PENNSYLVANIA NONPOINT SOURCE PROGRAM FY2014 PROJECT SUMMARY

DEP Staff

Project Title: Nonpoint Source Program-Bureau of Watershed Management and Regional

Offices

Project Number: 1401

Budget: \$277,193 (not including project 1401A)

Funding Category: Program (Base)

Lead Agency: DEP Bureau of Conservation and Restoration

Location: DEP Central Office/DEP Regional Offices

Point of Contact: Doug Goodlander, DEP

This project will strengthen the links between Central Office Program staff and the Regional Offices and enhance the roles of the DEP Regional and Mining Offices in the Nonpoint Source Program. The project will fund a total of 2.38 work years of effort for NPS watershed restoration activities overseen and directed by regional and mining office staff and effort provided within the Central Office to support the updating, implementation and administration of the Section 319 NPS Management Program Plan. The positions within the Central Office providing effort towards this workplan include: a conservation program manager, three water program specialists, one water pollution biologist, a conservation program specialist, and an administrative assistant. This project will require \$54,762 in indirect costs.

The below project numbered 1401A provides additional funding for EPA Region III personnel assigned to support the states' WPT obligations. Funding for project 1401A comes from EPA in-kind resources.

Project Title: Grants and Watershed Plan Tracking

Project Number: 1401A

Budget: \$10,000 (EPA in-kind funds) **Funding Category:** Program (Base)

Lead Agency: DEP Bureau of Conservation and Restoration

Location: DEP Central Office/DEP Regional Offices

Point of Contact: Doug Goodlander, DEP

A part time Contractor/Senior Environmental Employee (SEE) will work closely with State staff members to enter information into the Watershed Plan Tracker (WPT) and Grants Reporting and Tracking System (GRTS). Work will focus on improving the information in these databases, the structure of the information, and the reports provided through these

tracking systems. This work will allow the program to have a more complete, accurate and coordinated program tool to track program expectations and results.

DEP Implemented Projects

Project Title: Statewide Lake Water Quality Assessments

Project Number: 1402

Budget: 26,500 (not including project number 1402A)

Funding Category: Program (Base)

Lead Agency: DEP Bureau of Conservation and Restoration

Location: Statewide

Point of Contact: Barbara Lathrop, DEP

DEP will coordinate the assessment of 5 Pennsylvania's Significant and Important Lakes. The lakes will be sampled to determine trophic status, nutrients, macrophyte coverage and fisheries (if no previous data exists). Sampling will be done by DEP or DCNR or the PFBC using DEP's standard lake protocol. The water quality work addressed by this work plan includes the collection of samples and submission to DEP's laboratory for analysis.

Project Title: Lake Assessments Bradford County Conservation District

Project Number: 1402A

Budget: \$3,500 (EPA in-kind funds) **Funding Category:** Program (Base)

Lead Agency: Bradford County Conservation District **Location:** DEP Central Office/DEP Regional Offices

Point of Contact: Barb Lathrop, DEP

Continuing the lake assessment of Stephen Foster Lake, providing for on-going lake and watershed monitoring in the TMDL watershed to capture improvements due to significant BMP implementation to date. Wetland Pocket inlet and outlet monitoring will be included to determine P removal amounts from the lake proper. Other lake monitoring involves obtaining nutrient and pre-Marcellus shale drilling water quality data on up to 3 local lakes.

Project Title: Monitoring Projects for Improvement in WIP Watersheds

Project Number: 1403

Budget: \$21,500

Funding Category: Project (Incremental)

Lead Agency: Bureau of Conservation and Restoration

Location: Statewide

Point of Contact: Cheryl Snyder, DEP

DEP staff will monitor stream restoration and CREP-funded stream bank fencing/cattle crossing/riparian buffer planting projects as well as AMD impacted streams where 319-funded treatment systems are located in select watershed implementation plan (WIP) watersheds. Staff will also continue to work with local watershed and monitoring groups to monitor AMD treatment systems and receiving streams, stream restoration projects and CREP projects in order to gauge the effectiveness of these projects, establish water quality trends, and identify improving water bodies in WIP watersheds. This project will utilize both field and laboratory testing and will follow the DEP Laboratory's EPA-approved QA/QC procedures. As stream sections within these projects show improvement, they will be referred to DEP's Water Quality Standards staff for reassessment and possible delisting. Staff will also assist conservation districts in monitoring the effectiveness of farm-related BMPs being implemented as part of the NRCS/EPA collective National Water Quality Initiative in two WIP watersheds.

