



Citizen's Engagement Guide for West Virginia's Phase III Watershed Implementation Plan (WIP)

Background: In 2009, the states whose water drains into the Chesapeake Bay planned with the Chesapeake Bay Program to have all the practices in place that will clean the Bay by 2025. If successful, it could be a model for how to fix the problem of dead zones growing in coastal areas around the world. Each state agreed to a total maximum daily load (TMDL), or 'pollution diet', of how much nitrogen, phosphorous, and sediment that state could put into the the water for the Bay to be able to recover. On July 27th, the EPA released their midpoint assessment (<https://tinyurl.com/baymidpoint>) to assess progress on the states goal of reducing pollution by 60%.

The Choose Clean Water Coalition is a network of more than 200 organizations working to restore and protect the tributaries of the Bay, and coordinates our multi-state effort on the TMDL. West Virginia Rivers Coalition serves as the West Virginia state lead for the effort.

In West Virginia, our focus is our watersheds that drain to the Potomac and Shenandoah rivers, and the main stems of these major rivers: 24% of the Potomac drains through West Virginia. It's about our local streams. Still, we are all part of something bigger than our local watersheds. Every action by every watershed volunteer has meaning in the grand vision of restoring the Bay watershed by taking care of our local streams.

The water is getting cleaner, but we have to keep making progress or risk taking steps backward.

We are now at the midpoint of this multi-year effort to restore the Bay watershed by 2025. Now our watershed groups and agency partners are working on the Watershed Implementation Plan Phase 3, or WIP III. Every watershed and community group can play a role.

The good news is that for the first time in years, we are seeing real progress. Bay grasses are coming back, and the dead zone is starting to shrink. However, recovery is fragile. We still need to pick up the pace.

How is West Virginia doing?

West Virginia is on track. We're the only state that has achieved "ongoing oversight" status across all sectors: Agriculture, Suburban/Urban, Wastewater, and Nutrient Trading. Most WV tributaries are seeing reductions in the pollution measured in the TMDL.

As a result of hard work by many sectors, including farming and wastewater treatment, we met our sediment and phosphorous goals. With the help of several cost-share programs, many West Virginia farmers are managing their land to reduce runoff by planting cover crops to better hold soil on the farm and by planting forests to buffer streams. And major upgrades to wastewater treatment plants are online. In many cases, the water coming out of our treatment plants is cleaner than the water in the river. We've also seen exciting model projects in managing stormwater.

USGS also monitors water quality at multiple sites in the Chesapeake Bay watershed through testing. This USGS data indicates that WV stream water quality is generally improving.

More citizen involvement is needed to stay on track. The Eastern Panhandle is among the few regions in our state experiencing population and economic growth. The challenge of the TMDL is to accommodate orderly growth without adding pollution to our tributaries and the Bay. Our clean water community, which includes small, under-resourced watershed and

environmental education groups, will need to be even more engaged as ambassadors to local and statewide governments.

What does West Virginia need?

Agriculture sector. Nitrogen, phosphorous, and loss of soil from farmland have been a major contributor to pollution loads. Agency staffs and volunteer groups helped many farmers implement best management practices — like excluding livestock from streams and planting vegetative buffers. Thanks to the work of these agencies and groups, and the willing cooperation of farmers, West Virginia is meeting its targets. Still, many say that the hardest work is yet to come. There is still a lot to do, and there is still the problem of nutrients from animal operations, particularly poultry. But progress is on target for now.

Poultry litter remains a critical issue. It is typically spread on fields. But the receiving fields have reached their maximum ability to utilize phosphorus. New solutions are necessary. A pilot program to turn litter into soil amendments — using technology called bio-char — is in development. Its goal is to turn pollution into stable nutrients for use in other watersheds.

According to the WV Conservation Agency, getting the word out to farmers is still slow going. Watershed groups are respected members in their communities. If you know a farmer who still lets livestock in streams or has bare stream banks, please put in a good word for water quality. Encourage them to connect with the WV Conservation Agency or Natural Resource Conservation Service (NRCS) to take advantage of fantastic cost-share programs.

Verification. Many Best Management Practices, or BMPs, have limited certification horizons. Without recertifying BMPs that are in place, many will expire. This doesn't necessarily mean the practices will no longer be in place, but it does mean that without funding for recertifying BMPs we have no way of knowing whether they are still in place. Funding is the primary impediment to verification and re-certification. We need a commitment to secure the funding and staffing for BMP verifications.

