

**PENNSYLVANIA NONPOINT SOURCE PROGRAM**  
**FY2011 PROJECT SUMMARY**

**Base Program/DEP Staff**

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

**Project Number:** 1101

**Budget:** \$616,498

**Lead Agency:** DEP Bureau of Watershed Management

**Location:** DEP Central Office/DEP Regional Offices

**Point of Contact:** Steve Lathrop, 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 5.72 work years of effort for NPS activities by regional and mining office staff in each of the DEP Regional and Mining Offices and effort provided within the Central Office to support the implementation and administration of the Section 319 NPS Implementation Program. The positions within the Central Office supporting these work years of effort include: a conservation program manager, two water pollution specialists, an environmental program specialist, three water pollution biologists, a hydrogeologist, a conservation program specialist, an environmental planner, a clerk typist and an administrative assistant. This project will require an additional \$133,587 in indirect costs.

**Base Program**

**Project Title:** PENNVEST NPS Grant Application Developer

**Project Number:** 1102

**Budget:** \$88,300

**Lead Agency:** Pennsylvania Association of Conservation Districts (PACD)

**Location:** Multiple

**Point of Contact:** Russell Wagner, DEP

The purpose of this project is to increase the number and quality of PENNVEST NPS applications being submitted and funded. The Application Developer will be responsible for identifying and eliminating bottlenecks in the completion of high-quality PENNVEST NPS applications. The highest priority work will be to make existing mechanisms work more effectively and, ultimately, to assist applicants in securing funding for PENNVEST priority projects. The Application Developer will build capacity to prepare and submit applications by providing presentations at conferences and meetings; writing articles for publication in newsletters; providing training and assistance, statewide, to county conservation districts, watershed groups, environmental groups and municipalities; and providing training (as needed) for PA Department of Environmental Protection Regional Office staff.

**Project Title:** Statewide Lake Water Quality Assessments  
**Project Number:** 1103  
**Budget:** \$10,000  
**Lead Agency:** DEP Bureau of Watershed Management  
**Location:** Statewide  
**Point of Contact:** Barbara Lathrop, DEP

DEP will coordinate the assessment of 10 of 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:** Monitoring Projects for Improvement  
**Project Number:** 1104  
**Budget:** \$15,109  
**Lead Agency:** Bureau of Watershed Management  
**Location:** Multiple  
**Point of Contact:** Cheryl Snyder, DEP

DEP Division of Watershed Protection staff will 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.

**Project Title:** TMDL Planning  
**Project Number:** 1105  
**Budget:** \$100,000  
**Lead Agency:** DEP Bureau of Watershed Management  
**Location:** Statewide  
**Point of Contact:** Bill Brown, DEP

Pennsylvania entered into a consent decree and agreement with EPA and the groups requiring completion of TMDLs for all water body segments impaired by resource extraction (mine drainage) listed on the 1996 303(d) list by April 2009. This project is to continue the development of TMDLs beyond those required under the consent decree. A portion of the grant funds will be used for the collection of water samples. Each site will be sampled five times over a year period, including at least one sample in each season and flow condition. Sample results will be entered into SIS after sample analysis; uploading into STORET will be done according to established schedules. TMDL development using the data will occur immediately on completion of the project. A portion of the project funding will be used to contract for development of the TMDLs.

**Project Title:** Statewide NPS Education Office  
**Project Number:** 1106  
**Budget:** \$ 293,700  
**Lead Agency:** Pennsylvania Association of Conservation Districts (PACD)  
**Location:** Statewide  
**Point of Contact:** Steve Lathrop, DEP; Robert Maiden, PACD

This project allows the PACD state office to continue statewide education efforts on nonpoint source issues. The intent is to generate a coordinated, unified approach through the county conservation districts to provide information to the public about the Pennsylvania Nonpoint Source Program. PACD develops and maintains information packets, brochures, a newsletter, a web site and other educational products as requested by the conservation districts and the Nonpoint Source Management Section. It also provides logistical support for an annual conservation district watershed specialist training meeting. PACD has an Education Subcommittee that provides program recommendations.