Project Title: Monitoring Projects for Improvement

Project Number: 1404

Budget: \$15,500

Funding Category: Program (Base)

Lead Agency: Bureau of Conservation and Restoration

Location: Statewide

Point of Contact: Cheryl Snyder, DEP

DEP staff will monitor AMD, stream restoration and CREP sites. DEP staff will also work with local watershed and monitoring groups to monitor AMD treatment systems and receiving streams, stream restoration projects and CREP projects in order to gauge the effectiveness of these projects, establish water quality trends, and identify improving water bodies. This project will utilize both field and laboratory testing and will follow the DEP Laboratory's EPA-approved QA/QC procedures. As stream sections within these projects show improvement, they will be referred to DEP's Water Quality Standards staff for reassessment and possible delisting.

Date revised 6/9/2014

Project Title: TMDL Planning

Project Number: 1405 Budget: \$100,000

Funding Category: Program (Base)

Lead Agency: DEP Bureau of Point and Nonpoint Source Regulation

Location: Statewide

Point of Contact: Bill Brown, DEP

Included under this project is the collection and analysis of periphyton community and associated data to support nutrient criteria development. This project also includes the modification and development of the Mapshed model used to develop TMDLs, and training of staff on the use the model. Lastly the project includes the continuation of funding to cover DEP lab costs for running water tests to facilitate development of TMDLs throughout the Commonwealth.

Abandoned Mine Drainage Projects

Project Title: Conservation District Mining Program (East)

Project Number: 1406 Budget: \$ 250,000

Funding Category: Program (Base)

Lead Agency: Eastern Pennsylvania Coalition for Abandoned Mine Reclamation

(EPCAMR)

Location: Anthracite and northern bituminous regions of Pennsylvania

Point of Contact: Donna Carnahan, DEP or Robert Hughes, Eastern Pennsylvania Coalition

for Abandoned Mine Reclamation

Eastern Pennsylvania Coalition for Abandoned Mine Reclamation (EPCAMR) was formed to promote and facilitate the reclamation and remediation of land and water adversely affected by past coal mining practices in eastern Pennsylvania. EPCAMR is a complimentary organization to the Western Pennsylvania Coalition. Through this two year project, the EPCAMR Regional Coordinator will continue efforts to organize watershed associations, develop an education program, coordinate AMD remediation activities, generate local support for remediation efforts, and assist watershed associations and conservation districts in the development of watershed management plans and in securing funding for AMD remediation. The AMD Watershed Outreach Coordinator, in addition to assisting in these activities, will evaluate and comment on watershed restoration plans, seek funds for long-term maintenance projects and perform biological surveys and water quality testing on streams to document water quality improvements.

Project Title: Conservation District Mining Program (West)

Project Number: 1407 **Budget:** \$ 250,000

Funding Category: Program (Base)

Lead Agency: Western Pennsylvania Coalition for Abandoned Mine Reclamation

(WPCAMR)

Location: Western Pennsylvania bituminous coal region

Point of Contact: Donna Carnahan, DEP or Andy McAllister, Regional Coordinator,

Western Pennsylvania Coalition for Abandoned Mine Reclamation

The purpose of the WPCAMR is to promote and facilitate the reclamation and remediation of abandoned mine drainage (AMD) in western Pennsylvania. Through this 2 year project the Regional Coordinator will continue to develop an education program, coordinate AMD remediation activities, generate local support for remediation efforts, and assist watershed associations and conservation districts in the development of watershed management plans and in securing funding for AMD remediation. The Watershed Coordinator will continue to assist

with the development and implementation of funded projects and the documentation of water quality improvements.

Project Title: Old Beldin Mine AMD Treatment (Design and permitting)

Project Number: 1408

Budget: \$42,350

Funding Category: Project (Incremental)

Lead Agency: Clearfield Creek Watershed Association

Location: Little Laurel Run, Cambria County

Point of Contact: Donna Carnahan, DEP; Malcolm Crittenden, DEP-Cambria DMO; Arthur

Rose, Clearfield Creek Watershed Association

Little Laurel Run is an approved Section 319 Watershed Implementation Planning Watershed. The Old Beldin Mine is the 6th discharge out of 6 to be addressed by the Clearfield Creek Watershed Association. This project will complete a detailed design, permitting and construction bid documents for a passive treatment system that is expected to remove 41 lbs/day of acidity (14,965 lbs of acidity per year) and 13 lbs/day of iron (4,745 lbs of iron per year). After future construction of this project, the majority of the acidity loading in Little Laurel Run will be removed.

