PENNSYLVANIA NONPOINT SOURCE PROGRAM FY2013 PROJECT SUMMARY

(Revised 06/18/2013, reflecting sequester reduced budget and revised match)

DEP Staff

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

Offices

Project Number: 1301 Budget: \$447,294

Lead Agency: DEP Bureau of Conservation and Restoration

Location: DEP Central Office/DEP Regional Offices

Point of Contact: Doug Goodlander, DEP

This project will strengthen the links between Central Office Program staff and the Regional Offices and enhance the roles of the DEP Regional and Mining Offices in the Nonpoint Source Program. The project will fund a total of 4.14 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 \$98,400 in indirect costs.

The below project numbered 1326 provides additional funding for EPA Region III personnel assigned to support the states' WPT obligations. Funding for project 1326 comes from EPA in-kind resources.

Project Title: Grants and Watershed Plan Tracking

Project Number: 1326

Budget: \$10,000 (EPA in-kind funds)

Lead Agency: DEP Bureau of Conservation and Restoration

Location: DEP Central Office/DEP Regional Offices

Point of Contact: Doug Goodlander, DEP

A part time Contractor/Senior Environmental Employee (SEE) will work closely with State staff members to enter information into the Watershed Plan Tracker (WPT) and Grants Reporting and Tracking System (GRTS). Work will focus on improving the information in these databases, the structure of the information, and the reports provided through these tracking systems. This work will allow the program to have a more complete, accurate and coordinated program tool to track program expectations and results.

DEP Implemented Projects

Project Title: Statewide Lake Water Quality Assessments

Project Number: 1302

Budget: \$10,000

Lead Agency: DEP Bureau of Conservation and Restoration

Location: Statewide

Point of Contact: Barbara Lathrop, DEP

DEP will coordinate the assessment of 5 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 number 1302A will be funded as a sub-contract under this agreement, to reimburse the Bradford County Conservation District for their efforts to sample Stephen Foster Lake and 3 other lakes in the northern tier near to Marcellus shale drilling sites.

Project Title: Monitoring Projects for Improvement

Project Number: 1303

Budget: \$16,800

Lead Agency: Bureau of Conservation and Restoration

Location: Statewide

Point of Contact: Cheryl Snyder, DEP

DEP 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. DEP staff will also monitor additional AMD, stream restoration and CREP sites. 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: 1304

Budget: \$99,989

Lead Agency: DEP Bureau of Point and Nonpoint Source Regulation

Location: Statewide

Point of Contact: Bill Brown, DEP

Included under this project is the collection and analysis of periphyton community and associated data to support nutrient criteria development. Included in this project is the t testing of proposed models, modification of the models based on feedback from testing, and training of staff on the use the accepted model(s). Also included in this project is the continuation of funding to cover DEP lab costs for running water tests to facilitate development of TMDLs throughout the Commonwealth.

Abandoned Mine Drainage Projects

Project Title: Conservation District Mining Program (East)

Project Number: 1305 Budget: \$ 125,000

Lead Agency: Eastern Pennsylvania Coalition for Abandoned Mine Reclamation

(EPCAMR)

Location: Anthracite and northern bituminous regions of Pennsylvania

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

for Abandoned Mine Reclamation

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

Project Title: Conservation District Mining Program (West)

Project Number: 1306 Budget: \$ 125,000

Lead Agency: Western Pennsylvania Coalition for Abandoned Mine Reclamation

(WPCAMR)

Location: Western Pennsylvania bituminous coal region

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

Western Pennsylvania Coalition for Abandoned Mine Reclamation

The purpose of the WPCAMR is to promote and facilitate the reclamation and remediation of abandoned mine drainage (AMD) in western Pennsylvania. Through this 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: Donaldson Culm Bank and Good Spring Creek Restoration

Project Number: 1307

Budget: \$151,022

Lead Agency: Schuylkill County Conservation District

Location: Good Spring Creek, Upper Swatara Creek, Schuylkill County

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

Schuylkill County Conservation District

Good Spring Creek is a tributary of the Upper Swatara Creek, which is an approved Watershed Implementation Planning watershed. This stream was straightened and now flows by the Donaldson Culm Bank, an abandoned mine feature. Portions of this bank have been removed through "remining" activities but the less valuable material is adjacent to the stream channel. This culm material enters the stream during rainfall events. This project is to design and permit a stream restoration project to restore the floodplain and decrease the amount of sediment entering the stream.

