

PENNSYLVANIA NONPOINT SOURCE PROGRAM
FY2009 PROJECT SUMMARY

Base Program/District Staff

Project Title: Conservation District Mining Program

Project Number: 2901

Budget: \$ 370,500

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

Location: Western Pennsylvania bituminous coal region

Point of Contact: Russell Wagner, DEP or Bruce Golden, 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 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: Conservation District Mining Program

Project Number: 2902

Budget: \$ 370,500

Lead Agency: Luzerne Conservation District

Location: Anthracite and northern bituminous regions of Pennsylvania

Point of Contact: Russell Wagner, 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. 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.

Base Program/DEP Staff

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

Project Number: 2903

Budget: \$ 664,936

Lead Agency: Bureau of Watershed Management

Location: DEP Central Office/DEP Regional Offices

Point of Contact: Russell L. Wagner, DEP

This project will strengthen the links between Central Office Program staff and the Regional Offices and to enhance the roles of the DEP Regional Offices in the Nonpoint Source Program. The project will continue funding a total of six work years of effort for NPS activities by regional office staff in each of the six DEP Regional Offices. Any DEP regional NPS efforts above the six work years of effort will be used as part of the state match. An additional 1.53 work years of effort are to be provided within the Central Office to support the implementation and administration of the Section 319 NPS Implementation Program and the Citizen Volunteer Monitoring Program. The positions supporting these work years of effort include: a conservation program manager, four 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 \$ 220,930 in indirect costs.

Base Program

Project Title: Citizen Monitoring Program

Project Number: 2904

Budget: \$ 30,000

Lead Agency: DEP Bureau of Watershed Management

Location: Statewide

Point of Contact: Cheryl Snyder, DEP

The purpose of the Citizens' Volunteer Monitoring Program is to provide the means to address both the needs of the Department and local volunteer groups for support and coordination of environmental efforts, and to create environmental alliances. The program joins overall needs of DEP for citizen gathered data with public participation by establishing cooperative, environmental partnerships. This project will promote citizen monitoring activities by maintaining a Citizens' Volunteer Monitoring database registry, developing guidelines and model "Handshake Agreements" (non-binding, non-obligatory) that clearly detail the expectations of DEP program areas and citizen groups, publication of a Volunteer Monitoring newsletter, implementing a statewide "snapshot" report, training and equipping 14 lake associations, providing sample analysis through DEP lab and holding various workshops. Citizen monitoring activities will also support the measurement and documentation of water quality responses to 319-funded stream restoration projects.

Project Title: Statewide NPS Education Office
Project Number: 2905
Budget: \$ 287,400
Lead Agency: Pennsylvania Association of Conservation Districts (PACD)
Location: Statewide
Point of Contact: Steve Lathrop, DEP or Kathleen Banski, PACD

The 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.

Project Title: Watershed Education for Pollution Prevention-IX
Project Number: 2906
Budget: \$ 285,000
Lead Agency: League of Women Voters of PA-Citizen Education Fund (LWV-CEF)
Location: Statewide
Point of Contact: Steve Lathrop, DEP or , 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.

Project Title: Statewide Lake Water Quality Assessments
Project Number: 2907
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: TMDL Planning
Project Number: 2908
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 projects funding will be used to contract for development of the TMDLs.

National Monitoring Project:

Project Title: Urban Stormwater BMP Monitoring
Project Number: 2909
Budget: \$ 293,910
Lead Agency: Villanova University
Location: Mill Creek, Montgomery County
Point of Contact: Steve Lathrop, DEP; 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 three urban storm water best management practices located on the Villanova University campus. This will be the sixth through eighth year in the National Monitoring Program. A Porous Concrete Infiltration demonstration site, Bio-infiltration Traffic Island and Infiltration Trench 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.

Special Projects

Project Title: Region 3 Citizen Volunteer Monitoring Workshop

Project Number: 2910

Budget: \$ 15,000

Lead Agency: DEP, Bureau of Watershed Management

Location: Statewide

Point of Contact: Cheryl Snyder, DEP

Volunteer monitoring programs have been significantly enhanced at both the state and local watershed level. It is felt that an opportunity to share technical advances, organizational and programmatic ideas, and advocacy and partnership building approaches would benefit all Region 3 states.

