

PENNSYLVANIA NONPOINT SOURCE PROGRAM
FY2005 PROJECT SUMMARY

Base Program/District Staff

Project Title: Conservation District Mining Program

Project Number: 2501

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 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.

Project Title: Conservation District Mining Program

Project Number: 2502

Budget: \$ 125,000

Lead Agency: Eastern Pennsylvania Coalition for Abandoned Mine Reclamation (EPCAMR)

Location: Anthracite and northern bituminous regions of Pennsylvania

Point of Contact: Garry Price, DEP or Robert Hughes, 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 having acid mine discharge.

Base Program/DEP Staff

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

Project Number: 2503

Budget: \$ 1,323,533

Lead Agency: Bureau of Watershed Management

Location: DEP Regional Offices/DEP Central Office

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. A total of 10 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, three water pollution biologists, a hydrogeologist, 2 conservation program specialists, an environmental planner 2, a clerk typist and an administrative assistant. This project will require an additional \$ 263,120 in indirect costs.

Base Program

Project Title: Citizen Monitoring Program

Project Number: 2504

Budget: \$ 70,000

Lead Agency: 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, 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, implement a statewide "snapshot" report, train and equip 14 lake associations and provide sample analysis through DEP lab and hold various workshops. This project will require an additional \$ 13,916 in indirect costs.

Project Title: Statewide NPS Education Office
Project Number: 2505
Budget: \$ 175,000
Lead Agency: Pennsylvania Association of Conservation Districts (PACD)
Location: Statewide
Point of Contact: Fran Koch, 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 information packets, brochures, a newsletter and other educational products as requested by the conservation districts and the Nonpoint Source Management Section. PACD also has an Education Subcommittee that provides recommendations.

Project Title: Watershed Education for Pollution Prevention-VI
Project Number: 2506
Budget: \$ 100,000
Lead Agency: League of Women Voters of PA-Citizen Education Fund (LWV-CEF)
Location: Statewide
Point of Contact: Fran Koch, DEP

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 focusing on mitigating or preventing pollution in degraded watersheds. An important part of these coalitions is that they must include the municipalities and that each organization receiving a grant must send a representative to the orientation/training workshop. This project will also provide support for the coalitions to complete their projects, to raise public awareness and literacy, and to facilitate action in protecting community water resources. The maximum amount for each project is \$5,000.

Project Title: TMDL Watershed Restoration Plans
Project Number: 2507
Budget: \$ 20,000
Lead Agency: Bureau of Watershed Management
Location: Selected Watersheds
HUC Code: Various
State Water Plan Watershed: Yet to be determined
303 (d) Listed: yes
Point of Contact: Steve Lathrop, DEP

This project is an effort to establish a mechanism to provide assistance in developing watershed restoration plans in watersheds where TMDLs have been developed. This effort will involve various local watershed associations identified in specific watersheds where TMDLs have been developed. The goal is to have local stakeholder support and input in the development of the restoration plan for the watershed which will meet the goal of addressing

the TMDL and its intended reductions of the nonpoint source pollutant to be addressed. In addition to involvement of local stakeholders, there will be technical support provided through yet unselected vendors to interact with the local stakeholders to write the specific restoration plan and yet unselected vendors to provide technical support including estimated costs for best management practices selected by the local stakeholders and associated pollution reductions expected as a result of implementation of the best management practices. This project will require an additional \$ 3,976 in indirect costs.

Project Title: Statewide Lake Water Quality Assessments

Project Number: 2508

Budget: \$ 10,000

Lead Agency: 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. This project will require an additional \$ 1,988 in indirect costs.

National Monitoring Projects:

Project Title: Villanova Stormwater National Monitoring Program

Project Number: 2509

Budget: \$ 56,630

Lead Agency: Villanova University

Location: Mill Creek, Montgomery County

HUC Code: 2040205

State Water Plan Watershed: 03G

303(d) Listed: Yes

Point of Contact: Fran Koch, DEP; Dr. Robert Traver, Villanova University

This project will continue to collect and monitor inflow and outflow non-point source flow and pollutant loadings entering and leaving three urban stormwater Best Management Practices (BMP) located on the Villanova University campus: Infiltration – Porous Concrete Infiltration Demonstration Site; Bioinfiltration Traffic Island; and infiltration Trench. To measure the difference in flow volume and peak for wet weather flows. To develop pollutant Event Mean Concentrations for each storm (entering and exiting). To develop pollutant and flow averages for base flow conditions. This project joined the Section 319 Nonpoint Source National Monitoring Program in FY2004. All data collected will be included in STORET and the National BMP Database.