### **Implementation Program – Abandoned Mine Drainage**

**Project Title:** Updating AMD WIPS as Qualified Hydrologic Units  
**Project Number:** 1107  
**Budget:** \$50,000  
**Lead Agency:** DEP Bureau of Watershed Management  
**Location:** Multiple  
**Point of Contact:** Donna Carnahan, DEP

In 2006, the Surface Mining Control and Reclamation Act (SMCRA) was reauthorized. Funding from SMCRA can only be used within qualified hydrologic units (QHU) affected by coal mining practices. This set-aside funding is administrated through Pennsylvania's DEP Bureau of Abandoned Mine Reclamation (BAMR). BAMR has developed some guidelines that must be met for a watershed to become a QHU. This project provides financial assistance to further develop some of the Watershed Implementation Plans to meet these guidelines with BAMR. Once a watershed is a QHU, then it will be eligible for set-aside funding from BAMR. Also, more funding will be available for Operation, Maintenance and Replacement (OM&R) issues. Specific project locations 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 approval.

**Project Title:** Updating AMD WIPS as Qualified Hydrologic Units – Anderson Creek  
**Project Number:** 1107A  
**Budget:** \$10,000  
**Lead Agency:** DEP Bureau of Watershed Management  
**Location:** Multiple  
**Point of Contact:** Donna Carnahan (DEP), Eric Rosengrant (DEP), Jim Norris (Pike Twp)

In December 2006 Congress passed legislation reauthorizing the Abandoned Mine Land (AML) Program under Title IV of the Surface Mining Control and Reclamation Act of 1977 (SMCRA). Funding from SMCRA can only be used within qualified hydrologic units (QHU) affected by coal mining practices. Bureau of Abandoned Mine Reclamation (BAMR) had developed the *AMD Set-Aside Program Implementation Guidelines* that must be met for a watershed to become a QHU. Unfortunately, many of our WIP's do not meet all the requirements to be considered as QHU. Some additional information such as biological background data and alternative analysis for each treatment proposal needs to be gathered to meet the criteria in the guidelines. Once a watershed is a QHU, then it will be eligible for this funding. Anderson Creek was a Watershed Implementation Plan that was chosen through a screening process to be further developed into a QHU. Therefore, the funding in project will go to Pike Township to be used to supplement the Anderson Creek WIP with the needed information to meet the requirements of QHU.

**Project Title:** Updating AMD WIPS as Qualified Hydrologic Units – Shoup's Run  
**Project Number:** 1107B  
**Budget:** \$10,000  
**Lead Agency:** DEP Bureau of Watershed Management  
**Location:** Multiple  
**Point of Contact:** Donna Carnahan (DEP), Malcolm Crittenden (DEP), Andy Patterson (Huntingdon CCD)

In December 2006 Congress passed legislation reauthorizing the Abandoned Mine Land (AML) Program under Title IV of the Surface Mining Control and Reclamation Act of 1977 (SMCRA). Funding from SMCRA can only be used within qualified hydrologic units (QHU) affected by coal mining practices. Bureau of Abandoned Mine Reclamation (BAMR) had developed the *AMD Set-Aside Program Implementation Guidelines* that must be met for a watershed to become a QHU. Unfortunately, many of our WIP's do not meet all the requirements to be considered as QHU. Some additional information such as biological background data and alternative analysis for each treatment proposal needs to be gathered to meet the criteria in the guidelines. Once a watershed is a QHU, then it will be eligible for this funding. Shoup's Run was a Watershed Implementation Plan that was chosen through a screening process to be further developed into a QHU. Therefore, the funding in project will go to Huntingdon County Conservation District to be used to supplement the Shoup's Run WIP with the needed information to meet the requirements of QHU.

**Project Title:** Gibson-Halstock AMD Design  
**Project Number:** 1108  
**Budget:** \$43,098  
**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. Gibson-Halstock is the 5<sup>th</sup> 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 52 lbs/day of acidity, 3.9 lbs/day of aluminum and 1.9 lbs/day of iron. After future construction of this project, 83% of the acidity loading in Little Laurel Run will be removed.

