PENNSYLVANIA NONPOINT SOURCE PROGRAM
FY2016 PROJECT SUMMARY

(Updated 6/24/2016)

DEP Staff

Project Title: Nonpoint Source Program-Office of Water Resource Planning and Regional Offices
Project Number: 1601
Budget: $1,035,039 (not including project 1602 EPA in-kind funds)
Funding Category: Program (Base)
Lead Agency: DEP, Office of Water Resource Planning
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 7.20 work years of effort for NPS watershed restoration activities overseen and directed by regional and mining office staff and effort provided within the Central Office to support the updating, implementation and administration of the Section 319 NPS Management Program Plan. The positions within the Central Office providing effort towards this workplan include: a conservation program manager, three water program specialists, one water pollution biologist, a conservation program specialist, and an administrative assistant. This project will require $206,508 in indirect costs.

The below project numbered 1602 provides additional funding for EPA Region III personnel assigned to support the states' WPT obligations. Funding for project 1602 comes from EPA in-kind resources.

Project Title: Grants and Watershed Plan Tracking
Project Number: 1602
Budget: $10,000 (EPA in-kind funds)
Funding Category: Program (Base)
Lead Agency: DEP, Office of Water Resource Planning
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: 1603
Budget: $30,000
Funding Category: Program (Base)
Lead Agency: DEP, Bureau of Clean Water
Location: Statewide
Point of Contact: Barbara Lathrop, DEP

DEP will coordinate the assessment of 5 Pennsylvania's Significant and Important Lakes. The lakes will be sampled to determine trophic status, nutrients, macrophyte coverage and fisheries (if no previous data exists). Sampling will be done by DEP in coordination with our partners at DCNR and 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 includes a sub-contract with Bradford County Conservation District (BCCD) to provide staffing to continue the lake assessment of Stephen Foster Lake to provide for on-going lake and watershed monitoring in the TMDL watershed to capture improvements due to significant BMP implementation to date. Wetland Pocket inlet and outlet monitoring will be included to determine P removal amounts from the lake proper. Other lake monitoring to be carried out by the BCCD involves obtaining nutrient and pre-Marcellus shale drilling water quality data on up to 3 additional lakes in the Northeastern region of the state.

Project Title: Monitoring Projects for Improvement in WIP Watersheds
Project Number: 1604
Budget: $21,500
Funding Category: Project (Incremental)
Lead Agency: DEP, Bureau of Clean Water
Location: Statewide
Point of Contact: Cheryl Snyder, DEP

DEP staff will monitor stream restoration and CREP-funded stream bank fencing/cattle crossing/riparian buffer planting projects as well as AMD impacted streams on 319 program watersheds having an EPA approved Watershed Implementation Plan (WIP). Staff will also continue to work with local watershed and monitoring groups to monitor AMD treatment systems and receiving streams, stream restoration projects and CREP projects in order to gauge the effectiveness of these projects, establish water quality trends, and identify improving water

bodies in WIP watersheds. This project will utilize both field and laboratory testing and will follow the DEP Laboratory's EPA-approved QA/QC procedures. As stream sections within these projects show improvement, they will be referred to DEP's Water Quality Standards staff for reassessment and possible delisting. Staff will also assist conservation districts in monitoring the effectiveness of farm-related BMPs being implemented as part of the NRCS/EPA collective National Water Quality Initiative in two WIP watersheds.

Project Title: Monitoring Projects for Improvement
Project Number: 1605
Budget: $15,500
Funding Category: Program (Base)
Lead Agency: DEP, Bureau of Clean Water
Location: Statewide
Point of Contact: Cheryl Snyder, DEP

DEP staff will monitor priority AMD treatment systems and receiving streams, stream restoration projects, targeted agricultural compliance watersheds, and CREP project areas in order to gauge the effectiveness of these projects/programs, establish water quality trends, and identify improving water bodies not within EPA approved WIPs. DEP staff will work with local watershed and monitoring groups where possible to support this effort. 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: 1606
Budget: $25,000
Funding Category: Program (Base)
Lead Agency: DEP, Bureau of Clean Water
Location: Statewide
Point of Contact: Bill Brown, DEP

Pennsylvania is currently developing nutrient criteria for streams, lakes, and rivers. A large component of criteria development involves collection and analysis of periphyton communities. This project will focus on the continued collection and analysis of periphyton community and associated data to support nutrient criteria development.