Project Title: Riparian Forest Buffer Monitoring Program

Project Number: 2510

Budget: \$ 106,778

Lead Agency: Stroud Water Research Center

Location: Brandywine Creek Watershed, Chester County

HUC Code: 2040205

State Water Plan Watershed: 03H

303(d) Listed: Yes

Point of Contact: Carl Rohr, DEP; J. Denis Newbold, Stroud Water Research Center

Riparian forest buffers are increasingly recommended and advocated as a management practice that can both improve stream habitat and reduce the surface and subsurface transport of agricultural nonpoint source pollutants to streams. Although studies that quantify these reductions have been made in coastal plain watersheds, similar data are not available for upland regions. This project will continue to monitor, evaluate, and document the benefits of an experimental riparian reforestation in an agricultural watershed beyond the initial five-year period after riparian forest buffer establishment.

Project Title: Swatara Creek National Monitoring Program

Project Number: 2511

Budget: \$ 143,619

Lead Agency: Schuylkill County Conservation District

Location: Swatara Creek, Schuylkill County

HUC Code: 2050305

State Water Plan Watershed: 07D

303(d) Listed: Yes

Point of Contact: Jane Earle, DEP; Dan Koury, DEP; Tom Davidock, Schuylkill County Conservation District

This is the only National Monitoring Project in the country involving abandoned mine drainage (AMD) discharges. The objectives of this project are to evaluate the long-term performance of innovative passive treatment systems for neutralizing acidity and removing iron and aluminum and the long-term effects on the water quality of streams in the upper Swatara Creek watershed. The 319 funding commitments are to continue long term funding for this site for FY 2005.

Implementation Program/Abandoned Mine Drainage

Project Title: Brewster Hollow AMD Remediation

Project Number: 2512

Budget: \$ 28,680

Lead Agency: Broad Top Township

Location: Six Mile Run, Bedford County

HUC Code: 2050303

State Water Plan Watershed: 11D

303(d) Listed: Yes

Point of Contact: Jane Earle, DEP; Joe Allison, DEP; Ernest Fuller, Broad Top Township

The AMD assessment and restoration plan for Six Mile Run watershed identified these two AMD discharges in the headwaters of Brewster Hollow Run as top priorities for remediation. The treatment of these discharges will have a significant impact on improving water quality and will essentially restore the upper two miles of Brewster Hollow Run. This project includes surveying, final engineering, permitting, construction materials equipment, and labor for implementation of the treatment system designs.

Project Title: Six Mile Run Discharge SXO-D2 AMD Remediation

Project Number: 2513

Budget: \$ 151,239

Lead Agency: Broad Top Township

Location: Six Mile Run, Bedford County

HUC Code: 2050303

State Water Plan Watershed: 11D

303(d) Listed: Yes

Point of Contact: Jane Earle, DEP; Joe Allison, DEP; Ernest Fuller, Broad Top Township

This discharge, identified as a priority discharge in the Six Mile Run Watershed Restoration Plan, is located in the headwaters of the main stem of Six Mile Run. This work plan includes the components of engineering, permitting, construction, and construction inspection. Conceptual design was developed using a limestone pond for primary treatment of the discharge and a settling pond to capture aluminum.

Project Title: Remediation of the Tracey Airhole AMD Discharge

Project Number: 2514

Budget: \$ 250,000

Lead Agency: Schuylkill County Conservation District

Location: Good Spring Creek/ Swatara Creek, Schuylkill County

HUC Code: 2050305

State Water Plan Watershed: 7D

303(d) Listed: Yes

Point of Contact: Jane Earle, DEP; Dan Koury, DEP; Tom Davidock , Schuylkill County Conservation District

The TMDL and assessment focusing on nonpoint source pollution rank the Tracey Airhole Discharge as the most severely polluted in the Good Spring Creek watershed because of its high flow and high concentrations of iron. This project calls for the construction of a passive treatment system consisting of an aerobic wetland system. Treatment of this discharge will removal substantial amount of iron loading from Good Spring Creek.