Project Title: Oneida #3 AMD Treatment System Optimization (construction)

Project Number: 1409

Budget: \$157,505

Funding Category: Project (Incremental)

Lead Agency: Schuylkill County Conservation District

Location: Catawissa Creek, Schuylkill County

Point of Contact: Donna Carnahan, DEP; Dan Koury, DEP-Pottsville DMO; Wayne Lehman,

Schuylkill County Conservation District

The Oneida #3 is the second largest discharge in the Catawissa Creek watershed by volume and is the primary source of abandoned mine drainage to the Tomhicken Creek. The limestone tank treatment system is significantly increasing the pH and alkalinity of the discharge. The equipment needed to maintain the system, especially flushing, is physically demanding and safety is a concern. This project will retrofit the system so it routinely automatically flushes the limestone tank on its own. This will provide a safe means of maintenance while increasing efficiency of the system. This will increase the likelihood that the Tomhicken Creek can be eventually taken off the Integrated List as impaired.

Project Title: MON 30 Treatment System (construction)

Project Number: 1410

Budget: \$413,439

Funding Category: Project (Incremental)

Lead Agency: Lawrence Township

Location: Montgomery Creek, Clearfield County

Point of Contact: Donna Carnahan, DEP; Mario Carrello, DEP; Barb Shaffner, Lawrence

Township

MON 30 is the third AMD discharge in the Montgomery Creek watershed (known locally as Montgomery Run) to be addressed by Lawrence Township and its partners, the Clearfield County Conservation District and the Montgomery Run Watershed Association. This project is to construct a passive treatment system that is expected to remove 8 lbs./day of acidity (2,920 lbs of acidity per year), 9 lbs./day of aluminum (3,285 lbs of aluminum per year) and 5 lbs./day of iron (1,825 lbs of iron per year) and fully restore water quality in the unnamed tributary on which it's located.

Project Title: Black's Creek Priority Discharge Designs (design)

Project Number: 1411

Budget: \$49,667

Funding Category: Project (Incremental)
Lead Agency: Stream Restoration Inc.
Location: Black's Creek, Butler County

Point of Contact: Donna Carnahan, DEP; Elias Heferle, DEP; Cliff Denholm, Stream

Restoration Incorporated

A Watershed Implementation Plan was developed for Black's Creek in 2007. Many of the discharges were only sampled once or twice, not enough to design any treatments. This project will sample discharges for a year to help solidify which ones are priorities and to develop conceptual designs on the ones that should be treated.

Project Title: Sandy Run SAO-D8 AMD Remediation (construction)

Project Number: 1412

Budget: \$311,375

Funding Category: Project (Incremental)
Lead Agency: Broad Top Township

Location: Sandy Run, Broad Top Township

Point of Contact: Donna Carnahan, DEP; Malcolm Crittenden, DEP; David Thomas, Broad

Top Township

This project is a proposal to construct an AMD treatment system on the SAO-D8 discharge in Sandy Run. This AMD discharge along the main stem of Sandy Run is a top priority of the updated Watershed Implementation Plan, completed in 2007. This project will construct a treatment system consisting of a vertical flow wetland and aerobic wetland. Construction of this system will remove 9 lbs./day of acidity (3,285 lbs of acidity per year), 1 lbs./day of iron (365 lbs of iron per year) and 1 lbs./day of aluminum (365 lbs of aluminum per year) from Sandy Run.

Agriculture Projects

Project Title: North Branch Neshaminy Creek-Phase II (construction)

Project Number: 1413

Budget: \$ 185,478 (Revised from \$ 173,478) **Funding Category:** Project (Incremental)

Lead Agency: Bucks County Conservation District

Location: North Branch Neshaminy Creek watershed, Bucks County **Point of Contact:** Carl Rohr, DEP; Meghan Rogalus, Buck County C.D.

The objective of the North Branch Neshaminy Creek (NBNC) and Lake Galena Watershed Implementation Project-Phase II is to improve water quality by reducing sediment and nutrients entering surface and groundwater within the NBNC and Lake Galena Watershed via the implementation of nutrient management best management practices on two equine operations in the watershed. Both farms are identified in the Lake Galena and North Branch Neshaminy Creek Watershed Implementation Plan (2011) as priority sites for implementation of nutrient and sediment reduction practices.