Land conservation. Land trusts and farmland protection boards in the three easternmost counties of WV have worked with landowners to place more than 10,000 acres into permanent conservation easement. These easements offer the potential for permanent best management practices, whether on farmland or as stream buffers in new residential neighborhoods. Land trusts, watershed groups, and water utilities in Jefferson and Berkeley counties are collaborating to develop a model to accelerate land conservation to protect watersheds. The potential for land conservation benefits should be reflected in the WIP.

Wastewater treatment plant upgrades. One challenge in WIP II was to reduce pollution from aging wastewater treatment facilities. Thanks in part to citizen advocacy, our legislature funded some of these upgrades; some of the money came from a program called the State Revolving Fund — a state administered loan program that receives some federal funds. The upgrades are now online or scheduled to be soon. Sewage treatment extensions to older neighborhoods with failing septic systems present an opportunity for long-term benefit to local streams and the Bay — but funding these upgrades is a huge challenge because these pollution reductions are not necessarily “counted” in the Bay Program despite their benefits. Our WIP should acknowledge these opportunities.

Septic systems. Aging and malfunctioning septic system are a big problem. West Virginia agencies have funding to help owners in certain watersheds pump or repair their systems. They need help getting the word out. Sleepy Creek Watershed Association, Elks Run Watershed Group, and the Blue Ridge Watershed Coalition have active programs to help homeowners tap into funding. The WIP should continue to fund and promote remediation of these failing systems while exploring the feasibility of sewer extensions where appropriate.

Climate change. Understanding that climate change will be a key component of the Bay Program's out years. We need to ensure that WIP III plans anticipate the added requirements that will be incorporated into the Program.

Accounting for growth. With Jefferson and Berkeley counties ranking as two of the three fastest growing counties in the state, the WIP must account for anticipated growth — the platted lots in Jefferson County alone would double the county's population. Public lands also offer an opportunity to incorporate BMPs — many don't have them. As local park departments plan for future growth, we need to ensure that existing parks and new facilities operate at the highest standards for protecting streams and drinking water. The WIP presents an opportunity to engage local and state governments on the opportunities.

Federal public lands. Federal public lands are the headwaters of the Potomac River. More active engagement in forest management plans is essential to protect downstream drinking water supplies.

Stormwater management. Some Bay states created specific targets for reducing pollution from stormwater. In WV, we didn't have a specific target; rather we viewed stormwater as one part of our overall reduction targets. And made progress. Signature projects include a major project to reduce flooding at a cemetery in Morgan County and implementing green infrastructure in the Town of Bath's streetscape retrofit. Our state's WIP III must include goals for the stormwater sector to cooperate with local governments to identify and develop projects that continue progress while meeting the needs of local jurisdictions.

Watershed improvements. From rain gardens to rain barrels, from engaging homeowners to educating school children, from installing pet waste stations to planting thousands of trees, watershed organizations are doing their part. One of them, the Cacapon Institute, has coordinated planting so many trees through their Carla Hardy CommuniTree program they were honored in 2018 by the National Arbor Day Foundation for the first-ever Headwaters Award. Learn more at <http://www.cacaponinstitute.org/Forestry>. We're just hitting our stride, and renewing our efforts in the WIP.

What Your Organization Can Do:

1. **Collaboration.** An exciting convergence of watershed restoration and land conservation is taking place. As hard as it is to find time, we need more networking and information-sharing to plant the successes of one watershed into others, and to cooperatively help one another make connections that nurture success.
2. **Watershed restoration.** These are large-scale projects that require engineering to implement. Federal dollars are available, but securing non-federal funding matches in a resource-challenged state like West Virginia is a major hurdle. We're leaving money on the table because we lack the major centers of private wealth that other Bay states have. The watershed community will need to tackle this challenge together.
3. **Environmental Justice.** Income inequality and the lack of public voice for people of color and non-English speaking families continues to disconnect people from their water and the policies designed to protect them. Our outreach strategies should include work with communities who are not yet engaged in clean water programming.
4. **Restoration.** Collaborate across small watersheds to help garner support and funding for high-impact projects. For example, a single project on one parcel along Sleepy Creek would remove 16.5 tons of sediment a year from entering the creek. The watershed community must find ways to take a holistic approach to the Potomac watershed's high priority projects.