Project Title: Klondike Mine Construction

Project Number: 2515

Budget: \$ 391,512

Lead Agency: Clearfield Creek Watershed Association

Location: Little Laurel Run, Cambria County

HUC Code: 2050201

State Water Plan Watershed: 8C

303(d) Listed: Yes

Point of Contact: Jane Earle, DEP; Joe Allison, DEP; Arthur Rose, Clearfield Creek Watershed Association

This project proposes to construct two passive treatment systems on two discharges that contribute 30% of the acid and iron to Little Laurel Run, a tributary of Clearfield Creek. The proposed systems are vertical flow ponds (SAPS) with associated settling ponds and wetlands. In addition to the two passive treatment systems, a small stream that falls over a highwall and infiltrates into unreclaimed strip mine spoils will be restored to its original channel. This stream restoration will decrease the flow of one discharge and direct the good quality water of this stream directly into Little Laurel Run.

Project Title: Arnot No. 2 Mine AMD Treatment System Construction

Project Number: 2516

Budget: \$ 359,501

Lead Agency: Arnot Sportmen's Club (Applicant)
Babb Creek Watershed Association, Inc. (Sponsor)

Location: Johnson Creek, Tioga County

HUC Code: 2050104

State Water Plan Watershed: 4A

303(d) Listed: Yes

Point of Contact: Jane Earle, DEP; Tanya Montefusco, DEP; Robert McCullough, Babb Creek Watershed Association, Inc.

The abandoned Arnot No. 2 discharge remediation was addressed in the Upper Tioga River Watershed Assessment and Remediation Plan. The design and permitting of a proposed passive treatment system for the discharge was funded through a FY2002 319 NPS grant. The proposed passive treatment system will consist of a two-pass limestone pond system with associated settling basins. The proposed treatment system is expected to remove an estimated annual loading of nine tons of acidity and one-half ton of aluminum from Johnson Creek.

Project Title: Hubler Run 1 AMD Treatment System Rehabilitation

Project Number: 2517

Budget: \$ 122,337

Lead Agency: West Branch Sportsman's Association (Applicant)
Emigh Run/Lakeside Watershed Assn., Inc. (sponsor)

Location: Hubler Run/Alder Run, Clearfield County

HUC Code: 2050201

State Water Plan Watershed: 8C

303(d) Listed: Yes

Point of Contact: Jane Earle, DEP; Mario Carrello, DEP; Anna Mae Pezzulla, Emigh Run/Lakeside Watershed Assn., Inc.

This project will include design and construction of the necessary improvements to the existing Hubler Run #1 passive treatment system so the discharge will have sufficient quality to restore the fishery of Hubler Run. The current performance of the system does not indicate problem with construction or maintenance; however, the system has been experiencing average flows much higher than the design flows and does not have the capacity to treat the larger flows. The improvements include: (1) divide the limestone trench into two components, (2) install additional drainage pipe in the existing limestone trench and cell, and (3) construct an additional series of treatment components.

Project Title: Benedict Mine AMD Passive Treatment System

Project Number: 2518

Budget: \$ 37,600

Lead Agency: Shoup Run Watershed Association (Sponsor)
Huntingdon County Conservation District (Fiscal Agent)

Location: Shoup Run, Huntingdon County

HUC Code: 2050203

State Water Plan Watershed: 11D

303(d) Listed: Yes

Point of Contact: Jane Earle, DEP; Joe Allison, DEP, Andy Patterson, Huntingdon County
Conservation District

This project will treat the Benedict abandoned deep mine discharge. The work plan includes engineering, permitting, construction and construction inspection. Completion of this passive treatment system along with the treatment system planned for the Old Never Sweat Mine discharge will restore approximately one mile of an unnamed tributary to Shoup Run and provide additional alkalinity to Shoup Run. This project is one of the priority remediation projects included in the Shoup Run Restoration Plan developed by the Huntingdon County Conservation District through a 319 grant.