Project Title: Gibson-Halstock AMD Construction

Project Number: 1308 **Budget:** \$535,733

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 5th discharge out of 6 to be addressed by the Clearfield Creek Watershed Association. This project will be to construct a passive treatment system (design funded in 2012 grant) that is expected to remove 60 lbs/day of acidity, 4.6 lbs/day of aluminum and 2.0 lbs/day of iron. After construction of this project, 83% of the acidity loading in Little Laurel Run will be removed.

Project Title: Hartman Run Passive Treatment Design and Permitting

Project Number: 1309

Budget: \$43,000

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

One additional AMD seep has been discovered that is compromising the effectiveness of the existing AMD passive treatment system at Hartman Run. Currently, the Huntingdon County Conservation District is working towards updating the WIP with a plan of action to remediate this particular discharge. This project will complete a detailed design, permitting and construction bid documents for a treatment system on this discharge. Future treatment of this will remove 8.3 lbs/day of acidity, 0.18 lbs/day of iron and 0.45 lbs/day of aluminum.

Project Title: Schuylkill River Floodplain Restoration

Project Number: 1310

Budget: \$ 69,254

Lead Agency: Schuylkill Headwaters Association **Location:** Schuylkill River, Schuylkill County

Point of Contact: Donna Carnahan, DEP; Dan Koury, DEP Pottsville DMO; Bill Reichert,

Schuylkill Headwaters Association

In the late 1940's 40 million tons of coal silt was strung out along 130 miles of the Schuylkill River. A desilting project in the 1950's removed much of this material through construction of dams and basins to collect the sediment and then dredge it out of the river. Closer to the headwaters leftover coal waste or culm piles from coal washing impoundments is still causing siltation problems. This project will provide for the study of seven specific problem areas to see if it is financial feasible to remove this material at these sites and restore the natural floodplain.

Project Title: Six Mile Run SX0-D9 AMD Construction

Project Number: 1311 Budget: \$289,950

Lead Agency: Broad Top Township **Location:** Six Mile Run, Bedford County

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

Thomas, Broad Top Township

This project on this AMD discharge along the main stem of Six Mile Creek is a top priority of the updated Watershed Implementation Plan, completed in 2007. The SX0-D9 discharge contributes 11% of the iron, 4% of the aluminum and 4% of the acidity that has degraded Six Mile Run and prompted the development of a TMDL. This project will construct a treatment system (design funded in 2012 grant) consisting of a combination of a limestone pond, settling pond and an aerobic wetland. Future construction of this system will remove 59.4 lbs/day of acidity, 13.6 lbs/day of iron and 4.9 lbs/day of aluminum from Six Mile Run.

Project Title: Sandy Run SAO-D8 AMD Design

Project Number: 1312

Budget: \$42,500

Lead Agency: Broad Top Township **Location:** Six Mile Run, Bedford County

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

Thomas, Broad Top Township

This project was a proposal to design and construct system on 5 discharges in Sandy Run. It is only being funded to complete a design and permitting on the SAO-D8 discharge at this time. This AMD discharge along the main stem of Sandy Run is a top priority of the updated Watershed Implementation Plan, completed in 2007. This project will design and permit a treatment system consisting of a combination of a vertical flow wetlands and aerobic wetlands. Future construction of this system will remove 48.8 lbs/day of acidity, 4.2 lbs/day of iron and 4.4 lbs/day of aluminum from Sandy Run.

Project Title: Gadsby AMD Construction

Project Number: 1313 Budget: \$243,456

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 problem at this site is an abandoned strip pit located near some spoil. Water from the pit infiltrates the spoil and produces AMD. The goal of this construction project (design funded in 2009 grant) is to regrade the site to eliminate the strip pit and to minimize surface water infiltration and site erosion. This will eliminate the pollution problem, the need for costly treatments systems and operation and maintenance, thus saving hundreds of thousands of dollars in future costs.

Agriculture Projects

Project Title: South Branch Plum Creek Phase II (Construction)

Project Number: 1314 Budget: \$410,272

Lead Agency: Indiana County Conservation District

Location: South Branch Plum Creek Watershed, Indiana County **Point of Contact:** Carl Rohr, DEP; Jim Resh, Indiana County C.D.

