

## BASE PROGRAM ACTIVITIES

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A significant change occurred in the program staff in the latter part of 2010. Long-time Program Coordinator Alvan Gale retired and was replaced in late October. Alvan made significant contribution to the program and his expertise will be missed.



**Nonpoint Source Program Staff** (left to right): Teresa Koon, Assistant Deputy Director; Tim Craddock, Nonpoint Program Coordinator; Jennifer Pauer, Watershed Basin Coordinator; Lou Schmidt, Northern Basin Coordinator; Stephanie Ferrell, Administrative Assistant; Dustin Johnson, Western Basin Coordinator; Alana Hartman, Potomac Basin Coordinator; Kimberly Maxwell, Southern Basin Assistant Coordinator; Jennifer Dupree, Southern Basin Coordinator; and Nick Shell, Compliance Assistance in the Potomac Basin

The program supports a wide variety of activities and projects meant to restore, protect, educate and encourage participation in nonpoint pollution issues. This is not possible without the §319 grants provided by US EPA Region III. The grant is comprised of two types of funds, base and incremental. The base grant supports outreach and education, monitoring, planning, administration and non-TMDL projects. The base grant also supports staff not only within the WVDEP but also numerous positions within the WVCA, WVDOF and WVDEP-OOG. The activities of the staff are essential in order for the program to implement its projects and provide the services necessary to sustain efforts to curtail nonpoint pollution throughout West Virginia.

The incremental grant supports projects and project management, planning, and monitoring of projects that are funded by the incremental grant. In FY2010 there were 29 active projects and 18 active AGO grants.

AGOs (announcement of grant opportunities) are available if there is enough base grant monies to support them. AGOs are smaller scale nonpoint projects and activities that target other (non-TMDL) areas of the state.

Below is a summary of the activities, programs and staff supported by the §319 base grant. These include the WV Save Our Streams Program, many of the Basin Coordinator activities, the WV Conservation Agency, WVDEP's Office of Oil and Gas and projects within the WV Division of Forestry.

## BASIN COORDINATORS

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The Basin Coordinators (BCs) are the key to program success. These dedicated individuals are active in all aspects of the program from project planning and implementation, to outreach and education. The BCs help stakeholder groups organize and sustain their efforts and support all state and federal agency partners, as well as many others by providing advice in their areas of expertise. BCs are supported by the §319 base grant, Chesapeake Bay Program (CBP) and 106 Program. Below are highlights of activities from the BCs regions:

**Potomac (Eastern Basin):** WVDEP's Potomac Basin Coordinator (PBC) coordinates the nonpoint BMP data collection effort, collects urban and septic BMP data, and attends Watershed Technical Workgroup meetings to

keep current on CBP's BMP data requirements. The PBC also develops projects with local governments to guide them to committing to more nutrient and sediment reductions from non-agricultural, nonpoint pollution. The PBC facilitates the Watershed Implementation Plan writing group, which often overlaps with the WV Tributary Strategy Implementation Committee.

- Planning and implementation: During this period, the PBC continued to draft agendas, facilitate, and take notes at each teleconference held for Phase I Watershed Implementation Plan (WIP). The PBC maintained e-mail contact with those who requested to participate, and distributed materials deemed helpful to the decision-making process, as needed. The PBC participated in Watershed Technical Workgroup meetings and US EPA meetings on WIP information-sharing and a WV point source stakeholders meeting. The PBC helped to draft the non-regulated developed lands section of the WIP, participated in editing the Draft Phase I WIP, and submitted the Draft Phase I WIP. The PBC presented updates on the WIP-writing process to, and sought input from attendees of a meeting of the Northern Shenandoah Valley Regional Commission's Water Resources Policy Advisory Committee, a workshop for watershed groups, Morgan County Planning Commission, and county commissions from most of the other regions counties.
- Outreach and education: The PBC set up an urban stormwater display for the Chesapeake Bay room at the Tri-County Fair in August, presented stream quality activities at 4-H and Stream Scholars camps. The PBC provided updates for the [www.wvca.us/bay](http://www.wvca.us/bay) website and the corresponding quarterly e-newsletter. The PBC presented to several new watershed groups.
- 319 Program: The PBC visited potential stormwater management project sites and buffer planting sites with stakeholders throughout this period, continued helping to write two 319 Watershed Based Plans, and helped to submit corresponding 319 Project Proposals. The PBC attended each monthly meeting hosted by Region 9 Planning & Development Council to draft a model stormwater ordinance for Eastern Panhandle Communities, "County Planning in Accordance with the WIP."

