organizing and sponsoring Watershed Celebration Day (WCD). WCD is a two-day annual event that celebrates the accomplishments of watershed association volunteers. WCA provides an opportunity for these volunteers to network with other associations across the state as well as state and federal agencies, to share and learn new techniques. The volunteers are honored for their efforts with awards and recognition.

Two Statewide Programs are housed within the Nonpoint Source Section, Project WET and WV Save Our Streams, both promote the NPS mission statement "**To inspire and empower people to value and work for clean water**". These programs are nationally recognized for their accomplishments and continue to inspire volunteers, teachers and students throughout West Virginia.

In addition, WVCA's Watershed Resource Center (WRC) educates the public, watershed associations, and others on nonpoint source pollution and best management practices. The WRC houses and extensive website and disseminates information related to nonpoint source pollution. Assistance is also provided through a variety of efforts with targeted audiences ranging from one-on-one discussions to presentations made in large group settings. Education is delivered through distribution of brochures, fact sheets, conference presentations, watershed model demonstrations, hands-on field days, articles written on NPS topics and published in newsletters, project demonstration, presentations to school students, community groups, watershed associations, landowners, land/resource users, professionals, local farmers, developers, contractors, engineers, government representatives, the general public, and staff. The WRC also publishes its own newsletter quarterly, WaterNet, hosts Facebook and twitter sites, and provides desktop publishing as needed for agency staff and watershed associations.

## Chapter 6 - Goals and Objectives

The NPS Program's primary goal focuses on planning, development and implementation of comprehensive watershed restoration projects to remove streams from the state's 303(d) list. The difficulty in coordinating a stakeholder driven process to implement voluntary compliance aimed at achieving mandatory water quality objectives is a special challenge. The development of realistic WBPs, effective project proposals, and the implementation of these projects is time consuming. The process requires a great effort and resources from all of the NPS partners and stakeholders.

Responsibilities include preparing, reviewing and approving watershed based plans and restoration project proposals; preparing program guidelines and policies; delegating program activities to state and federal agencies through negotiations of interagency agreements; oversight of agency and partners progress in implementing field work; analysis and evaluation of water quality impacts from nonpoint source pollution; and managing financial budgets. Actions involved in meeting these responsibilities include reviewing and managing U.S. EPA's GRTS and NPS sub-grants; protecting water quality standards; assisting when needed in enforcement measures; coordinating with stakeholders and agencies the on AMD issues; with the NRCS and WVCA on agricultural issues; with a variety of agencies and stakeholders in the CBP; with WVDEP's SRF Program to deliver loans to individuals to install agriculture BMPs and correct failing septic systems; with WVDEP's ILF Program to align projects where feasible; with other agencies on the nonpoint aspects of developing and implementing TMDLs and WBPs, and designing technical measures to correct nonpoint source problems.

## Short-term

Short-term goals and objectives describe the annual activities that the NPS Program undertakes in order to administer the program's activities. These may change slightly from year to year as new watershed proposals are added; however the basic activities and actions that guide these and all other aspects of the NPS Program are consistent.

**SHORT-TERM GOALS AND OBJECTIVES**

1. **Provide leadership in managing the NPS Program**.
    a. Maintain and update US EPA's GRTS database (semi-annually)
    b. Participate in workshops, meetings and conferences to promote the NPS Program (as needed)
    c. Coordinate the submittal of reports to US EPA Region III (semi-annually)
    d. Manage the NPS Program's grant and process funding invoices submitted by the various partners
    e. Submit annual reports to USA Region III reflecting the milestones met during the past year (annually)
    f. Submit a minimum of one Success Story that shows waters partially of fully restored, shows progress towards achieving water quality goals, or shows ecological restoration (annually)
    g. Submit financial status reports to US EPA Region III on the on-going NPS Program grants (annually)