Project Title: Little Buffalo Creek Agricultural Restoration (construction)

Project Number: 1414 Budget: \$ 329,851

Funding Category: Project (Incremental)

Lead Agency: Union County Conservation District **Location:** Buffalo Creek watershed, Mifflin County

Point of Contact: Carl Rohr, DEP; Dan Wagner, Mifflin County C.D.

The project objective is to support funding for the implementation of agricultural BMPs identified in the Buffalo Creek WIP (Addendum). More specifically, the three main goals are to provide funding for recommended bmps at the farm 312 and farm 354 sites; continue to offer the riparian forested buffer easements as an approved bmp for land converted to forested buffers across all impaired sub-watersheds in the Buffalo Creek watershed; and to market the Section 319 NPS program to landowners in priority watersheds. The work will reduce existing sediment and nutrient loads in an impaired priority sub-watershed to help meet both WIP and TMDL goals.

Project Title: <u>Implementation of BMPs in the Hungry Run Watershed (Construction)</u>

Project Number: 1415

Budget: \$ 527,655 (Revised from \$ 498,847) **Funding Category:** Project (Incremental)

Lead Agency: Mifflin County Conservation District **Location:** Hungry Run watershed, Mifflin County

Point of Contact: Carl Rohr, DEP; Justin Kozak, Mifflin County C.D.

The Mifflin County Conservation District (Conservation District) has an approved Section 319 funded Watershed Implementation Plan (WIP) for the Hungry Run watershed. This project's objective is to install Best Management Practices (BMP) in the Hungry Run watershed to reduce sediment and nutrient causes of pollution. Multiple agricultural bmps are planned for six farms. Hungry Run is a relatively small watershed. It encompasses eight square miles and includes 24 farms. The PA DEP determined the watershed to be impaired due to nutrient and sediment sources which led to its inclusion on Pennsylvania's 303(d) list of impaired waters. This project will assist the Conservation District to stay on track for implementing projects to reduce sediment and nutrient loads in the Hungry Run watershed in accordance with the WIP.

Urban/Stream Restoration Projects

Project Title: REMOVED FROM GRANT Trout Run WIP Implementation

Project Number: NA Budget: \$80,000

Funding Category: Project (Incremental)

Lead Agency: Environment Erie

Location: Trout Run Watershed, Erie County

Point of Contact: Carl Rohr, Scott Heidel, DEP; Amy Jo Smith, Environment Erie

The project focuses on NPS pollution concerns throughout the watershed including those associated with storm water or urban runoff in the highly urbanized areas. Most if not all NPS impairments result from Agriculture and Crop related Agricultural nutrient and siltation degradation. The Erie County C.D. previously attempted to address these areas and was not able to successfully use S. 319 funds to accomplish this. The DEP Regional Office has partnered with this Lead Agency, Environment Erie, and has worked to address more of the urban runoff related issues in the watershed, in particular Fairview Township. This project was developed to address an update to the existing WIP, and education/outreach to watershed residents. Fairview Township has an Act 167 plan and also has not acted on its Act 537 planning requirements. It is an MS4 community. EPA WIP criteria will be addressed in the updated WIP, and EPA approval of the WIP will be obtained before any new implementation funds will be approved. The project has stated it is consistent with local plans and initiatives.

Project Title: Stephen Foster Lake Forebay Rehabilitation (construction)

Project Number: 1416

Budget: \$214,967 (*Revised from \$202,613*) **Funding Category:** Project (Incremental)

Lead Agency: Bradford County Conservation District

Location: Stephen Foster Lake, Mill Creek Watershed, Bradford County

Point of Contact: Barb Lathrop, DEP

As a final phase of the overall Mill Creek/Stephen Foster Lake restoration intitiative, started 19 years ago, this project will clean out the forebay of the lake where sediment and nutrients have been accumulating for many years. This project will remove and properly distribute on nearby lands, accumulated sediment and nutrients from the forebay lake that has filled with these sediments over the years, decreasing the filtering ability of the lake's forebay. This project will reestablish an area to capture any sediment or nutrients that may come down from the Mill Creek, before it were to impact the main body of the lake. Estimated pollutant loads that will be removed from the lake under this project include 6,677 tons of sediment, 192 pounds of

nitrogen, and 11.4 pounds of phosphorus, and the reestablishment of a permanent filtering area for the lake.