**Project Title:** West Ferris Wheel Passive Treatment, Phase 1

**Project Number:** 1109

**Budget:** \$406,709

**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. This partial award will fund Phase 1, which will include project oversight, an access road to the site and construction of two anoxic limestone drains and accompanying settling ponds that will address the first of three discharges. The construction of Phase 1 and future construction of Phase 2 will result in the removal of 246 lbs/day of acidity, 18 lbs/day of iron and 13.5 lbs/day of aluminum from Little Laurel Run.

**Project Title:** UNT 2 AMD Reclamation Design

**Project Number:** 1110

**Budget:** \$41,700

**Lead Agency:** Jacobs Creek Watershed Association

**Location:** Jacobs Creek, Fayette County

**Point of Contact:** Garry Price, DEP; Ron Horansky, DEP-Greensburg DMO; Patty Miller, Jacobs Creek Watershed Association

This project will accomplish the design and permitting of a passive AMD treatment facility along an unnamed tributary in the Jacobs Creek watershed. As recommended in the Jacobs Creek Watershed Implementation Plan, this system will combine an anoxic limestone drain (ALD) with a settling pond and polishing wetland area to neutralize a pH of 3.2 and remove 12 mg/l of aluminum and 3mg/l of iron from the discharge. Partners in the project with the Jacobs Creek Watershed Association include the Fayette County Conservation District and the DEP District Mining Office in Greensburg, PA.

**Project Title:** MON 52A AMD Discharge Construction [Project Removed From Grant]

**Project Number:** 1111

**Budget:** \$

**Lead Agency:** Clearfield County Conservation District

**Location:** Montgomery Creek, Clearfield County

**Point of Contact:** Donna Carnahan, DEP; Mario Carrello, DEP-Moshannon DMO; Kelly Williams, Clearfield County Conservation District

This project will construct a passive treatment system to abate AMD discharge MON-52A to Montgomery Creek, the #1 priority in the Watershed Implementation Plan. This stream empties directly into the West Branch Susquehanna River. The passive treatment system will consist of limestone cell, upflow/horizontal bioreactors, anoxic limestone drains and corresponding settling ponds and will remove 215 lbs/day of acidity, 24 lbs/day of iron, 14 lbs/day of aluminum and 60 lbs/day of manganese from an unnamed tributary of Montgomery Creek. This project will be a step towards meeting the TMDL goals for the watershed.

**Project Title:** HAR07 and HAR05 AMD Discharge Design

**Project Number:** 1112

**Budget:** \$90,072

**Lead Agency:** Clearfield County Conservation District

**Location:** Montgomery Creek, Clearfield County

**Point of Contact:** Donna Carnahan, DEP; Mario Carrello, DEP-Moshannon DMO; Kelly Williams, Clearfield County Conservation District

Only two AMD discharges can be found in the Hartshorn Run Watershed, HAR07 and HAR05 according to the Watershed Implementation Plan. This project will complete a detailed design, permitting and construction bid documents for a treatment system on each discharge. Treatment of HAR07 will remove 140 lbs/day of acidity, 1 lb/day of iron and 15 lbs/day of aluminum while treatment on HAR05 will remove 32 lbs/day of acidity, 13 lbs/day of iron and 0.5 lbs/day of aluminum. Once these systems are constructed, the entire length of Hartshorn Run should be restored.

**Project Title:** Shoup Run Inventory and OM&R Plan

**Project Number:** 1113

**Budget:** \$5,719

**Lead Agency:** Huntingdon County Conservation District

**Location:** Shoup Run, Huntingdon County

**Point of Contact:** Donna Carnahan, DEP; Malcolm Crittenden, DEP-Cambria DMO; Andy Patterson, Huntingdon County Conservation District

Two additional AMD seeps have been discovered that are compromising the effectiveness of the existing AMD passive treatment systems at Hartman Run and the Old Never Sweat deep mine. Neither of these seeps was included in the original AMD inventory, which led to the development of the Shoup Run Watershed Restoration Plan (WIP). The Huntingdon County Conservation District plans to do an inventory and evaluation of these newly identified sites and update the WIP with a plan of action to remediate them. This project will also develop a Shoup Run Watershed Operation, Maintenance and Replacement Plan for all AMD and AML projects in the watershed.