**Northern Basin:** The focus in this region is correcting nonpoint pollution from AMD. The Northern Basin Coordinator (NBC) is an expert in AMD and continues to provide support to all partners in the region. As a result many of the most successful watershed groups can be found in this region.

- Planning and implementation: Currently developing the WBP for Roaring Creek a tributary of the Tygart River impacted by mine drainage. Directed the design and implementation of the last two Lambert Run projects. Served as Team Leader for the Buckhannon River Project Team and chaired two meetings during this reporting period. The NBC hired and supervised a Governor's Intern position whose primary duties are to assist watershed groups with monitoring and watershed management planning.
- Monitoring: The NBC completed the water quality monitoring project on Roaring Creek. Also assisted the Friends of the Cheat (FOC) with several benthic collections on Sovern Run.
- Outreach and education: The NBC held several public events and spoke to various groups (local Trout Unlimited chapter, Maple Lake Home Owners Assoc, etc) about water quality issues that affect their constituents and possible funding for reclamation projects. The NBC led numerous tours of the very successful Lambert Run project. The NBC attended the Acid Mine Drainage Symposium sponsored by NMLRC at West Virginia University (WVU), which educates attendees on post mining reclamation techniques. The NBC attended the Monongahela River Summit in Morgantown. The event centered on water quality issues characteristic with the activities surrounding the Marcellus drilling boom. Also spent numerous hours working with watershed associations, the public and internally within DEP to raise awareness on nonpoint source Marcellus shale gas drilling issues and identify opportunities for improvement.

In summary, the NBC assisted watershed groups with water quality monitoring, instructed on how to gather flow data for future projects managed current and past projects, negotiated rights of way with private landowners and acted as a watershed group liaison with business entities and other governmental agencies.

**Southern Basin:** The projects of the Southern Basin Coordinator (SBC) have thus far focused on wastewater, agriculture and to a limited extent urban stormwater issues. Recently an AMD project has also been implemented. Due to her knowledge, experience and success with wastewater, the SBC has been re-classified as an ERS III and will provide statewide support for wastewater projects.

- Planning and implementation: The SBC helped manage grant activities for most of the wastewater treatment activities and provided technical expertise for projects in McDowell, Wyoming and Raleigh Counties. The New River Clean Water Alliance (NRCWA) is wrapping up the State of the Watershed Report for the Lower New; the SBC provided feedback and attended meetings regarding this plan. The SBC supervised the Assistant BC, who has been providing assistance to the groups with Stream Partner's Grants, outreach and monitoring.
- Monitoring: The SBC lead a team that collected samples according to the WVDEP-WB standard operating procedures (SOPs) for fecal coliform in order to de-list Windmill Gap following the completion of the Ashland project; information will be submitted in early 2011. The SBC organized several monitoring sweeps of Second Creek in preparation for their wastewater study. This effort involved a wide variety of partners from other local organizations.
- Outreach and education: The SBC assisted with several water festivals and coordinated the 1<sup>st</sup> Water Festival in Wyoming and McDowell Counties. Also helped plan the 3<sup>rd</sup> Annual Southern Watershed Meeting where 11 watershed associations were represented. The SBC participated and assisted the WVSOS Coordinator in a variety of monitoring demonstrations and workshops, one which taught VISTA volunteers from all across the Appalachian Region.