2. **Represent the DWWM in multi-agency and stakeholder organizations**.
    a. Represent the DWWM in or lead PTs for priority watersheds (as needed)
    b. Represent of the NPS Program on the SPP review committee (as needed)
    c. Participate on the NRCS Agricultural Technical Advisory Committee (quarterly)
    d. Represent the DWWM on the WV State Soil Conservation Committee (quarterly)
    e. Represent the DWWM's NPS Program on Chesapeake Bay Program committees (quarterly)
    f. Participate in ILF Program's Interagency Review Team (quarterly)

3. **Project management of all watershed projects**; **includes tasks such as technical guidance**, **support**, **and oversight and compliance management**.
    a. Coordinate with federal and state agencies partners on all active watershed projects (as needed)
    b. Oversee and work with local project managers, volunteer organizations and other NGOs on all active watershed projects (as needed)
    c. Work with state and federal agencies to leverage funds for specific project match (as needed)
    d. Report on the progress of watershed project proposals, and close-out completed projects (as needed)
    e. Monitor and encourage progress on nonpoint source WBPs and TMDLs (as needed)

4. **Coordinate and oversee NPS Program grant projects relating to nonpoint source issues in non-priority watersheds in order to foster a better understanding of NPS pollution**, **as well as more recognition for the NPS Program**.
    a. Oversee existing AGO projects (as needed)
    b. Work with potential applicants for the development of new AGO projects (as needed)

5. **Participate and coordinate in the development of work plans and grant proposals in priority watersheds**.
    a. Participate with Project Teams (PTs) to develop watershed project plans for abating sewage contamination in and acid mine drainage in priority watersheds (as needed)
    b. Coordinate with local PTs and Project Managers on projects providing guidance and technical assistance as needed during the implementation phases (as needed)
    c. Coordinate and guide watershed associations and other stakeholders in the development and/or revision of WBPs as needed (as needed)
    d. Develop and submit one success story to the US EPA (annually)

6. **Maximize the use of all funds to achieve water quality standards in NPS impaired streams**.
    a. Track implementation success and report restored streams and stream segments to the US EPA (annually)
    b. Leverage funding from other program's to protect and restore streams impacted by NPS pollution (annually)

7. **Establish a targeted monitoring approach for NPS Program projects including baseline**, **pre and post project to better evaluate the effectiveness of BMPs**. **Work with WAB and local partners to coordinate monitoring efforts**.
    a. Regional BCs will coordinate, oversee or develop monitoring plans in project areas and potential future project areas (as needed)
    b. Acquire approved Quality Assurance Project Plans (QAPPs) for watershed proposals, when they are required (as needed)
    c. Participate in the monitoring required for the NWQI (as needed)
    d. Support legitimate NPS monitoring efforts in priority watersheds where additional information is needed to determine water quality improvement and to prioritize restoration opportunities (annually)

8. **Participate in and coordinate with the WVWN**.
    a. Support WCD by participating in its organization and coordination, through financial assistance and through NPS Program outreach at the event (annually)
    b. Work with volunteers through training and AGO grants to build the capacity of local watershed organizations (annually)

9. **Coordinate with appropriate agencies, watershed associations and Public Service Districts to address failing on-site wastewater systems**.
    a. Facilitate the implementation of project proposals addressing on-site wastewater systems in the priority areas (as needed)
    b. Coordinate 319 projects where wastewater has been identified as a concern, with the CWSRF (annually)

10. **Coordinate with project teams to propose additional funding opportunities and activities in order to conduct streambank stabilization projects in priority watersheds**.
    a. Coordinate with PTs to develop new proposals for streambank restoration in priority watersheds where WBPs call for sediment reduction (annually)

11. **Participate in the Cheat and Monongahela River TMDL implementation plans**.
    a. Coordinate with the WAB, AML, OSM, FODC, FOC and the River of Promise Committee to implement the TMDLs (quarterly)
    b. Continue to monitor the success of completed projects (as needed)
    c. Coordinate the development of new AMD treatment projects (as needed)
    d. Monitor for water quality standards achievement throughout the entire length and/or portions of Sovern Run and Kanes Creek, and if the data shows submit it as a candidate for removal from the 303(d) list (as needed)

