

Chapter 6 - Goals and objectives

WIB'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 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 USEPA's GRTS and §319 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 goals

Short-term goals and objectives describe the annual activities that WIB undertakes 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 §319 Program are consistent.

An example of short-term goals from a recent annual workplan is provided in *Appendix 6*.

Long-term goals

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.

Watershed management

1. **Goal:** Conduct restoration activities and BMP implementation in 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 2021 develop two-four new WBPs in priority areas as designated by the Watershed Management Framework and TMDL processes.
- b) Every three-five years, evaluate the progress of active WBPs and revise as needed. E
- c) By 2021 complete the proposed watershed projects and achieve the required load reductions (LRs) that will meet the designated uses completing two WBPs.
- d) Every two-years or more frequently when needed or requested by EPA, report on active WBPs in accordance with the milestones established in approved plans. Work w/USEAP to update all tracking information.
- e) By 2021 target HUC12 basins in the Lower Kanawha, Little Kanawha, Upper, Middle and Lower Ohio for the development of 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.
- g) Support, and 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.

- h) Submit a minimum of one water quality restoration success story or two water quality improvement Success Stories annually.
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 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 WWAPP/WRR and other tools and encourage WVDEP to develop statewide criteria to define healthy waters that will ensure better protection of high quality watersheds.

The major load reduction (LR) goals are reflected in *Table 7*. The table shows LR progress since approval of the last WVNPM and *Table 7a* provides estimates for the next 5-years. These projections are based on previous results as well as realistic expectations for future NPS watershed project LRs. The projections will be used to evaluate the progress and the successes of the NPS Programs watershed management activities on a statewide basis and in priority watersheds.

Table 7 – LRs results for the major categories of nonpoint source pollutants

	Year	Acidity tons/yr	Metals-total lbs/yr	Nitrogen lbs/yr	Phosphorus lbs/yr	Sediment tons/yr	Fecal coliform cfu
5-year goals (past)	LR	300	140,000	280,000	220,000	6,000	1.70E+15
	2014	46.5	25,042	262,963	129,369	7,803	2.28E+15
	2015	97.4	49,017	397,811	381,282	7,878	9.64E+13
	2016	161.0	102,667	853,890	344,793	11,287	6.20E+13
	2017	27.8	20,689	141,217	17,654	2,963	1.07E+13
	2018	22.3	24,046	120,902	43,777	3,340	8.82E+15
Results:		355	221,461	1,776,783	916,875	33,272	1.13E+16
% Diff		4.2	11.3	36.4	30.7	34.7	36.9

WV exceeded the past five-year LR goals by an average of 25.7 percent increase.

Table 7a – Projected LRs for the major categories of nonpoint source pollutants

	Year	Acidity tons/yr	Metals-total lbs/yr	Nitrogen lbs/yr	Phosphorus lbs/yr	Sediment tons/yr	Fecal coliform cfu
5-year goals (next)	LR	350	180,000	400,000	300,000	20,000	2.00E+15
	2019						
	2020						
	2021						
	2022						
	2023						
Results:							

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 15 Conservation Plans under the Farm Bill Programs.
- b) Every two years 15 nutrient management plans will be written or reviewed. Estimates for nutrients will be provided, if possible. The overall goals are reflected in Table 7 .
- c) Every two-years provide technical assistance to 15 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 landowners 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 2021 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 assist 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 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.

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 WVDEP's OAMLR, OSR, OO&G and WVDOF on future project opportunities in watersheds impaired by resource extraction activities.

Objectives

- a) Where their project aligns 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 WVDEP'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 WVDOP 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 WVDOP to support LSCA activities, the objectives listed below as well as other activities that promote the protection of water quality from NPS pollution; however, WVDOP 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 WVDOP 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 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) Continue to work with local governments to incorporate post construction stormwater requirements into constructions projects, source water protection plans, hazard mitigation plans, and local comprehensive planning efforts.
- c) Continue implementation of agriculture BMPs consistent with the WIP and WBPs.
- d) Increase implementation of stream restoration projects in conjunction with livestock exclusion to reduce nonpoint source pollution, improve fish habitat and stabilize streams.
- e) Focus implementation efforts in the Cacapon watershed where local nutrient impairments have been found.

Resources and partners

Partnerships are the key to the success of §319 implementations, 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. Note: A list of resources providers and partnerships for the past five years is available upon request.

WIB Program websites

1. In Lieu Fee Program
<http://www.dep.wv.gov/WWE/Programs/Pages/In-Lieu-Fee.aspx>
2. Nonpoint Source Program
<http://www.dep.wv.gov/WWE/Programs/nonptsource/Pages/NPS.aspx>
3. Project WET
<http://www.dep.wv.gov/WWE/getinvolved/WET/Pages/default.aspx>
4. Stream Partners Program
http://www.dep.wv.gov/WWE/getinvolved/WSA_Support/Pages/StreamPartners.aspx
5. WV Save Our Streams
<http://www.dep.wv.gov/WWE/getinvolved/sos/Pages/default.aspx>