Abandoned Mine Drainage Projects

Project Title: Sandy Run SAO-D10 AMD Remediation (construction)
Project Number: 1607
Budget: $400,000
Funding Category: Project
Lead Agency: Broad Top Township
Location: Sandy Run, Broad Top Township
Point of Contact: Donna Wagner, DEP; Malcolm Crittenden, DEP; David Thomas, Broad Top Township

This proposal is to construct an AMD treatment system on the SAO-D10 discharge in Sandy Run. This AMD discharge along the main stem of Sandy Run is a top priority of the updated Watershed Implementation Plan, completed in 2007. This project will construct a treatment system consisting of a limestone pond and settling pond. Construction of this system will remove 96 lbs/day of acidity, 8.4 lbs/day of iron and 5.8 lbs/day of aluminum from Sandy Run.

Project Title: Reevesdale #2 AMD Restoration Project Phase 2–Optimization (construction)
Project Number: 1608
Budget: $485,772
Funding Category: Project
Lead Agency: Schuylkill Headwaters Association, Inc.
Location: Wabash Creek, Schuylkill County
Point of Contact: Donna Wagner, DEP; Dan Koury, DEP; William Reichert; Schuylkill Headwaters Association, Inc.

A passive treatment system consisting of a buried oxic limestone drain with three flushing zones was built in 2006 with the support of the 319 program. It has been discovered that maintenance of this original buried configuration is extremely difficult and is allowing for the accumulation of metals in the first flushing zone, plugging up the system near the intake causing most of the water from the Reevesdale #2 discharge to bypass the treatment system. This project will consist of reconfiguring the system to an upflow limestone bed with a pre-treatment settling pond and a flush pond. The optimization of the system should once again allow for the removal of 10 lbs/day of aluminum, 52 lbs/day of iron and 6 lbs/day of manganese from Wabash Creek.

Project Title: Deer Creek AMD Treatment Construction
Project Number: 1609
Budget: $883,174
Funding Category: Project
Lead Agency: Clearfield County Conservation District
Location: Deer Creek, Clearfield County
Point of Contact: Donna Wagner, DEP; Eric Rosengrant, DEP; Kelly Williams, Clearfield County Conservation District

This proposal is to construct an AMD passive treatment system on a discharge located on the Schoolhouse Tributary of Deer Creek. This discharge is a priority in the WIP and Section 319 helped fund the design of this system under project 1211. The system will consist of a series of vertical flow wetlands and settling basins. Completion of this system should remove 230 lbs/day of acidity, 12 lbs/day of iron and 15 lbs/day of aluminum and improve 2 miles of Deer Creek enough to support native brook trout population that is found upstream of this discharge.

Agriculture Projects

Project Title: Groff Floodplain Restoration Phase I
Project Number: 1610
Budget: $ 198,950
Funding Category: Project
Lead Agency: West Lampeter Township
Location: Mill Creek, Lancaster County
Point of Contact: Carl Rohr, Jineen Boyle PA DEP; Kara Kalupson,West Lampeter Township

The proposed application seeks to fulfill West Lampeter Township MS4 obligations by addressing sediment pollutants on a project site located outside of the township's determined MS4 zone. The project entails completing a floodplain restoration project and removing substantial amounts of accumulated sediment from the headwaters of a very small tributary stream to the Mill Creek in Lancaster County. The project is a WIP priority for a dam removal in the Big Spring Run sub-watershed, and located on a farm site in a very highly productive agricultural area. The stream is intermittent in nature and with seasonal patterns of dry streambed and flow, receives both overland flow and sub-surface drainage from a large upslope area, and drains a large upslope area primarily planted in cash grain crops. This proposed Phase I project is for completion of the survey, design, permit submission for floodplain restoration and also for agricultural best management practice implementation as identified and required in current conservation and nutrient management plans. If this Phase can be completed and all permits secured the project sponsor will be in a good position to start Phase II floodplain restoration work.

