township completed the project within a reasonable timeframe and within the allocated budget, and serves as the most likely candidate to begin the implementation of restoration efforts. East Amwell has committed to provide \$29,000 of in-kind services as match to the requested grant funds.

#### **4. Royce Brook Best Management Practices Implementation**

*Grantee: Rutgers Cooperative Extension of Somerset County*  
*Funding Amount: \$175,539*

The Royce Brook Watershed, located in Hillsborough Township, Somerset County, has a drainage area of 16.5 square miles, 17.4% of which is impervious cover, far exceeding the 10% cap recommended by the Center for Watershed Protection for non-impaired water quality. The Royce Brook flows into the Millstone River which discharges to the non-tidal portion of Raritan River. This project proposes to implement various green infrastructure techniques such as rain gardens and infiltration structures to reduce nutrient levels in stormwater discharges within the Royce Brook watershed. This reduction in nutrients will contribute to the reduction in phosphorus required by the TMDL for the non-tidal Raritan River. The Rutgers Cooperative Extension Offices work closely with the WRP of Rutgers University referenced above in the Perth Amboy project description. Some extension offices house “Watershed Agents” that are focused on working with local partners to implement stormwater best management practices (BMP’s) consistent with the recommendations of approved TMDL’s and watershed plans. The Watershed Agents positions were developed through a department funded CBT grant that provided financial support for these agents strategically placed in priority watershed areas. Rutgers University continued to support these positions and these agents are involved with many of the active grant projects implementing approved watershed plans. These agents rely on the WRP for BMP design and technical assistance. The Rutgers Cooperative Extension Office has committed \$17,539 of in-kind services as match to the requested funding and will work with the Stony Brook-Millstone Watershed Association and the WRP to design and implement green infrastructure BMP’s in the Royce Brook watershed.

#### **5. Haledon Avenue, North Street Green Infrastructure Demonstration Project, Paterson**

*Grantee: Passaic County Department of Planning and Economic Development*  
*Funding Amount: \$330,572*

The Molly Ann Brook watershed is comprised of a 7.8 square mile area within the Passaic River Basin. The significant tributaries that drain to the main stem of the Molly Ann Brook include Falls Brook, Squaw Brook and Glenn Place Brook as well as the Haledon Reservoir and Oldham Pond. The Molly Ann Brook watershed is located in Passaic and Bergen Counties and includes all of North Haledon and Haledon Boroughs,

parts of Wayne and Wyckoff Townships, Prospect Park, Hawthorne, Totowa, Franklin Lakes Borough and the City of Paterson. The project will both implement an approved watershed plan and implement green infrastructure in an area with associated CSO discharges. The green infrastructure techniques will result in the infiltration of stormwater through various vegetative infiltration structures along Haledon Avenue and North Green Street in the City of Patterson. These infiltration solutions will attempt to address the flooding issues common to this area and reduce stormwater runoff volume to CSO associated infrastructure. The infiltration of stormwater will reduce the peak (storm flow) runoff volume while increasing groundwater (base) flow to the Molly Ann Brook which is impaired for aquatic life. Erosive storm flows combined with reduced base flows are contributing to factors toward this use impairment designation. The Passaic County Department of Planning and Economic Development (PCDPE) was the lead stakeholder coordinating entity and grantee for the 319 (h) grants that supported development of the approved watershed plan, and a subsequent plan implementation rain barrel project. Passaic County completed both the plan development and implementation project in a timely fashion and within the budget allotted by the respective grants. PCDPE will continue to implement the approved plan with this project and build upon the success of the previous implementation grant. PCDPE has committed to \$84,550 of in-kind services as match to the requested grant funds.