5. **Stormwater education and outreach.** Have at least one person from your group be a point of contact for public inquiries about best management practices for homeowners and businesses. Be part of the new Flood Fighter program, sponsored by Region 9, the WV DEP, and WV Rivers, and commit your organization to getting properties into the program. This new initiative takes a campaign-style approach to implementing BMPs in residential neighborhoods and commercial districts.
6. **Land conservation and watershed protection.** The Safe Water Conservation Collaborative, coordinated by WV Rivers, coordinates watershed groups, public agencies, utilities, and land trusts sharing information to accelerate land conservation that protects drinking water supplies. Be part of this effort.
7. **Advocacy.** Your organization's voice — and the voices of your members — are making a difference. The WV watershed community already is active in sign-on letters and action alerts matter. Now we must become more active ambassadors in the local planning process. We need to be advocates for the strategies and outcomes of the WIP once they are finalized.

Commit to participating in advocacy efforts of WV Rivers and the Choose Clean Water Coalition to impact funding and policies that benefit our local streams. Take part in the CCW Coalition work group calls. Our agencies and your watershed need these funds to continue our progress. Commit to spreading action alerts from WV Rivers to your members when needed.

You can also ensure that your members participate in public comments and actions on important issues.

8. **Pollution prevention.** Keep planting trees by tapping into the programs of Cacapon Institute and the WV Division of Forestry. And continue with the great work you're doing. And consider the pet waste program implemented by Warm Springs WA.

Cross-Region Asks:

If we are to achieve the necessary pollution reductions critical to saving the Bay, West Virginia must also ensure that:

Climate Change/Coastal Resilience

- Why is this issue important?
 - Chesapeake Bay Program scientists have determined that Bay states need to eliminate an additional 9 million pounds of nitrogen pollution and 500,000 pounds of phosphorus to offset the impacts of climate change and ensure that dissolved oxygen standards can be met in the Bay mainstem by 2025 (to say nothing of compliance with WQS in watershed tributaries). While the jurisdictions rejected a proposal that would commit each jurisdiction to account for their proportion of the these numeric loads, the partnership did approve a policy to qualitatively or programmatically address climate impacts in the Phase III WIPs.
- *What is our ask?*
 - In addition to the Bay Program's own guidance (currently in draft form, final in October), Coalition members should ask for
 - A quantitative commitment to address climate-attributable pollution loads, as presented by the Bay Program modeling produced in 2017-2018, and supported by narrative discussion of proposed practices to eliminate the jurisdiction's proportion by 2025

- An assessment of and specific actions to address the impact that increasing loads of inorganic nitrogen will have on watershed tributaries
- Quantitatively address risk of climate impacts to proposed BMP siting based upon the best-available projections for inundation factors such as modeled storm surge and sea level rise; qualitatively and/or quantitatively consider impacts on design where feasible and supported by available science
- Conduct and include assessment of and specific actions that will be taken to address the climate vulnerability of existing BMPs, consistent with the guidelines above.
- Include clear commitment to specific actions that will be taken to facilitate the collection and evaluation of BMP performance data to support future development of BMP standards for climate resilience
- Provide a clear and specific narrative description of how potential climate co-benefits, addressing challenges such as flooding and urban heat islands, were identified and prioritized through the selection and design of proposed BMPs and other interventions
- Provide a clear and specific narrative description of how the Phase III WIP is adequately flexible and adaptable to addressing elimination of climate-attributable, numeric pollution loads (once adopted by the partnership in 2021) before that 2025 deadline. In other words, have a plan for a plan to eliminate climate-attributable pollution loads, beginning in 2021 (sooner is better) and no later than 2025.
 - "Cadillac-option": include commitments and specific actions to begin elimination of climate-attributable pollution loads before they are adopted in 2021. E.g. "We can expect that the modeling will indicate our burden will be somewhere between XX,XXX and YY,YYY additional pounds by 2025, so we propose getting started on implementing BMPs before 2021 that will address half of that additional pollutant loading."
- Commit to consideration of a set of "stopping rules" policies - before Phase III WIPs are finalized – that would ensure adoption by 2021, and action no later than 2025, to address numeric pollution loads attributable to climate change.
- Include a clear and unequivocal commitment to addressing climate-attributable pollution loads beginning no later than 2022.