Project Title: Mill Creek Stream Restoration-Phase V (Design and Construction)

Project Number: 1417

Budget: \$49,643

Funding Category: Project (Incremental)

Lead Agency: Lancaster County Conservation District **Location:** Mill Creek watershed, Lancaster County

Point of Contact: Carl Rohr, DEP; Matt Kofroth, Lancaster County C.D.

The Lancaster County Conservation District in partnership with the U.S. Fish & Wildlife Service and the Millcreek Preservation Association propose this project which consists of approximately 800 feet of stream bank stabilization, stream bank fencing, and riparian buffer establishment along an impaired section of the Mill Creek. The stream project will involve one property owner and improve impaired sections of the Mill Creek Watershed. Traditional stream bank stabilization measures will be applied to these sections of stream along with new natural channel design structures. A combination of mudsills, cross vanes, and log vanes will all be implemented to reduce significant stream bank erosion. In addition, stream bank fencing will be installed where there is limited fencing to date. Finally, a riparian buffer will be established to complete the water quality improvements. The Mill Creek Watershed Implementation Plan (2005) includes this project site identified as #139 in the Plan which is a priority site.

Project Title: O'Neil Alley Green Infrastructure Retrofit in Scottdale (design)

Project Number: 1418 **Budget:** Request: \$124,000

Funding Category: Project (Incremental)

Lead Agency: Jacobs Creek Watershed Association

Location: Jacobs Creek Watershed, Scottdale Borough, Westmoreland County

Point of Contact: Aaron Ward, DEP

The Jacobs Creek Watershed Association intends to further implement the Jacobs Creek WIP by providing for the design of green infrastructure in various locations in Scottdale borough. This particular project will provide for the preliminary engineering, final design development, construction documentation, and bidding coordination and review for stormwater retrofit projects on O'Neil Alley, Market Street, and two separate parking lots. Proposed BMPs for which designs

should be prepared include: pervious pavement, underground storage, bio-retention, cisterns and rain barrels, street trees, and curb extensions (bio-retention).

Project Title: Mount Pleasant/Shupe Run Stormwater Retrofit Project (construction)

Project Number: 1419 **Budget:** Request: \$545,399

Funding Category: Project (Incremental)

Lead Agency: Jacobs Creek Watershed Association

Location: Jacobs Creek Watershed, Westmoreland County

Point of Contact: Aaron Ward, DEP

The Jacobs Creek Watershed Association (JCWA) intends to further implement the Jacobs Creek Watershed Implementation Plan (WIP) by overseeing the construction of "green" stormwater management BMPs previously designed with a former §319 grant (Project Number: 1222). This particular project proposes to construct green stormwater BMPs in two separate locations; the Polish Falcon's meeting house and the Maruca Mobile Home Park (MHP). The proposed BMPs include; porous asphalt, bioretention areas, bioswales, removal of existing asphalt (reduction of pervious surface), water quality inlets and detention pipes.

Project Title: Barshinger Run (design and permitting)

Project Number: 1420

Budget: \$ 59,925

Funding Category: Project (Incremental)

Lead Agency: Izaak Walton League – York Chapter 67 **Location:** Codorus Creek Watershed, York County

Point of Contact: Scott Heidel, DEP

Codorus Creek is an approved Section 319 Watershed Implementation Planning Watershed. Agricultural runoff and streambank instability affects this watershed. The Izaak Walton League of America, York, PA has submitted a proposal to complete design and permitting work in order to address the agricultural runoff reporting to, and streambank instability within the impaired stream from one farm within the watershed. This project will allow the partners to complete the final design and to apply for future construction funds.

Project Title: South Branch Codorus Creek (design and permitting)

Project Number: 1421

Budget: \$ 58,905

Funding Category: Project (Incremental)

Lead Agency: DEP, Bureau of Conservation and Restoration

Location: Codorus Creek Watershed, York County

Point of Contact: Scott Heidel, DEP

Codorus Creek is an approved Section 319 Watershed Implementation Planning Watershed. Agricultural runoff and streambank instability affects this watershed. The Izaak Walton League of America, York, PA has submitted a proposal to complete design and permitting work in order to address the agricultural runoff reporting to, and streambank instability within the impaired stream from one farm and one additional property within the watershed. This project will allow the partners to complete the final design and to apply for future construction funds.