Indiana County Conservation District will continue implementation of dirt and gravel road, stream bank and shoreline protection, and agricultural projects on farms and local roads throughout the watershed. The S. Br. Plum Creek TMDL was completed in 2011, followed by the S. Br. Plum Creek TMDL Implementation Plan. Both address nutrient and sediment load reductions in impaired stream reaches. This project will install projects on sites identified in the WIP in order to reduce NPS pollutant loadings and improve water quality. Project partners include local landowners, the USDA-NRCS, and township maintenance crews.

Project Title: Hungry Run Stream Restoration Phase II (Construction)

Project Number: 1315 Budget: \$ 151,147

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

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

The Mifflin County Conservation District will partner with Aqua-Niche, Inc. to complete stream restoration on a reach of Hungry Run in Burnham, PA. The Phase I design and permit component is underway now. It is expected to be completed by the end of 2012. Phase II will start upon completion of Phase I and is expected to last through 2013. This is a priority site in the Hungry Run Watershed Implementation Plan (2008) and one of few to try and minimize urban and storm water runoff sources in Hungry Run. Burnham Borough and several local organizations are the primary supporters of this project. Storm water runoff detention and infiltration bmps, rain gardens, stream bank and channel restoration and a NPS education for the local citizenry will be accomplished through this project.

Project Title: Buffalo Creek Watershed Agricultural Restoration

Project Number: 1316 Budget: \$ 180,404

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

Point of Contact: Carl Rohr, DEP; William Deitrick, Union County C.D.

Union County Conservation District will continue work on farms in the Buffalo Creek watershed to implement the Buffalo Creek Watershed Implementation Plan (2008). A TMDL was developed for Buffalo Creek tributaries in 2009. The focus of implementation efforts is one UNT to Buffalo Creek having a small agricultural impaired stream reach. Farm projects will aim to curb nutrient and sediment runoff from barnyards and promote nutrient and pasture management. The district will also continue its efforts to expand the restoration efforts to areas in other parts of the Buffalo Creek watershed that are high priorities for agricultural BMP installation according to the current Integrated List of All Waters listings.

Project Title: Little Wiconisco Creek Phase IV (Construction)

Project Number: 1317 **Budget:** \$ 210,179

Lead Agency: Dauphin County Conservation District **Location:** Little Wiconisco Creek, Dauphin County

Point of Contact: Carl Rohr, DEP; Michael Hubler, Dauphin County C.D.

Dauphin County Conservation District is beginning full implementation of the recently completed Watershed Implementation Plan (2012) for the Little Wiconisco Creek watershed with this project. The Plan implements portions of the Wiconisco Creek TMDL (2007) which addresses, in part, nutrient and sediment loadings to the watershed. Multiple project sites are identified within priority stream reaches. The majority of work focuses on agricultural practices, nutrient management, and farm conservation planning on livestock farms.

Stormwater/Urban Projects

Project Title: Etna Borough Green Streets; Phase 2; design and permit

Project Number: 1318

Budget: \$ 44,500

Lead Agency: DEP, Bureau of Conservation and Restoration

Location: Etna Borough, Allegheny County

Point of Contact: Douglas Goodlander, DEP; Mary Ellen Ramage, Borough of Etna

In a continuing effort to further reduce excessive stormwater flows, the Borough of Etna intends to implement needed stormwater management BMPs utilizing the "Green Streets" concept on an additional block within their commercial district. This will provide better management of stormwater runoff in an urban setting by removing runoff from roofs and paved areas which currently drains into the community's combined sewer system. This Phase 2 project will include completing the design and permitting phase for re-construction of portions of two streets in the borough and one municipal parking lot. Stormwater management BMPs to be incorporated into the design for this area are expected to include: rain gardens, tree plantings, pervious pavers and underground stormwater storage and infiltration trenches. It is anticipated that work on at least one additional area of the borough will be necessary to complete the "Green Streetscape" project in the Borough of Etna. Once all three areas of the community are completed, it is anticipated that 155,000 gallons in runoff reduction will be observed for individual storm events up to a 1.25 inch storm intensity.