**Western Basin:** The Western Basin Coordinator (WBC) also has experience in mining and has excellent skills in GIS. He has regularly attended watershed meetings for both new and old groups in an attempt to inspire them into action. The WBC position is relatively new so the focus thus far has been on outreach and education and to a limited extent planning.

- Planning and implementation: The WBC worked with several watershed groups in an effort to revise or amend their watershed based plans. The WBC has begun evaluating possible sites and funding sources for a Davis Creek restoration project. The WBC worked closely with WVDEP-AML and Marshall University (MU) to continue mapping and data gathering in an effort to develop a comprehensive restoration plan for the Coal River watershed. The WBC provided oversight and assistance on the Morris Creek stream stabilization project.
- Monitoring: The WBC participated in monitoring efforts on Second Creek to gather baseline data for a possible project proposal in 2011. The WBC assisted Marshall MU with observation surveys throughout the Little Coal River to help evaluate the success of the NSCD projects.
- Outreach and education: The WBC worked with WVCA and MU to conduct several public meetings about the Fourpole Creek watershed; several local church, community groups, business leaders, schools and other interested citizens attended. Worked on several outreach and education events with WVSOS.

## **WV SAVE OUR STREAMS PROGRAM**

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In 2010 WVSOS has developed some new relationships as a result of its outreach efforts. A large effort during this period was dedicated to underserved school systems and to furthering the message of the WV Environmental Education Association (WVEEA). WVSOS will take a more active role in the association by serving on the board and hosting several meetings in 2010.

Several meetings and presentations occurred throughout southern WV and through the advanced placement program Lincoln County students will begin a monitoring effort in 2010-2011. WVSOS was involved in several monitoring projects through this period. These include fecal sweeps of the Second Creek drainage and the close-out of the Spring Run monitoring project. Additional fecal and benthic surveys were performed in Second Creek, focusing on Kitchen Creek. The purpose of these surveys was to gather baseline benthic and fecal data and evaluate the success of BMPs on upstream farmlands. The Spring Run project has ended. Results from the last benthic surveys are still not available but the final reports have been written and are available on the Cacapon Institute's website. Meetings were held to determine if future monitoring will be needed and to brainstorm ways to fund a continuous effort using mainly volunteers. A large amount of time and energy was dedicated to the new website. The site is now complete but updates are on-going. The next major phase is the upgrade of the Volunteer Assessment Database (VAD). Visit the WVSOS website at: <http://www.dep.wv.gov/sos>

WVSOS held 15 stream monitoring workshops and either sponsored or participated in 15 additional outreach events. These events educated 2140 person(s) in stream evaluations and other nonpoint related issues. 165 new volunteers were certified at level-one and two and several groups that were previously in-active, renewed their certifications.

WVSOS also worked with the WVCA and nonpoint program staff to complete benthic surveys on five 319-funded projects in the Cacapon River and Tug Fork River basins. WVSOS provided equipment and support to other watershed associations, basin coordinators and schools for project monitoring and demonstrations throughout the state and held several train-the-trainer workshops for groups in southern West Virginia, Virginia and North Carolina. In the latter part of the summer of 2010 WVSOS taught several advanced stream workshops through the Eastern Coal Regional Roundtable (ECRR) and The Mountain Institute (TMI). Both of these workshops attracted volunteers from surrounding states (e.g. PA, MD, VA, OH and KY) and as far away as Tennessee.

## **WV CONSERVATION AGENCY**

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The WVCA is the lead agency for all agricultural projects, some construction and streambank repair statewide. Agriculture has a significant impact on many of our rivers and streams especially in the Chesapeake Bay and Greenbrier River basins. WVCA actively peruses project opportunities and has had great success in convincing landowners to participate in §319 programs and the variety of programs available through the NRCS. Conservation Specialists are experts in a variety of conservation practices on farms and their water quality knowledge is always expanding. A working group consisting of WVCA staff and the program coordinator will develop internal guidelines for BMPs in the hopes to improve water quality results for agricultural projects in the future. Below are some of the WVCA highlights from 2010:

### Projects

- Assigned WVCA staff to act as project managers for Elks Run, Kitchen Creek, Lost River, Morris Creek and Sleepy Creek.
- Provided technical and educational support to WAs and BCs as requested.