Project Title: Middle Spring Creek WIP Implementation Phase II
Project Number: 1611
Budget: $62,912
Funding Category: Project
Lead Agency: Cumberland County Conservation District
Location: Middle Spring Creek, Cumberland County
Point of Contact: Carl Rohr, Jineen Boyle PA DEP; Cumberland County Conservation District Staff

The application will set the stage for actual bmp implementation for four urban/storm water retrofit sites, and accomplish riparian and stream corridor restoration at up to two sites as identified in the Middle Spring Creek WIP. Shippensburg Borough, although not an MS4 community, has many sites in need of storm water bmp retrofit and replacement. The majority of sites included in the proposal are in line with this need, which is clearly identified in the Middle Spring Creek WIP and TMDL. One project site with a large riparian buffer project identified in

the WIP has come forth seeking assistance from the applicant, and a second located just upstream of the Borough is a priority restoration site. A sub-set of urban sites have been selected for inclusion in the proposal, primarily because these represent the ones with the largest chance for success. In addition, the applicant has a desire to continue to engage the community with outreach and education in the form of rain barrel workshops so that home and business owners can better manage on-site runoff. The purchase of long-term monitoring equipment will allow the applicant to continue to address long-term watershed monitoring in conjunction with partnering organizations, watershed residents and academic staff and students at Shippensburg University.

Project Title: South Branch Plum Creek Agricultural WIP Implementation
Project Number: 1612
Budget: $285,092
Funding Category: Project
Lead Agency: Indiana County Conservation District
Location: South Branch Plum Creek, Indiana County
Point of Contact: Carl Rohr, Jeff Fliss PA DEP; Brooke Esarey, Indiana County Conservation District

The conservation district and PA DEP Regional Office has been taking the lead in carrying out farm visits, manure management and ag erosion and sedimentation plan development, and assisting the farm owners and operators in implementing BMPs. A substantial investment has been made in working with the agricultural community in this watershed and significant progress has been realized thanks to conservation district initiative. The project will help implement the South Branch Plum Creek WIP, help to meet TMDL goals for sediment reductions in headwater sub-basins most affected by agricultural land uses, and assist farm owners and operators in meeting agricultural compliance requirements. Proposed expenses are primarily for farm plan development and recommended agricultural bmp installation. This project will be carried out by staff in the conservation district and lead to a successful targeted agricultural compliance effort in Goose Run, Upper Mainstem and the entire South Branch Plum Creek watershed.

Urban/Stream Restoration Projects

Project Title: Mount Pleasant Plaza Storm Water Retrofit (Green Infrastructure) Project
Project Number: 1613
Budget: $233,299
Funding Category: Project
Lead Agency: Jacobs Creek Watershed Association
Location: (20 E. Main St. Mt. Pleasant PA 15666)
Shupe Run Watershed, Mount Pleasant Borough, Westmoreland County
Point of Contact: Kevin Kelly/Aaron Ward

To further the effort to restore sub-watersheds within the Jacobs Creek Watershed in accordance with the approved Jacobs Creek WIP, the Jacobs Creek Watershed Association seeks funding to implement a previously funded design of green infrastructure BMPs in the Shupe Run watershed. The design and permitting for this proposed project were completed under grant number 1322. These BMPs include underground extended detention, rain gardens, and water quality inlets. These BMPs, once constructed, will address the sources of impairment to this section of Shupe Run and will work to limit the discharge of nonpoint source pollutants to this stream. The proposed project is located on a parking lot in Mount Pleasant Borough on the property of a privately owned store. The proposed project is in the same sub-watershed as certain other stormwater management BMPs which were recently constructed with other Section 319 funds (see projects 2823, 2928, 1419). The proposed design, once constructed, will occur in a section of the watershed that is listed in the Integrated List as impaired for Road Runoff-Siltation.