Project Title: Old Never Sweat Mine AMD Passive Treatment System

Project Number: 2519

Budget: \$ 151,500

Lead Agency: Shoup Run Watershed Association (Sponsor)
Huntingdon County Conservation District (Fiscal Agent)

Location: Shoup Run, Huntingdon County

HUC Code: 2050203

State Water Plan Watershed: 11D

303(d) Listed: Yes

Point of Contact: Jane Earle, DEP; Joe Allison, DEP, Andy Patterson, Huntingdon County
Conservation District

This project will treat the Old Never Sweat abandoned deep mine discharge. The work plan includes engineering, permitting, construction and construction inspection. Completion of this passive treatment system along with the planned treatment system for the Benedict Mine discharge will restore approximately one mile of an unnamed tributary to Shoup Run and provide additional alkalinity to Shoup Run. Treatment will consist of a limestone pond and settling basin and a final wetland polishing pond. This project is one of the priority remediation projects included in the Shoup Run Restoration plan developed by the Huntingdon County Conservation District through a 319 grant.

Project Title: Presto-Sygan AMD Remediation [REMOVED FROM GRANT]

Project Number: 2520

Budget: \$

Lead Agency:

Location:

HUC Code:

State Water Plan Watershed:

303(d) Listed:

Point of Contact:

Project Title: Passive Alkalinity Addition Project at State Game Lands #67

Project Number: 2521

Budget: \$ 75,021

Lead Agency: Shoup Run Watershed Association (Sponsor)

Huntingdon County Conservation District (Fiscal Agent)

Location: Miller Run/ Shoup Run, Huntingdon County

HUC Code: 2050303

State Water Plan Watershed: 11D

303(d) Listed: Yes

Point of Contact: Jane Earle, DEP; Joe Allison, DEP, Andy Patterson, Huntingdon County Conservation District

This project will replace the current surface of a gravel township road that parallels Miller Run through State Game Lands #67 for 2 miles. The road has been maintained with waste shale from nearby coal mining operations and currently flushes out loose acidic material into the lowly buffered Miller Run during storm events. The road surface will be replaced with limestone aggregate and will include anoxic limestone under drains and outlets to channel runoff. The road resurfacing will provide long-term alkalinity addition to Miller Run. This project along with the installed or planned additional passive treatment systems and earlier limestone sand addition will provide for full restoration of Miller Run from acidic conditions to a near-neutral pH environmental that will support trout and aquatic macroinvertebrates. This project is one of the priority remediation projects included in the Shoup Run Restoration Plan developed by the Huntingdon County Conservation District through a 319 grant.

Project Title: North Fork Montour Run Restoration – Phase I **[REMOVED FROM GRANT]**

Project Number: 2522

Budget: \$

Lead Agency:

Location:

HUC Code:

State Water Plan Watershed:

303(d) Listed:

Point of Contact:

Project Title: Corbettown Discharge Constructed Wetlands

Project Number: 2523

Budget: \$ 301,055 (\$270,317 319 grant/\$30,738 Growing Greener grant)

Lead Agency: Jefferson County Conservation District

Location: Pine Run/ Mahoning Creek, Jefferson County

HUC Code: 5010006

State Water Plan Watershed: 17D

303(d) Listed: Yes

Point of Contact: Jane Earle, DEP, Sherry Carlin, Knox District Mining Office, Deborah Wilson, Jefferson County Conservation District

This project will provide treatment of the largest producer of iron in the Pine Run watershed, as determined by the Pine Run Watershed Nonpoint Source Pollution Assessment. This discharge accounts for 94% of the iron and 10% of the aluminum entering Pine Run. Remediation of this discharge will eliminate 116 tons of iron per year and restore the biological integrity of Pine Run. Prior discharge water quality monitoring has indicated that this net alkaline discharge would be treatable through construction of 3 pre-treatment wetlands cells, 3 multi-celled aerobic wetlands, and a final polishing pond. The Pine Run Watershed Association, a partner in the project, will provide long-term operation and maintenance and monitoring of environmental benefits of the project.

Project Title: Blacks Creek: BC16 Remediation Project

Project Number: 2524

Budget: \$ 151,740

Lead Agency: Stream Restoration, Inc.

Location: Blacks Creek/ Slippery Rock Creek, Butler County

HUC Code: 5030105

State Water Plan Watershed: 20C

303(d) Listed: Yes

Point of Contact: Jane Earle, DEP, Elias Heferle, Knox DMO, Margaret Dunn, Stream Restoration Inc.