- Provided assistance to watershed associations in developing/implementing WV Stream Partners Program grants.

#### Sediment and erosion control

- Provided technical assistance and/or information to over 500 attendees at the Contractor's EXPO.
- Reviewed and/or provided advice on construction erosion and sediment control plans.

#### Agriculture

- Provided technical assistance to five agricultural producers with the development, protection, stabilization and/or maintenance of riparian areas or with resource management advice that protects surface water.
- Developed conservation plans for two farms under Farm Bill Programs.
- Wrote three nutrient management plans for farmers and revised several others.

#### Outreach and education

- Provided 14 educational programs to schools, community groups, and others on nonpoint pollution and water quality issues.
- Assisted with and organized four agriculture educational field days.
- Staff provided information useful to WAs, agencies, and public on water quality issues on the Watershed Resource Center (WRC) website.
- Produced regular newsletters, E-mail bulletins etc. that discussed multiple issues related to nonpoint pollution; this information was received by a wide variety of program partners.
- Periodic exhibits at activities, conferences, and water quality events.
- Sponsored and organized the WV Envirothon.
- Participated as an active member of the West Virginia Watershed Network (WVWN); assisted with the planning of Watershed Celebration Day (WCD).

#### Training

- Staff attended classes, workshops and other activities to maintain or achieve the various professional certifications held or being sought such as nutrient management, farm planning, stream monitoring, pesticides, crop advisor, etc.
- Staff attended classes, conferences, exhibitions, seminars, and/or workshops to keep current on nonpoint source water quality issues.
- Program managers attended the NRCWA public meeting to discuss possible projects and goals/outlook for future programs.

#### Other activities

- Grassland evaluation and District land judging contests
- Grazing Conference Planning Committee meetings
- Soil sampling
- WV State Lime Program
- WV State Invasive Species Program
- Coordinated several farm tours
- Reviewed environmental compliance plan for Greenbrier Sporting Club golf course for their certification from the Audobon Society, as well as general BMPs on the golf course.

## **WVDEP'S OFFICE OF OIL AND GAS**

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WVDEP's Office of Oil and Gas (OG) is the lead agency for all oil and gas well drilling activities, including road construction and maintenance. Typically OG uses §319 monies to fund training workshops so that contractors can better understand and implement the appropriate BMP's. Additional funds are used towards the development of a revised Sediment and Erosion Control Manual and restoration projects on watersheds disturbed by a high volume of oil and gas well activity.

Additional §319 funding for OG is critical so that the state can properly manage the increased activities due to Marcellous Shale.

## **WV DIVISION OF FORESTRY**

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WV Division of Forestry (WVDFOF) is responsible for timber management activities including roads, and in some cases will provide technical assistance for riparian development. Additional §319 funding has been used as part of their statewide management strategy. Part of this strategy is the development of a mapping system prioritizing forest resources on a watershed scale.

## **AREAS OF CONCERN, RECOMMENDATIONS AND FUTURE ACTIONS**

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The program remains at the forefront of restoration opportunities by providing funds and technical assistance to qualified grant recipients. Results in some cases have been slow but successes have occurred and we are very close to removing several AMD impacted streams as well as those impaired by fecal coliform bacteria from the 303(d) list. Some set-backs have also occurred as several AMD passive treatment systems in Morris Creek and the Cheat River have either failed or not performed to their anticipated expectations. However, restoration of AMD waters is still a priority so work continues through the due diligence of credible local watershed associations.