Project Title: Urban Stormwater BMP Monitoring [DELETED, moved to FFY 2012 grant]

Project Number: 1319

Budget: \$0

Lead Agency: DEP, Bureau of Conservation and Restoration

Location: Mill Creek, Montgomery County

Point of Contact: Douglas Goodlander, 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 five urban storm water best management practices located on the Villanova University campus over the next two years. 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.

Project Title: Scottdale Green Streets, Construction

Project Number: 1320 Budget: \$ 436,301

Lead Agency: DEP, Bureau of Conservation and Restoration **Location:** Jacobs Creek Watershed, Westmoreland County

Point of Contact: Scott Heidel, DEP

Jacobs Creek is an approved Section 319 Watershed Implementation Planning Watershed. Urban runoff affects this watershed. The Jacobs Creek Watershed Association has submitted a proposal to complete construction work in order to address the urban runoff reporting to the impaired stream from the Scottdale Borough. This project will allow the partners to complete the construction of BMPs designed previously under a 319 grant.

Project Title: Southmoreland High School Green Infrastructure Project, Design and

Permitting

Project Number: 1321

Budget: \$ 57,000

Lead Agency: DEP, Bureau of Conservation and Restoration **Location:** Jacobs Creek Watershed, Westmoreland County

Point of Contact: Scott Heidel, DEP

Jacobs Creek is an approved Section 319 Watershed Implementation Planning Watershed. Urban runoff affects this watershed. The Jacobs Creek Watershed Association has submitted a proposal to complete design and permitting work in order to address the urban runoff reporting to the impaired stream from the Southmoreland High School. This project will allow the partners to complete the final design and to apply for future construction funds.

Project Title: Green Infrastructure Development in Mt. Pleasant, Design and Permitting

Project Number: 1322 Budget: \$ 131,250

Lead Agency: DEP, Bureau of Conservation and Restoration **Location:** Jacobs Creek Watershed, Westmoreland County

Point of Contact: Scott Heidel, DEP

Jacobs Creek is an approved Section 319 Watershed Implementation Planning Watershed. Urban runoff affects this watershed. The Jacobs Creek Watershed Association has submitted a proposal to complete design and permitting work in order to address the urban runoff reporting to the impaired stream from the Mt. Pleasant Borough and Township areas. This project will allow the partners to complete the final design and to apply for future construction funds.

Project Title: Conowingo Creek, Design and Permitting

Project Number: 1323 Budget: \$ 216,200

Lead Agency: DEP, Bureau of Conservation and Restoration

Location: Conowingo Creek, Lancaster County

Point of Contact: Scott Heidel, DEP

Conowingo Creek is an approved Section 319 Watershed Implementation Planning Watershed. Agricultural runoff and streambank instability affects this watershed. The Donegal Chapter of Trout Unlimited has submitted a proposal to complete design and permitting work in order to address the agricultural runoff reporting to and streambank instability within the impaired stream from five farms within the watershed. This project will allow the partners to complete the final design and to apply for future construction funds.

Supplemental Projects

Project Title: Statewide NPS Education Office

Project Number: 1324 Budget: \$ 329,200

Lead Agency: Pennsylvania Association of Conservation Districts (PACD)

Location: Statewide

Point of Contact: Douglas Goodlander, DEP; Robert Maiden, PACD

This two year 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: BMP Implementation in Approved Watershed Implementation Plans

Project Number: 1325

Budget: \$ 3,549

Lead Agency: DEP, Bureau of Conservation and Restoration

Location: Multiple

Point of Contact: Doug Goodlander, DEP

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

Grant Match

Project Title: Conservation District Fund Allocation Program (Match)

Project Number: N/A **Budget:** \$839,947

Lead Agency: Bureau of Conservation and Restoration

Location: Statewide

Point of Contact: Douglas Goodlander, DEP

This program is administered by the State Conservation Commission and is funded from the State General Fund. This money is used to support the continuing activities of conservation districts by partially funding a district manager and one or two district technicians in each county.

Project Title: Growing Greener Watershed Specialists (Match)

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

Lead Agency: Bureau of Conservation and Restoration

Location: Statewide

Point of Contact: Douglas Goodlander, DEP

This program provides grants to conservation districts to hire watershed specialists to help foster and support local watershed groups, 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.