Accounting for growth

- Why is this important?
 - Partnership agreed to policy decisions related to accounting for growth. While the Bay Program has forecasted growth through 2025 in order to give states a better sense of what they will need to offset, the states still need to make policy changes or ramp up BMP implementation in order to deliver on that. Advocates have an opportunity to help state lawmakers and officials develop innovative policy approaches that are uniquely tailored to their states. It is imperative that we push states here, because this is not a traditional aspect of Clean Water Act implementation. Rather, it is unique to the Bay TMDL and necessary to achieving the TMDL's goals.
- What is our ask?

- Phase III WIPs that are *accounting for growth* include policies that account for and offset pollution from new or expanding sources for all sectors, consistent with the TMDL and EPA expectations. If the state has not created an accounting for growth regulation, policy, or even working/stakeholder group, then we should urge the state to move forward to create one and volunteer to assist.
- It is also crucial that we advocate that states develop policies for ALL sectors. This is not solely designed to focus on new residential/commercial developments. New animal populations in many states will dwarf the impact of pollution from human population or economic growth.

Land Conservation

- Why is this important?
 - *Land conservation* is a part of a long term plan for restoring and maintaining water quality in the region. Land use change continues to be a major driver of pollution in the Chesapeake Bay watershed. Land conservation BMPs are among the options that jurisdictions are considering and committing to in developing their WIPs.
 - Since one of the major drivers of pollution in the Chesapeake Bay Watershed is land use change (from less polluting to more polluting uses), land conservation must be a part of long term plans for restoring and maintaining water quality. That should start with Phase III WIPs. Permanent land conservation is one of the most cost-effective and enduring forms of pollution reduction--by avoiding pollution in the first place and maintaining protection of that land in perpetuity. And its value in delivering this and many other benefits will only increase in future decades, making it an even sounder investment as time passes.
- What is our ask?
 - Ensure that land conservation BMPs are among the options that jurisdictions are considering and committing to in developing their WIPs.
 - Engage local land trusts as stakeholders in the WIP III planning process
 - Consider land trusts not only as partners who can deliver land conservation, but also as partners who are stewarding land and have relationships with landowners that could help facilitate “traditional” BMP implementation on private land

State and Local Funding

- Why is this important?
 - State budgets are essential for meeting the 2025 target. We will not succeed without new and enhanced programs backed by strong budgetary support. Our WIPs will not succeed without identifying funding deficiencies and developing a plan of action to increase those funds.
 - Funding is the most difficult challenge facing our efforts to meet our goals. There are not enough available fund and state legislatures are unwilling to appropriate the necessary funds.
- What is our ask?
 - Phase III WIPs identify innovative *state and local funding* needs to implement best management practices (BMPs) for farmers and conservation practices.
 - See state expectations resource for compelling and local arguments as to why an investment in clean water is a good one.

State Best Management Practice (BMP) Verification Programs

- Why is this important?

- The TMDL will only succeed if pollution reduction practices – including “Best Management Practices,” or BMPs – work as intended. The only way to know whether BMPs are working as intended is to verify that they have been installed, implemented, and maintained correctly. Verification is also key to public trust in the TMDL process.
- What is our ask?
 - For more detail, see the state CCWC BMP Verification Protocol Comments submitted to the EPA Chesapeake Bay Program in January 2016. In general, we need to work to ensure verification plans should require more provisions to ensure adequate transparency, enforcement, adaptive management, and funding. See you state expectations for more guidance here.