Project Title: Mount Pleasant Shop N Save
Project Number: 1614
Budget: $235,926
Funding Category: Project
Lead Agency: Jacobs Creek Watershed Association
Location: (210 N Diamond St., Mt. Pleasant PA 15666)
Shupe Run Watershed, Mount Pleasant Borough, Westmoreland County
Point of Contact: Kevin Kelly/Aaron Ward

To further the effort to restore sub-watersheds within the Jacobs Creek Watershed in accordance with the approved Jacobs Creek WIP, the Jacobs Creek Watershed Association seeks funding to implement a previously funded design of green infrastructure BMPs in the Shupe Run watershed. These BMPs include underground extended detention, rain gardens, and water quality inlets. These BMPs, once constructed, will address the sources of impairment to this section of Shupe Run and will work to limit the discharge of nonpoint source pollutants to this stream. The proposed project is located on a parking lot in Mount Pleasant Borough on the property of a privately owned store. The proposed project is in the same sub-watershed as certain other

stormwater management BMPs which were recently constructed with other Section 319 funds (see projects 2823, 2928, 1419). The proposed design, once constructed, will occur in a section of the watershed that is listed in the Integrated List as impaired for Road Runoff-Siltation.

Stream Restoration Project

Project Title: Crouse Run Stream Restoration
Project Number: 1615
Budget: $13,800
Funding Category: Project
Lead Agency: Pine Creek Land Conservation Trust
Location: (Box 123, Wildwood PA 15091-1001)
Pike Creek Watershed, Allegheny County
Point of Contact: Derrick McDonald/Scott Heidel

This project plans to design and permit the restoration of 450 linear feet of stream using natural stream designs to grade eroded banks, reconnect the flood plain, plant a RFB and install fish enhancement structures along Crouse Run, a tributary of Pine Creek, Allegheny County. Crouse Run is listed as impaired for urban runoff. The implementation of this project will work in conjunction with companion upstream urban runoff initiatives so that high energy flows reporting to this site from impervious surfaces upstream are managed so they do not damage this restoration project. Infiltration BMPs will be installed upstream before construction begins on this stream section to ensure long term viability of the BMPs designed under this project.

Supplemental Projects

Project Title: Urban Stormwater BMP Monitoring Site
Project Number: 1616
Budget: $ 323,366
Funding Category: Program
Lead Agency: Villanova University
Location: Mill Creek, Montgomery County
Point of Contact: Douglas Goodlander, DEP or Dr. Robert Traver, Villanova University

The Villanova University National Monitoring Program project is designed to measure the effectiveness of several urban storm water best management practices. The project became a part of the EPA's National Monitoring Program and was initially funded in PA's FFY2004 Section 319 grant. This work plan will continue this long term BMP evaluation initiative for an additional three years involving the collection of inflow and outflow data and the monitoring of nonpoint source pollutant loadings for five urban storm water best management practices located on the Villanova University campus. A Pervious Concrete/Porous Asphalt demonstration site, Bio-infiltration Traffic Island, Infiltration Trench, Stormwater Wetland and Green Roof will be evaluated. Differences in flow volume and peak flow volume for wet weather flows will be measured. Mean pollutant concentrations for storm events will be developed. Pollutant concentrations and flow averages for base flow conditions will be developed. All data collected will be included in the STORET database and the NPS National Monitoring Program database.

Project Title: NWQI Water Quality Assessments in the Maiden and Sacony Creek Watersheds
Project Number: 1617
Budget: $ 60,080
Funding Category: Program
Lead Agency: Berks County Conservation District
Location: Multiple
Point of Contact: Doug Goodlander, DEP

This proposal provides the Berks County Conservation District with funding, training, and assistance to complete an additional three year period of water quality study and additional water quality data coordination in the Maiden Creek and Sacony Creek watersheds in Berks County. This study will allow the county and state programs to determine the current and continuing conditions of the watersheds, to better identify the various types and concentrations of pollutants present in the surface water, and to identify water quality improvements attributed to BMPs installed in the watersheds. This project is being implemented consistent with the state's watershed monitoring obligations under the NRCS/EPA National Water Quality Initiative (NWQI). This project will conduct chemical, biological (macroinvertebrates), and

physical habitat assessments at specific stream sites within the Maiden Creek and Sacony Creek watersheds, with an emphasis on designated impaired reaches. These assessments will be completed consistent with PA DEP's water monitoring protocols and with the oversight of the PA DEP staff. In addition to conducting chemical, biological and physical stream assessments, the Berks County Conservation District proposes to coordinate with various other stream assessment stakeholders in the Maiden and Sacony Creek watersheds. The Maiden and Saucony Creek watersheds are being assessed by multiple public and private entities including but not limited to: the Stroud Water Resource Center, Academy of Natural Science, Reading Area Water Authority, and the Schuylkill Action Network as part of William Penn Middle Schuylkill Cluster Initiative and NRCS-Regional Conservation Partnership Program (RCPP). The Berks County Conservation District will work to coalesce the stakeholder data and report the results to PA DEP. The findings in the additional reported upon assessments will show more detail of the overall condition of the Maiden and Sacony watersheds and the aquatic ecosystem's response to BMPs.