A state's training workshop on volunteer monitoring will be hosted by Pennsylvania to provide an opportunity for volunteer monitors to learn from each other, develop new skills, and enhance existing skills. This workshop will include volunteer monitoring coordinators, volunteers, and other experts from Pennsylvania, Delaware, Maryland, Virginia, and West Virginia.

PA Department of Environmental Protection will take the lead in securing the location and other logistics; coordinating the planning committee consisting of at least 1 representative from each state; managing conference publicity, registration, and materials; conducting follow up with speakers; coordinating poster sessions and field trips; and all follow up work for the conference.

Project Title: Region 3 NPS/TMDL/WQS Workshop

Project Number: 2911

Budget: \$ 20,000

Lead Agency: DEP, Bureau of Watershed Management

Location: Statewide

Point of Contact: Russell Wagner, DEP

The Pennsylvania Department of Environmental Protection (DEP) will sponsor the annual Region III Nonpoint Source Management/Total Maximum Daily Load/Water Quality Standards Meeting. This meeting provides state staff in these programs within EPA Region III an opportunity to meet collectively to discuss national and regional issues, report progress in addressing past issues, and above all, highlight advancements in achieving the water quality goals.

Project Title: Recode AVGWLF Model to MapWindows Environment
Project Number: 2912
Budget: \$ 20,000
Lead Agency: Penn State Institute of Energy and the Environment
Location: Statewide
Point of Contact: Bill Brown, DEP; Barry Evans, Penn State

As part of an earlier project completed by Penn State for DEP, a GIS-based watershed modeling tool, called *AVGWLF*, was created to support TMDL and similar watershed-based water quality projects in Pennsylvania. The software under which *AVGWLF* runs will no longer be available to DEP in the near future. USEPA, which provides funding for much of the water quality-related activities undertaken by DEP, has recently moved away from using this software and has recommended that state agencies do the same. This project proposal is to re-code the current “Pennsylvania” version of *AVGWLF* into a non-commercial software environment that can be used license-free and is compatible with existing ESRI-formatted GIS data sets currently maintained by the state.

Project Title: Schuylkill Action Network
Project Number: 2913
Budget: \$ 60,000
Lead Agency: Partnership for the Delaware Estuary, Inc.
Location: Schuylkill River Watershed
Point of Contact: Russell Wagner, DEP; Joe Hebelka, DEP; Jennifer Adkins, Partnership for the Delaware Estuary, Inc.

The Schuylkill River is the largest tributary to the Delaware River and has long been recognized for the important role it plays as a source of drinking water and fish habitat. However, the health of the river and its tributaries has changed dramatically over the past 30 years. In an effort to improve the water resources of the Schuylkill, a partnership of state agencies, local watershed organizations, water suppliers, local governments and the Federal government known as the Schuylkill Action Network (SAN), has been formed. The SAN includes a Steering Committee, a Planning Workgroup, and Technical Workgroups to address the complex issues in the Schuylkill River watershed. Funding for this project is to fund a coordinator position through the Partnership for the Delaware Estuary, a partner in the SAN.

Implementation Program - Abandoned Mine Drainage

Project Title: Six Mile Run SX8-D1 AMD Remediation

Project Number: 2914

Budget: \$ 49,500

Lead Agency: Broad Top Township

Location: Six Mile Run, Bedford County

Point of Contact: Donna Carnahan, DEP; Malcolm Crittenden, DEP; Ernest Fuller, Broad Top Township

The treatment of this discharge in the headwaters of Six Mile Run is one of the top priorities within the Six Mile Run Watershed Implementation Plan. This discharge contributes 38% of the iron, 3% of the aluminum and 9% of the acidity loading to the main stem of Six Mile Run. This project will fund the survey, final system design and permitting toward the future construction of a passive treatment system.

Project Title: McIntire Passive Treatment System

Project Number: 2915

Budget: \$ 183,045

Lead Agency: Stream Restoration Incorporated

Location: Blacks Creek, Butler County

Point of Contact: Garry Price, DEP; Elias Heferle, DEP; Margaret Dunn, Stream Restoration Incorporated

The unnamed "McIntire" tributary was identified in the Blacks Creek Watershed Implementation Plan as the single largest abandoned mine drainage impact to Blacks Creek. Two AMD discharges contribute approximately 50% of the pollutant loading to Blacks Creek. A previous grant provided funding to treat one of these discharges. This project is to provide funding to address the other discharge. The successful completion of the proposed passive treatment under this project is expected to neutralize about 82,000 pounds of acidity and remove 32,000 pounds of metals annually. It will eliminate 34% of the iron, 24% of the manganese and 17% of the aluminum loading to Blacks Creek