**Project Title:** Bell Colliery AMD Restoration, Phase III

**Project Number:** 1114

**Budget:** \$347,355

**Lead Agency:** Schuylkill County Conservation District

**Location:** Schuylkill River; Schuylkill County

**Point of Contact:** Garry Price, DEP; Dan Koury, DEP- Pottsville DMO; Wayne Lehman, Schuylkill County Conservation District

In 2004 an AMD treatment system funded by Section 319 was constructed on the Bell Colliery Drift Mine. This project was an early attempt at AMD remediation and several lessons have been learned from the original configuration of the system. This project will change the system from a downflow configuration to an upflow configuration, add treatment capacity, provide active flushing capability and add cleanout access to the flushing system. Upstream of Bell Colliery the stream is not degraded, so improving this system will further improve water quality in the headwaters of the Schuylkill River.

**Project Title:** West Branch Phase II Design

**Project Number:** 1115

**Budget:** \$132,035

**Lead Agency:** Schuylkill County Conservation District

**Location:** Schuylkill River; Schuylkill County

**Point of Contact:** Garry Price, DEP; Dan Koury, DEP-Pottsville DMO; Wayne Lehman, Schuylkill County Conservation District

The Pine Knot Mine Discharge contributes elevated levels of aluminum, iron, manganese and acidity to the West Branch Schuylkill River. Heavy prior mining activity, poor stream management and the existence of open mine slopes/boreholes in the area cause water losses to the Pine Knot Mine Pool. This project will look at a portion of the West Branch Schuylkill River and identify sites of recharge to the Pine Knot Mine Pool. Other deliverables will be a design and permits for an abatement project to reduce or eliminate this recharge to the Pine Knot Mine Complex, a high priority in the Upper Schuylkill River Watershed Implementation Plan.

**Project Title:** Little Mill Creek Construction  
**Project Number:** 1116  
**Budget:** \$187,000  
**Lead Agency:** Headwaters Charitable Trust  
**Location:** Little Mill Creek, Jefferson County  
**Point of Contact:** Donna Carnahan, DEP; Ely Heferle, DEP-Knox DMO; Brittany Anderson, Headwaters RC&D

On Little Mill Creek there are four passive treatment systems, funded by Section 319 in the early 1990s, that needed some renovations and upgrades. Through a partial award in 2010, funding was given to the group to complete construction on three of the systems. This funding will address the fourth passive treatment system. Upgrades to this fourth system will remove an additional 12.8 lbs/day of acidity and 0.2 lb/day of aluminum. This non-WIP watershed project will be supported entirely with base funding from the grant.

### **Implementation Program - Agriculture**

**Project Title:** Hungry Run Ag BMPs  
**Project Number:** 1117  
**Budget:** \$454,963  
**Lead Agency:** Mifflin County Conservation District  
**Location:** Hungry Run, Mifflin County  
**Point of Contact:** Carl Rohr, DEP; Andrew McDonald, Mifflin County Conservation District

This project will implement work on several project sites identified in the Hungry Run Watershed Implementation Plan. Hungry Run is impaired by nutrient and sediment sources. The project goal is to reduce NPS pollution in Hungry Run by installing different types of BMPs to minimize nutrient and sediment impairments on five farms. Project outcomes will include the installation of the “core” BMPs identified in the plan on these farms to treat runoff, improve stream bank habitat and stabilize eroding stream banks. The conservation district is currently completing I&Es and designs on two of these farms with funds procured in Project #2832A. Project design and BMP construction are being bid out to qualified private sector contractors. Funds in Project #2832A will also satisfy the construction costs for one of the five projects identified in the work plan. These projects when implemented will help to improve water quality in Hungry Run.