This project will address a discharge, from an abandoned oil well known as BC16, which discharges degraded water into an unnamed tributary of Blacks Creek. The passive treatment system for the BC16 discharge will consist of an aerobic wetland and a horizontal flow limestone bed. This project is part of a large-scale restoration effort for Blacks Creek and Slippery Rock Creek through reclamation of abandoned mine lands and treatment of abandoned mine discharges. Completion of all planned treatment phases would significantly improve a 3.5-mile segment of Blacks Creek and downstream Slippery Rock Creek. Biological and chemical monitoring will be conducted to determine the effects of the treatment systems on Blacks Creek. The Slippery Rock Watershed Coalition, a public-private partnership, is addressing long-term maintenance issues through establishment of a trust fund.

Project Title: Bolich Wetland Project

Project Number: 2525

Budget: \$ 46,000

Lead Agency: Mahanoy Creek Watershed Association

Location: Mahanoy Creek, Schuylkill County

HUC Code: 2050301

State Water Plan Watershed: 6B

303(d) Listed: Yes

Point of Contact: Garry Price, DEP; Dan Koury, DEP, Pottsville; Roseann Wenrich, Mahanoy Creek Watershed Association

Project includes the construction of a 1.5 acre passive treatment wetland along the Mahanoy Creek that will remove iron from approximately 800,000 gallons per day. It is estimated that the project will remove 185 pounds of iron per day.

Implementation Program/Agricultural

Project Title: Farm BMP's on Dave Byler Farm

Project Number: 2526

Budget: \$ 66,276

Lead Agency: Mifflin County Conservation District

Location: Little Kishacoquillas (Kish) Creek, Mifflin County

HUC Code: 2050304

State Water Plan Watershed: 12A

303(d) Listed: Yes

Point of Contact: Carl Rohr, DEP; Mark Mathews, DEP SCRO; Mike Stuck, Mifflin County Conservation District

This proposal will help reduce excess nutrients in Little Kish Creek from barnyard and hillside runoff through installation of 2,500 feet of streambank fencing, riparian buffer plantings using native species, and filter areas. Mr. Byler's farm is located in one of the most intensely farmed areas in Mifflin County and on an impaired (303d listed) segment of the Little Kish Creek. These BMP's also address impaired segments identified during the upper Kish Creek Watershed Assessment and the recommendations of the Juniata Watershed Management Plan to reduce nutrient runoff from agricultural areas, with the goal of restoring Kish Creek watershed.

Project Title: Farm BMP's on Shawn Yoder's Farm

Project Number: 2527

Budget: \$ 30,410

Lead Agency: Mifflin County Conservation District

Location: Kishacoquillas (Kish) Creek, Mifflin County

HUC Code: 2050304

State Water Plan Watershed: 12A

303(d) Listed: Yes

Point of Contact: Carl Rohr, DEP; Mark Mathews, DEP SCRO; Mike Stuck, Mifflin County Conservation District

This proposal will help reduce excess nutrients in Kish Creek from barnyard and hillside runoff through installation of 2,500 feet of streambank fencing, riparian buffer plantings using native species, and filter areas. Mr. Byler's farm is located in one of the most intensely farmed areas in Mifflin County and on an impaired (303d listed) segment of the Kish Creek. These BMP's address impaired segments identified during the upper Kish Creek Watershed Assessment and the recommendations of the Juniata Watershed Management Plan to reduce nutrient runoff from agricultural areas, with the goal of restoring Kish Creek watershed.

Project Title: Agricultural BMP's for the Conestoga Watershed

Project Number: 2528

Budget: \$ 178,000

Lead Agency: Lancaster County Conservation District

Location: Conestoga River, Lancaster County

HUC Code: 2050306

State Water Plan Watershed: 07J

303(d) Listed: Yes

Point of Contact: Carl Rohr, DEP; Jay Braund, DEP SCRO; Matt Kofroth, Lancaster County Conservation District

This project will provide cost share opportunities for the installation of Agricultural Best Management Practices (BMP's) in the Conestoga River watershed. The majority of streams in the Conestoga River watershed are on the 303d list as impaired by agricultural runoff and are some of the major sources of excess nutrients and sediment to the Chesapeake Bay. This project will help improve water quality in the watershed by implementing BMP's in areas adjacent to impaired stream segments. Load reductions necessary in these impaired areas of the watershed will be further addressed in a TMDL to be completed in 2004-2005. The TMDL will provide focal points for state and federal agencies involved in the Chesapeake Bay Tributary Strategy to clean up the Bay.