Project Title: Nye Branch Discharge Treatment System Design

Project Number: 2916

Budget: \$ 30,300

Lead Agency: Jefferson County Conservation District

Location: Pine Run, Jefferson County

Point of contact: Garry Price, DEP; Elias Heferle, DEP; Deborah Wilson, Jefferson County Conservation District

The Nye Branch is one of five major AMD pollution sources to Pine Run. The Nye Branch was identified as a high priority for remediation in the Pine Run Watershed Implementation Plan. A previous grant provided for construction of the Corbettown discharge passive treatment system. Funding through this project will provide for the final design of an AMD treatment system capable of load reductions of 59 pounds of metals, 142 pounds of acidity and removing 3.75 miles of the Nye Branch from the stream impairment list.

Project Title: Caylor Run Abandoned Mine Drainage Treatment Design
Project Number: 2917
Budget: \$ 25,300
Lead Agency: Jefferson County Conservation District
Location: Pine Run, Jefferson County
Point of Contact: Garry Price, DEP; Elias Heferle, DEP; Deborah Wilson, Jefferson County Conservation District

Caylor Run has been identified in the Pine Run Watershed Implementation Plan as a priority sub-watershed. There are nine AMD discharges on Caylor Run. Caylor Run is the largest polluting tributary in the Pine Run Watershed. This project will include water sampling and a final passive treatment system design.

Project Title: MON 40, 41, 42 AMD Design Project
Project Number: 2918
Budget: \$47,465
Lead Agency: Lawrence Township Board of Supervisors
Location: Montgomery Creek, Clearfield County
Point of Contact: Donna Carnahan, DEP; Mario Carrello, DEP; Barbara Shaffner, Lawrence Township

This project will survey, design and obtain the necessary permits for a passive treatment system to abate AMD discharges MON-40, 41, 42 to Montgomery Creek, known locally as Montgomery Run. This stream empties directly into the West Branch Susquehanna River. The Montgomery Run Watershed Implementation Plan lists this project as its #3 priority in restoring this impaired watershed. Priority #1, MON 52A design is being completed under a previous grant.

Project Title: Smouse Strip AMD Abatement Design
Project Number: 2919
Budget: \$ 110,022
Lead Agency: Anderson Creek Watershed Association
Location: Little Anderson Creek, Clearfield County
Point of Contact: Donna Carnahan, DEP; Mario Carrello, DEP; Malcom Barnes, Anderson Creek Watershed Association

This project will include a geologic investigation, design of a collection and conveyance channel, permitting and the construction of the conveyance system. The Anderson Creek Watershed Implementation Plan identifies remediation of the Smouse Strip discharges as key to reducing pollution in an unnamed tributary to Little Anderson Creek. The results of this project will help for future treatment as necessary.

Project Title: Bear Creek AMD System Repair
Project Number: 2920
Budget: \$ 23,470
Lead Agency: Dauphin County Conservation District
Location: Bear Creek, Dauphin County
Point of Contact: Garry Price, DEP; Dan Koury, DEP; John Orr, Dauphin County Conservation District

This project was originally removed from the grant, but has been reinstated. This project will Remove the failing existing vertical flow wetland and increase the retention time of Basin B. Also furnish and install flow distribution systems at the outfall of Basin B and the supply and outfall of Basin C. This would help to eliminate channelization of the water and it would provide longer retention times. Funding under this grant would compliment the remaining funds under project 2630G in the FY2006 grant to repair the Bear Creek Phase I system.

Implementation Program/Agricultural

Project Title: Trout Run Watershed Improvements
Project Number: 2921
Budget: \$ 0
Lead Agency: Erie County Conservation District
Location: Trout Run, Erie County
Point of Contact: Tim Bruno, DEP; Carl Rohr, DEP; Amy Jo Smith, Erie County Conservation District

This project was removed from the grant.

Project Title: Phase II Restoration- Conewago Creek
Project Number: 2922
Budget: \$ 52,500
Lead Agency: Dauphin County Conservation District
Location: Conewago Creek
Point of Contact: Jineen Boyle, DEP; Carl Rohr, DEP; Michael Hubler, Dauphin County Conservation District

This project is to implement agricultural best management practices on three farms identified in the approved watershed implementation plan within the Lynch Run and 1st Unnamed Tributary North sub watersheds of the Conewago Creek watershed. This is the second phase of the project and builds on the first phase which received funding in a prior 319 grant.