**Project Title:** Ag Restoration on Buffalo Creek  
**Project Number:** 1118  
**Budget:** \$185,004  
**Lead Agency:** Union County Conservation District  
**Location:** Buffalo Creek, Union County  
**Point of Contact:** Carl Rohr, DEP; Jason Fellon, DEP-NCRO; Dan Wagner, Union County Conservation District

The Buffalo Creek Watershed Implementation Plan will continue to be addressed through this project. One agriculturally impaired unnamed tributary to the Buffalo Creek was selected as the sub basin in which to begin implementation in the current S. 319 Project #2820. Two farms are



being worked on in this sub basin. Farm #2 is in design phase now, with all BMPs to be funded under the current S. 319 grant, while Farm #6 has had an I&E completed. This farm is the highest priority for funding at this time. Agricultural BMPs proposed for construction include stream bank fencing, stream crossing, drinking water access, waste storage structure, manure transfer system, heavy use area protection and roof water controls. The conservation district will also try to secure additional projects and select a second sub basin for restoration work in Buffalo Creek.

**Project Title:** South Branch Plum Creek Fencing

**Project Number:** 1119

**Budget:** \$110,937

**Lead Agency:** Indiana County Conservation District

**Location:** South Branch Plum Creek, Indiana County

**Point of Contact:** Joe Kelly, DEP; Adam Cotchen, Indiana County Conservation District

This will be the first project to be implemented once the Watershed Implementation Plan is completed for the South Branch of Plum Creek. It will include the installation of stream bank fencing, stabilized stream crossings and alternative water sources. The ICCD will design BMPs and oversee construction, and landowners will provide match through direct payment, bmp installation and/or labor and use of equipment. It is anticipated that stream bank fencing alone will reduce the sediment load in the South Branch of Plum Creek by 1,009 tons/year.

**Project Title:** Mill Creek Stream Restoration, Phase III

**Project Number:** 1120

**Budget:** \$159,675

**Lead Agency:** Lancaster County Conservation District

**Location:** Mill Creek, Lancaster County

**Point of Contact:** Carl Rohr, DEP; Jineen Boyle, DEP-SCRO; Matthew Kofroth, Lancaster County Conservation District

The Mill Creek Watershed Implementation Plan will continue to be implemented through this project. Four project sites on two stream reaches, identified as Sites #09, 10, 104 and 125, will be addressed. This project consists of approximately 5,600 linear feet of stream bank stabilization, stream bank fencing, and riparian buffer establishment along the two impaired sections of the Mill Creek. The project involves several property owners. Traditional stream bank stabilization measures will be applied to these sections of stream along with new natural channel design structures. Significant stream bank erosion will be minimized. Stream bank fencing will be installed where there is no fencing to date. Riparian buffer plantings will be completed for buffers with a minimum width of thirty-five feet. The Conservation District, U.S. Fish and Wildlife Service and the Millcreek Preservation Association are partnering to complete this project.

## **Implementation Program – Stormwater/Urban**

**Project Title:** Hungry Run Stream Restoration-Phase I

**Project Number:** 1121

**Budget:** \$39,191

**Lead Agency:** Mifflin County Conservation District

**Location:** Hungry Run, Mifflin County

**Point of Contact:** Carl Rohr, DEP; Andrew McDonald, Mifflin County Conservation District

This project continues implementation of the Hungry Run Watershed Implementation Plan. Hungry Run is a small agricultural watershed with some urban runoff impairment in the lower reaches. This project addresses Site #2 Urban in the watershed plan. The project is for the development of a complex stream restoration design and associated permitting for approximately 1,340 linear feet of Hungry Run in Burnham. This stream reach is severely impacted by urbanization. The project will specifically develop a design to stabilize highly eroding stream banks, mitigate overland stormwater that is compounding bank erosion, install a riparian buffer and provide in-stream fish habitat as necessary. An RFP will be developed to select a qualified engineering firm to complete site design and permitting tasks. An additional \$2,000 has been added to the amount requested to cover increased permitting fees.