Project Title: Sustaining the Farming Community in the Mill Creek watershed

Project Number: 2529

Budget: \$ 100,000

Lead Agency: Izaak Walton League

Location: Mill Creek, Lancaster County

HUC Code: 2050306

State Water Plan Watershed: 07J

303(d) Listed: Yes

Point of Contact: Carl Rohr, DEP; Jineen Boyle, DEP SCRO; Gwyn Rowland, Izaak Walton League

Through this project the Izaak Walton League will help the Mill Creek Partnership build the capacity of farming families in the Mill Creek watershed by engaging 50 or more Amish families in Lancaster County in stream bank fencing, riparian buffer plantings and implementation of BMPs for small farms. The League will also assist in establishing a local watershed association. These BMP projects will help sustain the farming community and also help protect and restore living resources and the water quality of the Chesapeake Bay. Agricultural activities in Lancaster and Lebanon Counties are the major contributors of excess nitrogen to the upper Bay and rank the highest in need for restoration.

Project Title: Spring Run Agricultural BMP Nutrient Reduction Project

Project Number: 2530

Budget: \$ 78,715

Lead Agency: Fulton County Conservation District

Location: Spring Run/ Licking Creek

HUC Code: 2070004

State Water Plan Watershed: 13B

303(d) Listed: Yes

Point of Contact: Russell Wagner, DEP; Rick Devore, DEP SCRO; Scott Alexander, Fulton County Conservation District

This project is for implementation of agricultural BMP's at three agricultural operations along the main stem of Spring Run, a small limestone stream in the Potomac River basin of Fulton County. These projects are part of an overall comprehensive plan for each operation and will measurably reduce nutrient and sediment loading to Spring Run, the Potomac River and the Chesapeake Bay. These projects will build upon other restoration projects in the watershed including aggressive streambank fencing. The BMPs to be funded here include relocation of a feed area for a small dairy herd and stormwater runoff controls; assistance for funding of a roofed barnyard into an environmentally sound feeding area; and runoff controls, enhanced off-stream watering systems and additional streambank fencing.

Project Title: Eagle Scout Pasture Improvement/ Nonpoint Source Reduction

Project Number: 2531

Budget: \$ 7,800

Lead Agency: Bucks County Conservation District

Location: Neshaminy Creek

HUC Code: 2040201

State Water Plan Watershed: 02F

303(d) Listed: Yes

Point of Contact: Russell Wagner, DEP; Joseph Schlosser, SERO; Bill McFadden, Bucks County Conservation District

This project includes the installation of three agricultural best management practices for implementation of a rotational grazing system. The project will take place on a farm that is under permanent easement through the Buckingham Township Farmland Preservation Program and has 3,000 feet of stream frontage on the Neshaminy Creek.

Implementation Program - Stormwater/Urban

Project Title: East Branch Codorus Creek Phase V Restoration

Project Number: 2532

Budget: \$ 49,000

Lead Agency: Izaak Walton League

Location: East Branch Codorus Creek

HUC Code: 2050306

State Water Plan Watershed: 07H

303(d) Listed: Yes

Point of Contact: Fran Koch, DEP; Rick Devore, DEP SCRO; Thomas Kornbau, Izaak Walton League

This project will continue the stream restoration of the East Branch Codorus Creek, on additional stream segments that were identified as severely impaired during the watershed assessment. This funding will allow completion of stream restoration on an identified segment that was not completed due to limited funds.

Project Title: Millers Run Stream Restoration Phase II- Design

Project Number: 2533

Budget: \$ 33,770

Lead Agency: Little Conestoga watershed Alliance (LCWA)

Location: Millers Run/Little Conestoga Creek, Lancaster County

HUC Code: 2050306

State Water Plan Watershed: 07J

303(d) Listed: Yes

Point of Contact: Russell Wagner, DEP; Jineen Boyle, DEP SCRO; Michelle Spitko, LCWA

This project will provide funding for design and permitting of the second phase of Millers Run restoration as identified in the Little Conestoga Creek basin-wide assessment and restoration plan. Millers Run is a small tributary to the Little Conestoga Creek whose headwaters were severely impacted by accelerated erosion and sedimentation due to poorly managed stormwater runoff from intense residential development constructed prior to the 1988 adoption of municipal stormwater management ordinances. Restoration and stormwater control measures to be designed include specifications for regarding and stabilization of streambanks, use of instream aquatic habitat and flow control structures, and establishment of tree and shrub riparian buffers.