Project Title: Mill Creek Stream Restoration Project – Phase I

Project Number: 2923

Budget: \$ 101,187

Lead Agency: Lancaster County Conservation District

Location: Mill Creek, Lancaster County

Point of Contact: Jineen Boyle, DEP; Carl Rohr, DEP, Mathew Kofroth, Lancaster County Conservation District

This project consists of 3,200 feet of stream bank stabilization, stream bank fencing, and riparian buffer establishment along an impaired section of the Mill Creek watershed. The project will involve four property owners. A combination of mounds, rock cross vanes, log deflectors, and Christmas tree revetments will all be implemented to reduce massive stream bank erosion. This stream section was identified as high/medium priority locations for restoration in the watershed implementation plan. In 2005, a similar project was completed directly downstream from this project. With completion of this project, over 1.2 miles of stream will be restored.

Project Title: BMPs in the Hungry Run Watershed

Project Number: 2924

Budget: \$ 0

Lead Agency: Mifflin County Conservation District

Location: Hungry Run Watershed, Mifflin County

Point of Contact: Mark Mathews, DEP; Carl Rohr, DEP; Cadie Pruss, Mifflin County Conservation District

This project was removed from the grant.

Project Title: Implementing the Watershed Plan: Upper Kishacoquillas Creek

Project Number: 2925

Budget: \$ 0

Lead Agency: Mifflin County Conservation District

Location: Upper Kish Creek, Mifflin County

Point of Contact: Mark Mathews, DEP; Carl Rohr, DEP; Cadie Pruss, Mifflin County Conservation District

This project was removed from the grant.

Implementation Program – Stormwater/Urban

Project Title: Design and Installation of Large Storm Water BMP in Harveys Lake

Project Number: 2926

Budget: \$ 0

Lead Agency: Harveys Lake Borough

Location: Harveys Lake, Luzerne County

Point of Contact: Ron Yablonsky, DEP; Barb Lathrop, DEP; Laurence Lucarino, Harveys Lake Borough

This project was removed from the grant.

Project Title: Hershey Meadows Stream Restoration Project (Phase II)

Project Number: 2927

Budget: \$ 0

Lead Agency: Tri-County Conewago Creek Association

Location: Conewago Creek, Dauphin and Lancaster Counties

Point of Contact: Jineen Boyle, DEP; Carl Rohr; Mathew Royer, Tri-County Conewago Creek Association

This project was removed from the grant.

Project Title: Stormwater Retrofit Project - Phase II

Project Number: 2928

Budget: \$ 475,250

Lead Agency: Borough of Mount Pleasant

Location: Jacob's Creek, Westmoreland County

Point of Contact: Rita Graham, DEP; Steve Lathrop, DEP; Jeff Landy, Borough of Mount Pleasant

This storm water retrofit phase II project will include the design and construction of storm water bioretention/infiltration best management practices (BMPs) in municipal and commercial parking areas and residential sites. These BMPs will be designed to remove the first inch of runoff volume and some water borne pollutants associated with the runoff. Phase I identified areas for storm water volume control and constructed seven BMPs at four locations. Phase II will continue the restoration of Shupe Run, an impaired tributary within the Jacobs Creek watershed.

Project Title: Scottdale Stormwater Retrofit Project

Project Number: 2929

Budget: \$ 167,500

Lead Agency: Jacobs Creek Watershed Association

Location: Jacobs Creek, Westmoreland County

Point of Contact: Rita Graham, DEP; Steve Lathrop, DEP; Tom Michael Barrick, Jacobs Creek Watershed Association

This storm water retrofit project will design, construct and implement storm water bioretention/infiltration (rain gardens) best management practices (BMPs) in municipal and commercial parking areas. These BMPs will be designed to remove the first inch of runoff volume and some water borne pollutants associated with the runoff. The receiving stream for the runoff is Stauffer Run, a tributary to Jacobs Creek impaired from urban runoff and abandoned mine drainage. The project will also identify municipal, commercial and residential areas where additional storm water BMPs can be successfully implemented.

Project Title: Crouse Run Stream Restoration Project

Project Number: 2930

Budget: \$ 46,641

Lead Agency: Pine Creek Land Conservation Trust

Location: Pine Creek, Allegheny County

Point of Contact: Jeff Fliss, DEP; Joe Kelly, DEP; Jan Ridenour, Pine Creek Land Conservation Trust

This project was removed from the grant.