Farm Bill

- Why is this important?
 - The Farm Bill provides an opportunity to increase funding to the Chesapeake Bay through the Regional Conservation Partnership Program (RCPP) and the Conservation Reserve Enhancement Program (CREP).
- What is our ask?
 - Chesapeake Bay jurisdictions should collectively support improving funding mechanisms such as the RCPP and CREP within the Farm Bill that will bring continued, critical funding back to the region.
- What does this mean?
 - RCPP - The 2014 Farm Bill’s RCPP was meant to replace the Chesapeake Watershed Initiative, which brought \$47 million annually to Chesapeake Bay watershed farmers to install conservation practices meant to benefit water quality. RCPP fell short, and has only brought in about \$10 million annually. The changes made to RCPP in the Senate Farm Bill, supported by the Choose Clean Water Coalition, should substantially increase conservation funding for all eight Critical Conservation Areas across the country, which includes the Chesapeake Bay watershed. The primary change is to have 60% of all RCPP funds, rather than the current 35%, go to those 8 Critical Conservation Areas.
 - CREP - This is the primary Farm Bill program used to restore and protect riparian forest buffers in the Chesapeake Bay watershed and nationwide. The Coalition supported a provision that got into the Senate Farm Bill which will increase the number of acres that can be restored nationwide by at least 50% - from 1 million acres to at least 1.5 million acres. Riparian forest buffers are a primary conservation practice used in every state’s WIP to meet pollution reduction targets by agricultural sector.

Conowingo Dam

- Why is this important?
 - The Conowingo Dam unintentionally acts as a “pollution gate” stopping sediment (and attached pollutants) from going down stream into the Chesapeake Bay. At this point in time, the reservoir behind the dam is essentially full and is trapping smaller and smaller amounts of sediment over time. When the region experiences large storms that create strong floods, this scours the sediment and other pollutants behind the dam and sends them downstream into the Bay. Original estimates stated that the dam would not be at trapping capacity until 2030 or 2035, but the dam is approximately 95 percent full right now, and recent assessments have determined the dam is no longer stopping pollution at all.
- What is our ask?
 - A strong WIP for the *Conowingo Dam* that provides sufficient funding.

Clean Water Act Permits

- Why is this important?
 - The jurisdictions are gathering input from stakeholders and conservation organizations leading up to and during *Clean Water Act Permit* renewals and development.
 - A significant percentage of reductions have come from facilities regulated under CWA permits. Many of these facilities are regulated under general permits that come up for renewal every 5 years (or they're supposed to). At any given time, some of these permit renewals are under development. Advocates need to know when the permit renewals are due and start working with the state months, if not a full year, in advance to have our voices heard in the permit development process.
 - As an example, under a TMDL milestone assessment, EPA downgraded Maryland's stormwater sector and one condition to prevent further downgrading was to develop the next round of MS4 Phase I permits two years early, sharing the draft template permit with EPA Region 3. MD advocates met with MDE a number of times during that year and submitted written comments.

Phase III WIP Schedule:

- **Phase III WIP Planning District Commissions (PDCs) Assistance Grants**
 - Grant contracts to PDCs- April 15. PDC grant project start date- July 2. Project completions date- Dec 14.
- **Release of final planning targets**-May 25-June 25.
- **Seek input from Chesapeake Bay Stakeholder Advisory Group (SAG)**-March, April, June, August, October, and December.
- **CAST Training**- Staff training-May. Local partner training- June.
- **Coordinated meetings with PDCs and Soil and Water Conservation Districts (SWCD) Areas**- May/June.
- **SWCD Area meetings to evaluate agriculture input desks**- July 2-November 1.
- **PDCs meetings with local elected officials to evaluate non-agriculture input desks**- July 2-November 1.
- **PDCs convene meetings with local partners and SWCDs to evaluate non-agriculture input desks**-November 1-December 14.
- **On-going drafting of Phase III WIP document**-May-December.
- **DEQ builds Phase III WIP input decks from SWCD and PDC engagement**- November-January.
- **Submit draft Phase III WIP for Executive Review**-February 1.
- **Submit draft Phase III WIP to EPA**-March 1.
- **Public Comment on draft Phase III WIP**-April 12, 2019.
- **Public Comment period ends**- June 7, 2019
- **Final Phase III WIPs will be released**- August 9, 2012.

Additional Resources:

- **West Virginia's Chesapeake Bay Initiative:** <http://www.wvchesapeakebay.us>.
- **Eastern Panhandle Planning and Development:** <http://www.region9wv.com>
- **WV DEP public comment-period announcements:**
<https://dep.wv.gov/insidedep/Pages/DEPMailingLists.aspx>.
- **West Virginia Rivers Coalition Water Policy News:** WVRivers.org. Click on email sign-up.
- **Chose Clean Water Coalition:** ChooseCleanWater.org.
- **Center for Progressive Reform:** <https://create.piktochart.com/output/29335894-new-piktochart>. (A terrific info graphic)

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