#### **6. Implementation of the Raritan River TMDL Through Actions in the Millstone River Watershed**

*Grantee: Stony Brook-Millstone Watershed Association*

*Funding Amount: \$300,000*

The Millstone River watershed encompasses 265 square miles and receives stormwater runoff from all or part of 25 municipalities within the counties of Monmouth, Mercer, Middlesex and Somerset, ultimately discharging to the non-tidal Raritan River just east of Somerville. The Stony Brook-Millstone Watershed Association (SBMWA) in partnership with WRP at Rutgers University proposes to implement the TMDL for phosphorus in the non-tidal Raritan River. This will be accomplished through the implementation of green infrastructure techniques within the watershed targeted through impervious cover assessments and reduction action plans that will be developed for 16 municipalities within the watershed. The implementation of green infrastructure will reduce stormwater runoff volume, nutrients and sediment discharges to the Millstone River and ultimately the non-tidal Raritan River. The SBMWA has a long history of environmental stewardship and has successfully completed several 319(h) supported implementation grants providing environmental education to municipalities and restoring riparian buffers and streambanks. WRP is well established in the design and implementation of green infrastructure projects as referenced in above in the Perth Amboy and Royce Brook project descriptions. The SBMWA has committed a 50% (\$150,000) in-kind services match to the requested grant funds.

#### **7. Living Shoreline for Phoenix Park, Camden**

*Grantee: Camden County Municipal Utilities Authority*

*Funding Amount: \$258,000*

Since 2011, the City of Camden has made enormous strides to address environmental

issues related to reducing CSO's via reclaiming vacant land for parks and stormwater management in addition to building community capacity to better manage natural systems. The Camden County Municipal Utilities Authority (CCMUA) has led the way by working with community groups, the Department, and the WRP at Rutgers University to form Camden SMART (Stormwater Management and Resource Training). This initiative focuses on priority environmental issues, including efforts to manage vacant properties, reduce stormwater runoff to CSO infrastructure, reduce flooding, address the impacts of brownfield properties on community health, support for grassroots community garden efforts, and upgrading aging infrastructure. The goal of this initiative is to capture stormwater runoff before it enters the CSO system, thereby reducing the occurrence of overflow discharges. Additionally, this control of stormwater runoff will help prevent surcharging of the manholes in the sewer system and sewer backups in private properties, which contribute to severe human health problems. As part of this initiative, the WRP developed a green infrastructure feasibility study that contained 40 concept designs for projects. Nine of these projects were constructed during the first year of the initiative. Additionally another 20 green infrastructure projects have been implemented supported by a previous 319(h) grant.

To complement the Camden SMART effort, the CCMUA has been providing substantial funding and working closely with stakeholder groups to reclaim a brownfields site and create Phoenix Park. This project will implement a living shoreline as a component of the overall design and restoration for Phoenix Park and the waterfront of the adjacent CCMUA owned and operated wastewater treatment facility. Additionally, funding will be allocated to train and engage the local community in monitoring the success of the living shoreline and helping maintain the system. The CCMUA has committed \$64,600 of in-kind services as match to the requested grant funds.

### **Non-Pass through Funds:**

#### **NPS Travel, Training, and Conference Registrations: \$10,000**

These funds will be used to send representatives from the Division of Water Monitoring and Standards to relevant training events and conferences or meetings relating to nonpoint source pollution abatement efforts. Eligible costs would include travel, lodging, ground transportation, parking and any registration expenses that would be associated with attendance at events that are either required for receipt of the Federal 319(h) grant award or are determined by management to be necessary to support nonpoint source management efforts of the Department. As an example, each year EPA holds a national Grants Reporting and Tracking System (GRTS) Users Group Meeting and Nonpoint Source Conference to assist States in meeting the mandatory EPA GRTS reporting requirements through an increased understanding of the GRTS system, including use of its Business Intelligence database report generation system and the EPA STEPL load reduction calculation model. Maintaining the GRTS database is a mandatory requirement established in the Performance Partnership Agreement (PPA) with EPA. This database provides the means to account for 319(h) funding and the effectiveness thereof in achieving strategic measure goals for water quality improvement. Attendance at such events is also essential to proper program administration, as information gathered is then

shared with all staff responsible for GRTS use. The allocation of these Federal funds would also be used to fund attendance by staff and/or management at other relevant statewide or nationally recognized non point source related events, such as the annual New England Interstate Water Pollution Control Commission conference, a forum for sharing important advances and developments in nonpoint source pollution control.