Project Title: Implementation of BMPs in Watersheds

Project Number: 2931

Budget: \$ 1,707,755

Lead Agency: DEP, Bureau of Watershed Management

Location: Multiple

Point of Contact: Russell Wagner, DEP

This project provides financial assistance to implement BMPs identified in watersheds on streams identified as impaired by PA DEP for aquatic uses. These projects can be in watersheds with or without Watershed Restoration Plans that have been accepted by EPA or within watersheds having or not having a TMDL. Funding of BMPs in these watersheds will help reduce nonpoint source loads, achieve load reductions, restore designated uses, and with the ultimate goal of removing stream segments from the DEP Integrated Quality Monitoring and Assessment Report 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 approval.

Project Title: Conowingo Creek Pilot Program
Project Number: 2931A
Budget: \$ 221,505
Lead Agency: Trout Unlimited, Donegal Chapter
Location: Conowago Creek, Lancaster County
Point of Contact: Carl Rohr, DEP; Glen Nephin, Trout Unlimited, Donegal Chapter

This project will be a continuation of the stream restoration work that has been completed on upstream sections of the Conowingo Creek and tributaries as part of project 2821 in our FY2008 grant. The affected stream reach is within the upper one-half of the watershed. The project location is identified in the Conowingo Creek Watershed Implementation Plan (WIP) as Site #33.

The completed TMDL and WIP clearly point to sediment, nutrient, organic enrichment and low dissolved oxygen impairments in the Conowingo Creek watershed. The proposed project will address these impairments by reducing direct sediment loading to the stream and reducing nutrient inputs through better use of adjoining pasture and hay lands, and minimizing livestock access to the stream.

Project Title: Hershey Meadows Stream Restoration Project (Phase II)
Project Number: 2931B
Budget: \$ 222,000
Lead Agency: Tri-County Conowago Creek Association
Location: Conowago Creek, Dauphin and Lancaster Counties
Point of Contact: Jineen Boyle, DEP; Carl Rohr; Mathew Royer, Tri-County Conowago Creek Association

This project will continue work from a previous 319 grant that was awarded to do design work. Phase II will restore approximately 2,705 linear feet of the main stem Conowago Creek using fluvial geomorphology methods and habitat enhancement measures, including planting 100-foot wide forest riparian buffers. Phase II also includes restoration of approximately 15 acres of wetlands adjacent to the Conowago Creek. The load reduction for sediment as a result of this project is estimated to be 230 tons per year. This project was originally listed as project 2927.

Project Title: Trout Run Watershed Improvements
Project Number: 2931C
Budget: \$ 247,825
Lead Agency: Erie County Conservation District
Location: Trout Run, Erie County
Point of Contact: Tim Bruno, DEP; Carl Rohr, DEP; Amy Jo Smith, Erie County Conservation District

This project is to address the Watershed Implementation Plan for Trout Run and Godfrey Run, both of which drain directly into Lake Erie. This project will involve stream bank restoration, agricultural BMP implementation, septic system programming, education and monitoring activities. A second 319 project addressing another phase of the watershed implementation plan is project 2931J in this grant.

Project Title: Brush Run Restoration Project
Project Number: 2931D
Budget: \$ 128,650
Lead Agency: Jacobs Creek Watershed Association
Location: Brush Run, Westmoreland County
Point of Contact: Joe Kelly, DEP; Rita Graham, DEP; Michael Barrick, Jacobs Creek Watershed Association

This project will include the design and implementation of both agricultural BMPs and stream bank stabilization practices with the goal of reducing sediment and nutrient loadings in Brush Run and ultimately Jacobs Creek. Five different ag BMPs will be installed and 2,500 feet of stream bank stabilized.

Project Title: Little Sherrick Run Restoration Project
Project Number: 2931E
Budget: \$ 121,830
Lead Agency: Jacobs Creek Watershed Association
Location: Little Sherrick Run, Westmoreland County
Point of Contact: Joe Kelly, DEP; Rita Graham, DEP; Michael Barrick, Jacobs Creek Watershed Association

The Sherrick Run Tributary to Jacobs Creek is degraded from urban runoff. This project will focus on multiple sites with multiple BMPs to improve water quality. Grass lined swales, infiltration and bio-retention beds from parking lot runoff and stream bank stabilization on multiple residential properties will be completed.