12. **Develop guidelines for an urban runoff management program that promotes low impact development practices**.
    a. Regional BCs and the SWS will work with local officials and watershed associations to develop LID and green infrastructure proposals when appropriate, and provide guidance and technical assistance when needed (as needed)

13. **Coordinate with WVCA and NRCS to implement CREP/EQIP programs in priority watersheds**.
    a. Act as the DWWM representative on the CREP committee and coordinate with WVCA to provide guidance to NRCS in future National Water Quality Initiative (NWQI) efforts (quarterly)
    b. Work with NRCS, WVCA and local conservation districts to seek diverse funding base for agricultural projects in priority watersheds (as needed)

14. **Provide conservation education and information to educators**, **youth and the general public**.
    a. Conduct eight nonpoint source or aquatic biology related activities, outdoor classrooms or presentations focusing on youth (as needed)
    b. Participate in water festivals, conferences and other activities to present or conduct nonpoint source education for the general public (as needed)

15. **Increase capacity for watershed associations to actively participate in and provide leadership for NPS watershed projects**.
    a. Provide training for watershed staff and volunteers from 10 watershed associations to address gaps in team memberships, and develop a performance agenda (annually)
    b. Work with BCs and watershed associations to identify shortfalls, and offer additional training to increase capacity and project management capabilities (as needed)
    c. Target AGO funds toward watershed association staff recruitment, capacity building and the development of financial and project related systems to enable watershed project development and implementation (annually)

## Long-term

The long-term goals describe the implementation priorities into the future. This list is based on extensive hours of evaluating the progress of existing WBPs, considering new WBPs and determining to the extent possible the expected load reductions. They also include other long-term goals and objectives the NPS Program believes are possible. These long-term goals will be evaluated every two-years and we will work with EPA to adjust our schedules and goals as opportunities and/or changes occur.

**LONG-TERM GOALS AND OBJECTIVES**

**WATERSHED MANAGEMENT**

1. **Goal**: Conduct restoration activities and BMP implementation is priority watersheds with the goal of achieving load reductions that will meet their designated uses by 2025. **Table 7** provides load reduction projections for the major categories of NPS pollutants.

Objectives

a) By 2020 develop two-four new WBPs in priority areas as designated by the Watershed Management Framework and TMDL processes.
b) Every two years, evaluate the progress and revise existing active WBPs as needed.
c) By 2020 complete the proposed watershed projects and achieve the required load reductions (LRs) that will meet the designated uses in three existing WBPs.
d) Every two-year's or more frequently when needed or requested by EPA, report on active WBPs in accordance with the milestones established in approved plans.
e) By 2020 target priority basins in the Little Kanawha, Upper, Middle and Lower Ohio for the development of two new WBPs.
f) Support and encourage the remediation of watersheds impacted by wastewater in priority watershed and on a statewide basis by promoting the statewide efforts of the CWSRF and Agricultural Loan Programs. See Table 7 for LR estimates.
g) Support, provide funding and technical assistance within priority watersheds and on a statewide basis to stream restoration projects that restore the streams natural hydrologic conditions and reduce sedimentation. See Table 7 for LR estimates.

2. **Goal**: Support and encourage the protection of healthy watersheds and work with local stakeholders to educate their communities on their importance. This includes waters identified as high quality and outstanding national resources, as well as those that still remain high quality but may be threatened by NPS pollutants.

Objectives

a) If there is local stakeholder interest, funding and agency support, a Watershed Protection Plan (WPP) will be developed to protect high value water bodies identified as Tier 3. The goal is to develop one WPP within the next five years.
b) If there is local stakeholder interest, funding and agency support efforts will be made to protect high priority wetland and riparian areas and other high value watershed resources, including water quality reference streams, in priority restoration and protection watersheds. The goal is

to engage land trust, local landowners and others to implement conservation easement protection (CEP). The goal is to develop two-four CEPs within each of the approved WPPs within the next five years.

c) Support the development of the WVWAPP tool and encourage WVDEP to develop statewide criteria to define healthy waters that will ensure better protection of high quality watersheds.