Project Title: Wissahickon Shade Buffer Project
Project Number: 2534
Budget: \$ 1,500
Lead Agency: Wissahickon Valley Watershed Association
Location: Sandy Run/Wissahickon Creek, Montgomery County
HUC Code: 2040203
State Water Plan Watershed: 03F
303(d) Listed: Yes
Point of Contact: Steve Lathrop, DEP; Dennis Harney, SERO; Robert B. Adams, WVWA

This project will establish a tree and shrub riparian buffer along a section of Sandy Run, a tributary of the Wisshickon Creek. Monthly monitoring of stream temperature and dissolved oxygen will also be conducted. Local Eagle Scout candidates will plant the buffer.

Project Title: Monastery Stables Runoff Control Project
Project Number: 2535
Budget: \$ 80,380
Lead Agency: Fairmount Park Commission/ NLREEP
Location: Wissahickon Creek, Philadelphia
HUC Code: 2040203
State Water Plan Watershed: 03F
303(d) Listed: Yes
Point of Contact: Carl Rohr, DEP; David Talley, DEP SERO, Tom Witmer, Fairmount Park Commission

This project will correct problems contributing to nutrient laden stormwater flowing from the Monastery Stables into the Wissahickon Creek in Wissahickon Valley Park, in Philadelphia. Stormwater will be captured with a system of on-site best management practices and infiltrate the runoff so that sediment and nutrients no longer reach the creek. The water infiltration will also allow groundwater replenishment. The variety of BMPs used will also eliminate erosion on the forested hillside, reduce stormwater surges to the creek, repair eroded gullies, allow drier surfaces for horses, reduce extent of exotic invasive plants, and educated the public about the effects of stormwater erosion and sedimentation.

Project Title: Prioritization of BMP's and implementation of watershed projects

Project Number: 2536

Budget: \$ 85,000

Lead Agency: Borough of Harveys Lake

Location: Harveys Lake, Luzerne County

HUC Code: 2050107

State Water Plan Watershed: 05C

303(d) Listed: Yes

Point of Contact: Barbara Lathrop, DEP; Ron Yablonsky, DEP NERO, Betty Jane West, Harveys Lake Borough

This is a continuation of the Boro's long-term efforts to restore and protect the valuable natural resources of Harveys Lake and Creek following the management plan for the watershed developed under EPA's Clean Lake Program (Section 314) in 1995. The grant involves updating the management plan to meet EPA's required elements of a Watershed Based Implementation Plan, implementing roadside stabilization, installing a state-of-the-art iron oxide sleeve into the BMP unit at the Hemlock Gardens stormwater project, upgrading existing catch basins, and inventorying and planning for stormwater BMP needs, considering designs, permits, efficiencies, maintenance and costs. To track phosphorus and suspended sediment load reductions, and the lake's response for the approved TMDL, stormwater samples will be analyzed, modeled, and documented.

Project Title: Durham Ridge Wetland Project

Project Number: 2537

Budget: \$ 16,180

Lead Agency: Plumstead Township

Location: Pine Run, Neshaminy Creek, Bucks County

HUC Code: 2040201

State Water Plan Watershed: 02F

303(d) Listed: No

Point of Contact: Steve Lathrop, DEP; James Grabusky, SERO; Michael May, Plumstead Township

The Durham Ridge wetland project is part of an extensive township-wide stormwater management improvement program. The project site is located on a 24-acre township owned parcel at the headwaters of 2 streams which receive stormwater runoff from the site. Several site improvement steps such as no-mow and native plantings and infiltration trenches have been implemented to reduce runoff from the site and improve water quality. This project will continue those efforts by creating a 29,000 square foot wetland upstream of an existing wet basin that will provide pretreatment for stormwater management basin and further reduce runoff. Innovative stormwater management principles and low impact design criteria will be employed.