Project Title: Rain Garden Alliance Pine Creek Project
Project Number: 2931F
Budget: \$ 90,000
Lead Agency: Audubon Society of Western Pennsylvania
Location: Pine Creek, Allegheny County
Point of Contact: Joe Kelly, DEP; Jeff Fliss, DEP; Jim Leaman, Codorus Creek Watershed Association

One of the most effective least expensive places to address storm water is at its source. This project will facilitate the installation of a sufficient number of rain gardens with a combined capacity to retain up to 2 million gallons of water annually removing it from the storm and sewer systems. Homeowners will be identified and gardens installed with homeowner involvement. The average rain garden size will be 200 square feet.

Project Title: SBCC Floodplain Restoration – Shrewsbury Township

Project Number: 2931G

Budget: \$ 100,000

Lead Agency: Codorus Creek Watershed Association

Location: South Branch Codorus Creek, York County

Point of Contact: Joe Kelly, DEP; Jineen Boyle, DEP; Jim Leaman, Codorus Creek Watershed Association

The South Branch Codorus Creek is impaired by excess sediment and nutrients. A TMDL was developed in 2002 and a Watershed Implementation Plan prepared in 2007. This project will design, permit and construct 700 linear feet of stream channel/flood plain restoration, 900 feet of stream bank stabilization and 1.2 acres of riparian buffer planting. Expected benefits of this project include a significant reduction in the erosion of sediment to the stream, enhanced bed load sediment transport, improved aquatic habitat and establishment of riparian buffers. The project will also create an estimated 3.6 acre-feet of new flood storage, which will reduce the frequency and impact of flooding downstream in the town of Glen Rock.

Project Title: South Sandy AMD Project #5

Project Number: 2931H

Budget: \$ 30,000

Lead Agency: South Sandy Creek Watershed Association

Location: Williams Run-South Sandy Creek, Venango County

Point of Contact: Donna Carnahan, DEP; Eli Heferle, DEP; Valarie Tarkowsky, South Sandy Creek Watershed Association

The goal is to remove coal refuse and acid soils (refuse pile). Removal of these materials will eliminate the pollution problem – acid mine drainage caused by past mining practices. This project is to complete the first step by conducting exploratory drilling and sampling of material to determine the source of the problem. The material needs to be evaluated for content composition to determine value for removal to be used as a fuel source in generating power. Removing the refuse pile will eliminate the need for costly treatment systems and operation and maintenance, thus saving hundreds of thousands of dollars in future costs.

Project Title: Barshinger Run Watershed Renaissance Initiative

Project Number: 2931I

Budget: \$ 211,128

Lead Agency: Codorus Creek Watershed Association

Location: Barshinger Creek, York County

Point of Contact: Joe Kelly, DEP; Jineen Boyle, DEP; Jim Leaman, Codorus Creek Watershed Association

Barshinger Run is the largest, single source of sediment and nutrients entering East Branch of Codorus Creek. This project is to design and implement 2,400 feet of stream stabilization on Barshinger Run. The end result will provide a major reduction of bank erosion and sediment inputs to enhanced aquatic habitat for macroinvertebrates and finfish and preserving and creating a riparian buffer along both banks of Barshinger Run. A riparian buffer of 35-100 feet width on

both sides of the stream is proposed along with the installation of cattle crossings and 2 wire high tensile fences for cattle exclusion.

Project Title: Trout Run Watershed Improvements

Project Number: 2931J

Budget: \$ 150,000

Lead Agency: Erie County Conservation District

Location: Trout Run, Erie County

Point of Contact: Tim Bruno, DEP; Carl Rohr, DEP; Amy Jo Smith, Erie County Conservation District

This project is to address the Watershed Implementation Plan for Trout Run and Godfrey Run, both of which drain directly into Lake Erie. The major goals of the project are to reduce sedimentation and nutrient loading in Trout Run. Major budget items for this project include design and construction costs for BMPs, design and construction costs for stream bank stabilization (including riparian area), septic system testing and repairs and NMPs. A second 319 project addressing another phase of the watershed implementation plan is project 2931C in this grant.

Grant Match

Project Title: Conservation District Fund Allocation Program (Match)

Project Number: N/A

Budget: \$ 1,835,200 (state match)

Lead Agency: Bureau of Water Quality Protection

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 (state match)

Lead Agency: Bureau of Watershed Conservation

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.