The major load reduction goals are reflected in Table 7. **These projections will be used to evaluate the progress and the success of the NPS Programs watershed management activities on a statewide basis and in priority watersheds.**

**Table 7** - Projected LRs for the major categories of nonpoint source pollutants

| **Pollutant** | **Unit** | **Projected load reductions** | | |
|---|---|---|---|---|
| | | 5-year | 10-year | 15-year |
| Acidity | tons/yr | 300 | 600 | 900 |
| Metals (Aluminum) | lbs/yr | 37,800 | 75,600 | 113,400 |
| Metals (Iron) | lbs/yr | 95,200 | 190,400 | 285,600 |
| Metals (Manganese) * | lbs/yr | 7,000 | 14,000 | 21,000 |
| Total metals | lbs/yr | 140,000 | 280,000 | 420,000 |
| Nutrients (Nitrogen) | lbs/yr | 280,000 | 560,000 | 840,000 |
| Nutrients (Phosphorus) | lbs/yr | 220,000 | 440,000 | 660,000 |
| Total Nutrients | lbs/yr | 500,000 | 1,000,000 | 1,500,000 |
| Sediment | tons/yr | 6,000 | 12,000 | 18,000 |
| Fecal Coliform | cfu | 1.70E+15 | 3.30E+15 | 5.00E+15 |

*Note: According to 6.2.d of 47CSR2 (Requirements Governing Water Quality Standards) the Manganese criteria shall only apply within 5-miles immediately upstream of known water supplies used for human consumption. In many cases this rule eliminates the need for Manganese reductions because there are no public or private water supplies within 5-miles of NPS projects.

**AGRICULTURE**

3. **Goal**: Targeting statewide opportunities and priority watersheds, promote the conservation of cropland, pastureland and other land within the agriculture community through technical assistance, BMP implementation, conservation planning, nutrient management, monitoring and education.

Objectives

a) Every two-years develop 10 Conservation Plans under the Farm Bill Programs.
b) Every five-years 25 nutrient management plans will be written or reviewed managing the estimates provided in Table 7 for pounds/year of nitrogen and phosphorus through the implementation of BMPs.
c) Every five-years provide technical assistance to 25 agriculture producers with the development, protection, stabilization and/or maintenance of riparian areas or with resource management advice that protects surface water.
d) Provide estimated reduction of sediment from stabilization/restoration of failing streambank, etc. (Calculated by BEHI) on an annual basis using the values provided in Table 7 as the targets.

e) Provide estimated sediment reductions due in part to change in management schemes; rotational grazing, exclusion, etc. (Calculated by RUSLE) on an annual basis using the values provided in Table 7 as the targets.
f) Provide information on the Agriculture Water Quality Loan Program to 10 agricultural landowner's on an annual basis.

4. **Goal**: Manage pesticides to protect surface and groundwater.

Objectives

a) Every two-years coordinate pesticide collection to protect surface and ground water in compliance with WVDA.
b) By 2020 organize a minimum two pesticide collection pickups by in cooperation with WVU Extension and the WVDA.

5. **Goal**: Support monitoring programs in priority watersheds impaired by agricultural nonpoint pollutants.

Objective

a) WVCA staff will assists landowners, watershed associations and partner agencies with stream monitoring activities in priority watersheds as needed.

**URBAN STORMWATER/DEVELOPED LANDS**

6. **Goal**: Improve and protect West Virginia's soil and water resources by reducing the amount of erosion from earthwork sites through education and technical assistance.

Objectives

a) Provide technical assistance and/or information to 2,500 attendees at the WV Construction & Design Exposition over the course of five years through an informational display booth with technicians on hand to answer questions.
b) Every two-years review and/or provide advice with writing 40 construction erosion and sediment control plans with estimates of soil saved.

7. **Goal**: Provide education and technical assistance on Stormwater Best Management Practices.