Project Title: NWQI Water Quality Assessments in the Upper Kishacoquillas Creek and Hungry Run Watersheds
Project Number: 1618
Budget: $ 72,692
Funding Category: Project
Lead Agency: Mifflin County Conservation District
Location: Multiple
Point of Contact: Doug Goodlander, DEP

This proposal provides the Mifflin County Conservation District with funding, training, and assistance to complete an additional three year period of water quality study of the Upper Kishacoquillas Creek and Hungry Run Watersheds in Mifflin County. Both of these monitoring areas are included within current EPA approved WIPs. This study will allow the county and state programs to determine the current and continuing conditions of the watersheds, to better identify the various types and concentrations of pollutants present in the surface water, and to identify water quality improvements attributed to BMPs installed in the watersheds. This project is being implemented consistent with the state's watershed monitoring obligations under the NRCS/EPA National Water Quality Initiative (NWQI). This project will conduct chemical, biological (macroinvertebrates), physical habitat, and fish population assessments at specific stream sites along the upper reach of Kishacoquillas Creek and its tributaries and the entire Hungry Run Watershed, with an emphasis on designated impaired reaches. These assessments will be completed consistent with PA DEP's water monitoring protocols and with the oversight of the PA DEP staff.

Project Title: BMP Implementation in Approved Watershed Implementation Plans
Project Number: 1619
Budget: $ 47,745
Funding Category: Program
Lead Agency: DEP, Office of Water Resources Planning
Location: Statewide
Point of Contact: Doug Goodlander, DEP

This project provides financial assistance to construct BMPs identified in Watershed Implementation Plans that have been accepted by EPA. Funding of BMPs in these watersheds will help reduce nonpoint source loads, achieve load reductions identified in the TMDLs and restore designated uses, with the ultimate goal of removing stream segments from the DEP Integrated Water Quality Monitoring and Assessment Report's impaired list. This project will focus on implementing agricultural BMPs in WIP watersheds within the Chesapeake Bay watershed. Before any project is implemented, the proposed scope of work and budget will be submitted to the EPA project manager for review and approval.

Project Title: Abrahams Creek /Frances Slocum Lake Agricultural BMPs
Project Number: 1620
Budget: $ 213,159
Funding Category: Project
Lead Agency: Luzerne Conservation District
Location: Abrahams Creek/Frances Slocum Lake watershed, Luzerne County
Point of Contact: Barbara Lathrop, DEP

This project provides financial assistance to construct agricultural BMPs on three priority sites within the Abrahams Creek watershed. These priority work sites have been identified through a currently active WIP update process being carried out under project number 1512. BMPs to be implemented include: Comprehensive Nutrient Management Plan development, heavy use area protection practices, manure stacking pads, a stream crossing, roof gutters, animal trails and walkways, an access lane, rock lined waterways, and off-stream animal watering facilities. These practices will reduce nutrient and sediment load affecting the watershed and the lake.

Grant Match

Project Title: Conservation District Fund Allocation Program (Match)
Project Number: N/A
Budget: $ 947,004
Lead Agency: DEP, Office of Water Resources Planning
Location: Statewide
Point of Contact: Douglas Goodlander, DEP

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

Project Title: Growing Greener Watershed Specialists (Match)
Project Number: N/A
Budget: **$** 2,155,000
Lead Agency: DEP, Office of Water Resources Planning
Location: Statewide
Point of Contact: Douglas Goodlander, DEP

This program provides grants to conservation districts to hire watershed specialists to help foster and support local watershed groups, implement educational activities and carry out watershed restoration and protection projects. A total of 67 watershed specialists have been hired. Included in their responsibilities is to provide expert advice to farmers and landowners for conservation practices and work with DEP on watershed restoration projects and proposals funded through the NPS 319 and Growing Greener programs.