Project Title: Brockway Natural Channel Design/ Stream Restoration- Phase III
[REMOVED FROM GRANT]

Project Number: 2538

Budget: \$

Lead Agency:

Location:

HUC Code:

State Water Plan Watershed:

303(d) Listed:

Point of Contact:

Project Title: Phase II Restoration of West Mill Creek Park [REMOVED FROM GRANT]

Project Number: 2539

Budget: \$

Lead Agency:

Location:

HUC Code:

State Water Plan Watershed:

303(d) Listed:

Point of Contact:

Project Title: Magnolia Lake Shoreline Stabilization Project

Project Number: 2540

Budget: \$ 19,500

Lead Agency: Bucks County Conservation District

Location: Mill (Otter) Creek, Bucks County

HUC Code: 2040201

State Water Plan Watershed: 02E

303(d) Listed: Yes

Point of Contact: Barbara Lathrop, DEP; Joseph Surra, SERO; William Mitchell, Bucks County Conservation District

This project will provide funding for design and permitting for stabilization of severely eroded banks of the county owned Magnolia Lake. The eroding lake shore is contributing nutrient and sedimentation runoff into Magnolia Lake and the downstream Silver Lake and Mill Creek. This area was listed as a priority for restoration in the Comprehensive Lake and Watersheds Management Plan identified in the 2003 Mill Creek (Otter Creek) Watershed Assessment funded through the Section 319 program.

Project Title: Trout Run Mushroom Wetlands [REMOVED FROM GRANT]
Project Number: 2541
Budget: \$
Lead Agency:
Location:
HUC Code:
State Water Plan Watershed:
303(d) Listed:
Point of Contact:

Other Projects

Project Title: South and East Branch Codorus Creek Monitoring and Maintenance
Project Number: 2542
Budget: \$ 25,000
Lead Agency: Izaak Walton League
Location: Codorus Creek, York County
HUC Code: 2050306
State Water Plan Watershed: 7H
303(d) Listed: Yes
Point of Contact: Barbara Lathrop, DEP; Rick Devore, SCRO; Thomas Kornbau, York Chapter Izaak Walton League of America

The York Chapter of the Izaak Walton League has completed restoration of more than 3,000 feet of stream restoration projects in the South Branch Codorus Creek watershed. This project is to complete some re-construction on two project sites. The re-construction will include moving a cross rock vane 15 feet downstream redesigned as a J-hook vane. At a second site a J-hook will be reconstructed. This project will also provide some funding to establish post-construction monitoring. Future cross section monitoring surveys can be compared to the as-built cross sections to measure bank erosion, soil loss and changes to the channel size and shape.

Project Title: Villanova Infiltration Pit Evaluation and Restoration [REMOVED FROM GRANT]
Project Number: 2543
Budget: \$
Lead Agency:
Location:
HUC Code:
State Water Plan Watershed:
303(d) Listed:
Point of Contact:

Project Title: Portable Timber Bridges
Project Number: 2544
Budget: \$ 15,600
Lead Agency: Wayne County Conservation District
Location: Multiple
HUC Code: 2040103, 2040103, 2050101
State Water Plan Watershed: Multiple
303(d) Listed: Unknown
Point of Contact: Russell Wagner, DEP; Andrew Schweitzer, NERO; Mike Roche, Wayne County CD

This project will provide the cost share of portable timber bridges to be used for water quality protection during timber harvest throughout Wayne County in northeastern Pennsylvania. Timber harvesting is one of the major industries in Wayne County, involving 80 full time loggers. Timber harvesting is an earth moving activity that has the potential to adversely affect waterways. The Upper Delaware River Watershed Management Plan identifies erosion and sedimentation/ nonpoint source pollution from timber harvesting as a high priority to be addressed. The portable timber bridges purchased through this project will help protect the county's high quality and exceptional value waterways from sedimentation and erosion during logging operations and demonstrate the low environmental impact and economic advantages of the bridges.

Project Title: BMP Implementation to Address TMDLs
Project Number: 2545
Budget: \$ 538,971
Lead Agency: DEP, Bureau of Watershed Management
Location: Multiple
HUC Code: Multiple
State Water Plan Watershed: Multiple
303(d) Listed: Yes
Point of Contact: Russell Wagner, DEP

This project provide assistance in implementing BMP's in watershed where EPA approved watershed restoration plans and where TMDLs have been developed or are planned for development, or in stream segments identified as impaired or not meeting designated uses in the 2004 DEP Integrated Quality Monitoring and Assessment Report. Funding of BMPs in these watersheds will help reduce nonpoint source, achieve load reductions identified in the TMDLs, restore designated uses, and with the ultimate goal of removing stream segments from the impaired list.

Grant Match:

Project Title: Conservation District Fund Allocation Program (Match)

Project Number: N/A

Budget: \$ 1,969,933 (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 63 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.