**Project Title:** Jacobs Creek Stream Bank Stabilization

**Project Number:** 1122

**Budget:** \$71,350

**Lead Agency:** Jacobs Creek Watershed Association

**Location:** Jacobs Creek, Fayette County

**Point of Contact:** Joe Kelly, DEP; Rita Graham, DEP-SWRO; Patty Miller, Jacobs Creek Watershed Association

The Jacobs Creek Watershed Association, in partnership with the Fayette County Conservation District, will continue its restoration efforts on the mainstem of Jacobs Creek with this project to stabilize over 1,000 feet of stream bank, which has been severely eroded by excess stormwater flows. The restoration of this location, identified as Site 28 in the Jacobs Creek Watershed Implementation Plan, will be accomplished using a combination of vegetative bioengineering and structural enhancement and is expected to reduce sediment load to the stream by as much as 13,000 pounds per year, as well as improve fish habitat by creating back current eddies and shading the streambed.

**Project Title:** Hubler Run Stream Channel Restoration [**Project Removed From Grant**]  
**Project Number:** 1123  
**Budget:** \$  
**Lead Agency:** Emigh Run/Lakeside Watershed Association, Inc. (ERLWA)  
**Location:** Hubler Run, Clearfield County  
**Point of Contact:** Joe Kelly, DEP; Anna Mae Pezulla, Emigh Run/Lakeside Watershed Association, Inc.

ERLWA intends to utilize funds for this project to design, permit and construct a stream channel restoration project on Hubler Run. The stream channel has been severely encroached upon by the construction of ponds along the stream banks. This project will re-establish a free flowing stream channel approximately 700 linear feet in length. The Hubler Run Watershed Implementation Plan identifies this location as one of two non-AMD impairments that need to be addressed. The completion of this project will reduce sediment and thermal impacts and enhance fish passage through this portion of the stream channel.

**Project Title:** Sweitzer-Springfield Stream Restoration  
**Project Number:** 1124  
**Budget:** \$180,000  
**Lead Agency:** Codorus Creek Watershed Association  
**Location:** Codorus Creek, York County  
**Point of Contact:** Joe Kelly, DEP; Jim Leaman, Codorus Creek Watershed Association

This project will continue the ongoing efforts to restore the Codorus Creek watershed which is impaired with sediment. Work will be done as outlined in the Codorus Creek WIP. The section of Codorus Creek that will be restored in this project is identified as severely impaired and a priority to be restored in the WIP. The project will incorporate Rosgen methods of stream restoration to reduce the significant sediment loads entering the watershed from high, unstable streambanks. The applicant intends to incorporate as much woody stream habitat as possible into the project. Approximately 1,400 linear feet of stream channel will be restored. The applicant estimates that by completing this project, on the South Branch Codorus Creek, approximately 760 tons of sediment will be kept from washing into the stream. This will be another step toward helping Codorus Creek meet its TMDL.

**Project Title:** Green Streetscape, Phase I  
**Project Number:** 1125  
**Budget:** \$374,700  
**Lead Agency:** Borough of Etna  
**Location:** Pine Creek, Allegheny County  
**Point of Contact:** Joe Kelly, DEP; Mary Ellen Ramage, Borough of Etna

In an effort to reduce excessive stormwater flows, the Borough of Etna intends to implement stormwater management BMPs utilizing the “Green Streets” concept. This will provide better management of stormwater runoff in an urban setting by removing runoff from the combined sewer system. Phase I of the project will include re-construction of portions of two streets in the borough, installation of 15 rain gardens, tree plantings and nearly 6,000 square feet of pervious

pavers. It is anticipated that an additional two phases of work will be necessary to complete the “Green Streetscape” project in the Borough of Etna. Once all three phases of the project are completed, it is anticipated that 155,000 gallons in runoff reduction will be observed for the 2- and 5-year one hour storm events.