Objectives

a) From 2015-2020 provide five stormwater workshops or demonstration projects.
b) By 2018 present 20 stormwater management workshops across the state.
c) By 2016 provide technical advice regarding stormwater management quality and/or quantity issues to 20 clients.

**RESOURCE EXTRACTION**

8. **Goal**: If funding allows, the NPS Program will coordinate to the extent possible with DEP's OAMLR, OSR, OO&G and WVDOF on future project opportunities in watersheds impaired by resource extraction activities.

Objectives

a) Where their project align with current WBPs, or where TMDLs and other sources of information suggest alternate WBPs could be developed to fully restore smaller impacted watersheds; the NPS Program will partner with local stakeholders our agency and partner agencies to develop restoration projects. See Table 7 for LR projections.
b) If funding allows, the NPS Program will partner with DEP's mining program and the federal OSM to provide support for long-term operation and maintenance of passive and active AMD treatment.

9. **Goal**: Support the WVDOF in their administration of the Logging and Sediment Control Act (LSCA), which reduces the potential impacts to water quality from forestry operations. The NPS Program will work with the WVDOF to support LSCA activities, the objectives listed below as well as other activities that promote the protection of water quality from NPS pollution; however, WVDOF is the primary agency for implementing all forestry management activities.

Objectives

a) Every three-years participate in the Forestry BMP Committee that updates and revises the WVDOF BMP Manual.
b) Increase community/landowner involvement with Urban Forestry Program, Stewardship Incentive Program (SIP) and Forest Incentive Program (FIP).
c) Encourage proper forestry management on all forest lands, which will ensure a productive forest and enhance water quality.

**CHESAPEAKE BAY PROGRAM**

10. **Goal**: WV is a headwater state for the Chesapeake Bay watershed and the NPS Program will support the goals of the CB Agreement by serving on committees, participating in regular meetings and calls and providing input to the future development of the Bay TMDL and models. The NPS Program will also work on specific objectives that support the general goals of the CB Program. **The general goals of the Chesapeake Bay Agreement are as follows**:

    1) Protect, restore and enhance finfish, shellfish and other living resources, their habitats and ecological relationships to sustain all fisheries and provide for a balanced ecosystem in the watershed and Bay.
    2) Restore, enhance and protect a network of land and water habitats to support fish and wildlife, and to afford other public benefits, including water quality, recreational uses and scenic value across the watershed.
    3) Reduce pollutants to achieve the water quality necessary to support the aquatic living resources of the Bay and its tributaries and protect human health.
    4) Ensure that the Bay and its rivers are free of effects of toxic contaminants on living resources and human health.
    5) Sustain state-identified healthy waters and watersheds recognized for their high quality and/or high ecological value.

6) Increase the number and the diversity of local citizen stewards and local governments that actively support and carry out the conservation and restoration activities that achieve healthy local streams, rivers and a vibrant Chesapeake Bay.
7) Conserve landscapes treasured by citizens in order to maintain water quality and habitat; sustain working forests, farms and maritime communities; and conserve lands of cultural, indigenous and community value.
8) Expand public access to the Bay and its tributaries through existing and new local, state and federal parks, refuges, reserves, trails and partner sites.
9) Enable every student in the region to graduate with the knowledge and skills to act responsibly to protect and restore their local watershed.
10) Increase the resiliency of the Chesapeake Bay watershed, including its living resources, habitats, public infrastructure and communities, to withstand adverse impacts from changing environmental and climate conditions.

Objectives

a) Implement local TMDL WBPs and CB WIP to reduce nutrients, sediment and fecal coliform to local waters and the Chesapeake Bay.
b) Participate in the development of local TMDLs in Warm Springs Run and Rocky Marsh Run to enhance TMDL/NP coordination by identifying opportunities to incorporate information needed for WBP development.
c) Continue to work with local governments to incorporate post construction stormwater requirements in local ordinances.
d) Continue implementation of agriculture BMPs and WV NPDES CAFO permitting and enforcement consistent with the WIP and WBPs.