Project Title: Large Stormwater BMP at Harveys Lake (design and construction)

Project Number: 1422

Budget: \$157,810

Funding Category: Project (Incremental)
Lead Agency: Harveys Lake Borough

Location: Borough of Harveys Lake, Luzerne County

Point of Contact: Barb Lathrop, DEP

This project proposing to design and install a large Nutrient Seperating Baffle Box stormwater system. This practice, in combination with the other practices installed in this watershed over the past 10 years, is expected to bring the lake into compliance with its phosphorus TMDL. In addition this grant extends the long-term, in-lake water quality monitoring program by two years (for the 2015 and 2016 growing seasons), as well as includes some stormwater monitoring to quantify the associated pollutant load reductions associated with this new practice as well as some other BMPs that have been installed in the past. Lastly this project includes public outreach as well as quantifying the pollutant load reductions to establish/confirm complete compliance with the Harveys Lake TMDL.

Supplemental Projects

Project Title: Water Resources Education Network

Project Number: 1423 Budget: \$ 200,000

Funding Category: Program (Base)

Lead Agency: League of Women Voters – Citizens Education Fund

Location: Statewide

Point of Contact: Douglas Goodlander, DEP

This two year project continues funding of the League of Women Voters of Pennsylvania - Citizen Education Fund to provide money to 10 to 12 community coalitions to undertake public education and alliance building projects focused on mitigating or preventing nonpoint source pollution in degraded watersheds. An important part of these projects is that they must include municipalities and each organization receiving a grant must send a representative to the annual orientation/training workshop. This grant will also provide support for the coalitions to complete their projects, raise public awareness of nonpoint source issues and facilitate action in protecting community water resources. The maximum award for each community based project is \$5,000.

Project Title: BMP Implementation in Approved Watershed Implementation Plans

Project Number: 1424 **Budget:** \$ 250,000

Funding Category: Program (Base)

Lead Agency: DEP, Bureau of Conservation and Restoration

Location: Statewide

Point of Contact: Doug Goodlander, DEP

This project provides financial assistance to construct BMPs identified in Watershed Implementation Plans that have been accepted by EPA. Funding of BMPs in these watersheds will help reduce nonpoint source loads, achieve load reductions identified in the TMDLs and restore designated uses, with the ultimate goal of removing stream segments from the DEP Integrated Water Quality Monitoring and Assessment Report's impaired list. Specific project locations and BMPs to be implemented have not been identified at this time. However, before any project is implemented, the proposed scope of work and budget will be submitted to the EPA project manager for review and approval.

Project Title: Restoration Potential Screening

Project Number: 1425

Budget: \$ 40,000

Funding Category: Program (Base)

Lead Agency: DEP, Bureau of Conservation and Restoration

Location: Statewide

Point of Contact: Doug Goodlander, DEP

Recovery Potential Screening (RPS) is a technical assessment method for systematically comparing relative restorability among many different impaired waters or watersheds based on multi-metric indices drawn mostly from landscape and monitoring data. This screening will be used to identify more restorable waters that are good candidates for restoration investments. This project will support multi-purpose statewide efforts facilitating identification of the state's intended uses of RPS, identifying appropriate metrics, gathering and measuring data, demonstrating RPS techniques in state workshops, transferring RPS tools and data products, and supporting efforts to develop various screening runs to identify priority waters throughout the state.

Grant Match

Project Title: Conservation District Fund Allocation Program (Match)

Project Number: N/A

Budget: \$1,035,389 (*Revised from* \$999,947)

Lead Agency: Bureau of Conservation and Restoration

Location: Statewide

Point of Contact: Douglas Goodlander, DEP

This program is administered by the State Conservation Commission and is funded from the State General Fund. This money is used to support the continuing activities of conservation districts by partially funding a district manager and one or two district technicians in each county. These staff are key in the Commonwealth's efforts to monitor and implement restoration activities on impaired stream reaches throughout Pennsylvania.

Project Title: Growing Greener Watershed Specialists (Match)

Project Number: N/A **Budget:** \$ 2,079,386

Lead Agency: Bureau of Conservation and Restoration

Location: Statewide

Point of Contact: Douglas Goodlander, DEP

This program provides grants to conservation districts to hire watershed specialists to help foster and support local watershed groups, implement educational activities and carry out watershed restoration and protection projects. A total of 66 watershed specialists have been hired. Included in their responsibilities is to provide expert advice to farmers and landowners for conservation practices and work with DEP on watershed restoration projects and proposals funded through the NPS 319 and Growing Greener programs.