**Project Title:** Harveys Lake Stormwater BMPs

**Project Number:** 1126

**Budget:** \$565,700

**Lead Agency:** Borough of Harveys Lake

**Location:** Harveys Lake, Luzerne County

**Point of Contact:** Barb Lathrop, DEP; Ron Yablonsky, DEP-NERO; Susan Sutton, Harveys Lake Borough

The Harveys Lake Stormwater Implementation Plan proposes several BMP installations to mitigate phosphorus and sediment inputs to the lake, including two large manufactured treatment devices, a stormwater swale, and several floating wetlands. The floating wetland is a new and innovative NPS nutrient removal device specifically designed to remove N and P from lakes and ponds. Each 250 square foot island is equivalent to one acre of wetlands in terms of nutrient uptake. They will be placed in the lake near stormwater outlets. As a result of installing all these BMPs, Harveys Lake's TMDL-targeted total phosphorus loadings will be reduced by 89 lbs/yr. The overall reduction of phosphorus loads to the lake will then total 78% (180 lbs/yr) of the targeted reduction of 230 lbs/yr. This project also includes public outreach and stormwater and in-lake monitoring to document efficacy of the installed BMPs.

### **Base Program – Amendments to Existing Grants**

**Project Title:** Conservation District Mining Program

**Project Number:** 1127

**Budget:** \$125,000

**Lead Agency:** Western Pennsylvania Coalition for Abandoned Mine Reclamation (WPCAMR)

**Location:** Western Pennsylvania bituminous coal region

**Point of Contact:** Garry Price, DEP or Andy McAllister, Regional Coordinator, WPCAMR

The purpose of the WPCAMR is to promote and facilitate the reclamation and remediation of abandoned mine drainage (AMD) in western Pennsylvania. Through this 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. This adds a fourth year to a three-year work plan and budget.

**Project Title:** Conservation District Mining Program

**Project Number:** 1128

**Budget:** \$125,000

**Lead Agency:** Luzerne County Conservation District

**Location:** Anthracite and northern bituminous regions of Pennsylvania

**Point of Contact:** Garry Price, DEP or Robert Hughes, Executive Director, EPCAMR

The 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. The EPCAMR Executive Director 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 EPCAMR Program Manager, 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. This adds a fourth year to a three-year work plan and budget.

**Project Title:** Watershed Education for Pollution Prevention-XIV

**Project Number:** 1129

**Budget:** \$ 100,000

**Lead Agency:** League of Women Voters of PA-Citizen Education Fund (LWV-CEF)

**Location:** Statewide

**Point of Contact:** Steve Lathrop, DEP or Julie Kollar, PA League of Women Voters

This 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 project is \$5,000. This adds a fourth year to a three-year work plan and budget.

**Project Title:** Urban Stormwater BMP Monitoring

**Project Number:** 1130

**Budget:** \$ 85,000

**Lead Agency:** Villanova University

**Location:** Mill Creek, Montgomery County

**Point of Contact:** Steve Lathrop, DEP or Dr. Robert Traver, Villanova University

The Villanova University National Monitoring Program project is designed to measure the effectiveness of several urban storm water best management practices. The project became a part of the EPA's National Monitoring Program and was initially funded in PA's FFY2004 Section 319 grant. This project will continue to collect inflow and outflow and monitor nonpoint source pollutant loadings for five urban storm water best management practices located on the Villanova University campus. A Pervious Concrete/Porous Asphalt

demonstration site, Bio-infiltration Traffic Island, Infiltration Trench, Stormwater Wetland and Green Roof will be evaluated. Differences in flow volume and peak flow volume for wet weather flows will be measured. Mean pollutant concentrations for storm events will be developed. Pollutant concentrations and flow averages for base flow conditions will be developed. All data collected will be included in the STORET database and the NPS National Monitoring Program database. This will be tenth year in the National Monitoring Program.

### **Grant Match**

**Project Title:** Conservation District Fund Allocation Program (Match)

**Project Number:** N/A

**Budget:** \$ 1,372,410 (Base Funds)

**Lead Agency:** Bureau of Watershed Management

**Location:** Statewide

**Point of Contact:** Russell Wagner, 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.

**Project Title:** Growing Greener Watershed Specialists (Match)

**Project Number:** N/A

**Budget:** \$ 1,963,467 (Incremental Match)

**Lead Agency:** Bureau of Watershed Management

**Location:** Statewide

**Point of Contact:** Russell Wagner, DEP

This was a new state program available for the first time in 2000. This program provides grants to conservation districts to hire watershed specialists to help foster and support local watershed groups, educational activities and 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 projects and proposals funded through the NPS 319 and Growing Greener programs.