Funding of course is a concern for the near future. As part of the President's 2012 budget process, the Office of Management and Budget (OMB) is requiring the US EPA to justify the value of §319 Base Program funding. A report from EPA to OMB is due in the summer of 2011. This is of grave concern for WV we cannot implement our incremental program without the base program, as those are the people who initiate and manage the implementation projects. Watershed associations generally do not have the capacity to implement the §319 program on their own, and in most of our agricultural watersheds, associations have not formed. Agriculture incremental projects are managed by WVCA's Conservation Specialists funded under our base grant. Evaluating the base program independently of the incremental program is not a good approach. WV completes multiple statewide activities with the base grant, but a large percentage of the base grant is used to implement the incremental program.

Developing watershed based plans (WBPs) are becoming more and more difficult. Many of our state's plans encompass entire HUC-8 basins so producing a WBP for these large areas that meet EPA's A-I guidelines without the assistance of a consultant is difficult. The costs of these plans are driven up as more and more information is required. We have spent more than \$40,000 to complete a protection plan for the Elk River Headwaters and still do not have a deliverable product due to the complexities of the area, difficulty in sustaining the local watershed association and miss-information and communication regarding the requirements.

Many plans in West Virginia are outdated or need to be revised due to changes in the TMDL or simply because of the immense coverage areas of the original plans. In the future the program will propose WBPs that target smaller sub-watersheds instead of writing plans that mirror TMDL development.

During 2010, West Virginia continued to see an exponential rise in the drilling of Marcellus shale gas wells. These drill sites are vastly larger than conventional sites and have had nonpoint source impacts to adjacent landowners and streams. WV's NPS program has been working with our Office of Oil and Gas to enhance the oil and gas BMP manual to improve the BMPs recommended on sites including the requirement that outfall

protection would be required for culverts. The need for this improvement was identified as a result of our efforts in the Little Sandy Creek watershed incremental project. WVDEP has also proposed legislation to regulate this largely unregulated activity.

As a result of the Obama Administration's stimulus funding, the NPSP has seen a boost in funding for alternative, decentralized wastewater treatment projects through the State Revolving Loan Fund. As a result of the success of the Ashland wastewater treatment project, of the NPSP raising awareness to our State Revolving Loan Fund, and of EPA allowing debt forgiveness for State Revolving Loan Funds for alternative, decentralized systems, many areas in the southern WV are now accessing these funds. In addition to the limited 319 funding we have available, we now have additional resources to construct these much needed systems and to restore streams.

For the future the program is looking into developing internal guidelines for BMPs in agriculture (e.g. minimum buffer width), wastewater (e.g. proximity to the stream) and natural stream channel design (NSCD) that will have more impact on water quality. The program will also strive to improve on-line resources that provide clear understanding of US EPA's guidelines, and provide better instructions for submitting project proposals and reports.

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West Virginia's FY 2010 §319 grant totaled \$2,127,600 with \$1,024,400 going to the base program and \$1,103,200 going to the incremental program. Approximately \$681,405 of these monies has been spent or requested leaving a balance \$1,786,186 available for projects through September of 2011.

For more information visit the programs website: <http://www.dep.wv.gov/nonpoint>

## GOALS AND OBJECTIVES FOR FY 2011

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- Manages and coordinate the statewide nonpoint source program as the lead agency;
- Prepare, review, and approve nonpoint pollution project plans, oversee incremental projects, coordinate volunteer monitoring and complete all reports and US EPA GRTS entries;
- Negotiate with and help local stakeholders in developing work plans for priority watersheds;
- Complete two watershed based plans, an additional five proposals will come from partners;
- Develop internal program guidelines for BMP's in agriculture (e.g. minimum buffer width), waste-water (e.g. proximity to the stream) and natural stream channel design (NSCD) that have more impact on water quality; and
- Improve on-line resources that provide clear understanding of the program's guidelines and provide better instructions for submitting project proposals and reports.