## Resources and Partners

Partnerships are the key to the success of 319 implementation, planning and overall management. If not for the commitments of the federal and state agencies and the variety of NGOs, nonpoint source pollution abatement would not be accomplished.

WVDEP partners

1. Bay Program
   http://www.dep.wv.gov/WWE/watershed/wqmonitoring/Pages/ChesapeakeBay.aspx
2. Clean Water State Revolving Loan Fund
   http://www.dep.wv.gov/WWE/Programs/SRF/Pages/default.aspx
3. Construction Stormwater Programs
   http://www.dep.wv.gov/WWE/Programs/stormwater/csw/Pages/home.aspx
4. Integrated Water Quality Monitoring and Assessment Report – 305(b) and 303(d)
   http://www.dep.wv.gov/WWE/watershed/IR/Pages/303d_305b.aspx
5. Office of Abandoned Minelands and Reclamation
   http://www.dep.wv.gov/aml/Pages/default.aspx
6. Total Maximum Daily Load (TMDL) Program
   http://www.dep.wv.gov/WWE/watershed/TMDL/Pages/default.aspx
7. Water Quality Monitoring Programs

http://www.dep.wv.gov/WWE/watershed/wqmonitoring/Pages/waterquality.aspx

8. Water Quality Standards Program
   http://www.dep.wv.gov/WWE/Programs/wqs/Pages/default.aspx

State and Federal agency partners

9. Bureau for Public Heath - Source water Assessment and Wellhead Protection
   http://www.wvdhhr.org/oehs/eed/swap/
10. Environmental Protection Agency (Region III)
    http://www2.epa.gov/aboutepa/epa-region-3-mid-atlantic
11. Natural Resource Conservation Service
    http://www.nrcs.usda.gov/wps/portal/nrcs/site/wv/home/
12. Office of Surface Mining
    http://www.arcc.osmre.gov/about/states/wv.shtm
13. WV Conservation Agency – 319 Programs
    http://www.wvca.us/WNPSProgram.cfm
14. WV Conservation Agency – Bay Program
    http://www.wvca.us/bay/
15. WV Division of Forestry
    http://www.wvforestry.com/

NGO partners

16. Blue Heron Environmental Network
    https://www.facebook.com/pages/Blue-Heron-Environmental-Network/121364874546221
17. Cacapon Institute
    http://www.cacaponinstitute.org/
18. Canaan Valley Institute
    http://www.canaanvi.org/CVI/index.html
19. Freshwater Institute/Conservation Fund
    http://www.conservationfund.org/our-conservation-strategy/major-programs/freshwater-institute/
20. Friends of Deckers Creek
    http://www.deckerscreek.org/
21. Friends of the Cheat
    http://www.cheat.org/
22. Greenbrier River Watershed Association
    http://wordpress.greenbrier.org/
23. Morris Creek Watershed Association
    http://www.morriscreekwatershed.org/
24. Plateau Action Network
    http://plateauactionnetwork.org/
25. Sleepy Creek Watershed Association
    http://www.sleepycreekwatershed.org/
26. Trout Unlimited (WV Council)
    http://www.wvtu.org/

27. WV Rivers Coalition
    http://www.wvrivers.org/
28. WV Rural Water Association
    http://www.wvrwa.org/
29. WV Water Research Institute
    http://wvwri.org/

**And many more**

319 Program Resources

30. In Lieu Fee Program
    http://www.dep.wv.gov/WWE/Programs/Pages/In-Lieu-Fee.aspx
31. Nonpoint Source Program
    http://www.dep.wv.gov/WWE/Programs/nonptsource/Pages/NPS.aspx
32. Project WET
    http://www.dep.wv.gov/WWE/getinvolved/WET/Pages/default.aspx
33. Stream Partners Program
    http://www.dep.wv.gov/WWE/getinvolved/WSA_Support/Pages/StreamPartners.aspx
34. WV Save Our Streams
    http://www.dep.wv.gov/WWE/getinvolved/sos/Pages/default.aspx