

Pollution-reducing practices can improve water quality in the Chesapeake Bay and its rivers and streams, according to new research from the Chesapeake Bay Program partnership. In a report released February 25, a number of case studies show that “best management practices” are having a positive impact on the Bay.

“In *New Insights*, we find the scientific evidence to support what we’ve said before: we are rebuilding nature’s resilience back into the Chesapeake Bay ecosystem, and the watershed can and will recover when our communities support clean local waters,” said Nick Dipasquale, director for the Chesapeake Bay Program.

West Virginia is one of six states in the Chesapeake Bay watershed, which consists primarily of the Potomac River and its tributaries in the eastern panhandle and Potomac Basin regions. The West Virginia Conservation Agency (WVCA) is one of three lead state agencies facilitating the Chesapeake Bay Program.

“*New Insights: Science-based Evidence of Water Quality Improvements, Challenges, and Opportunities in the Chesapeake*” compiles data collected and analyzed by Chesapeake Bay Program partners, including the University of Maryland Center for Environmental Science (UMCES) and the U.S. Geological Survey (USGS).

Over the past several years, the WVCA, in cooperation with local landowners and federal and state organizations, has worked to reduce excess nutrients and sediment from entering the Potomac River watershed and ultimately the Chesapeake Bay. “*Insights*” shows that the hard work is having a positive impact, but there is still more work that needs done.

“The West Virginia Conservation Agency has had great success in working with our nonpoint source stakeholders, both in the agricultural and stormwater sector, to make local improvements to water quality, said Carla Hardy, watershed program coordinator for the WVCA. “Our citizens are recognizing their responsibility and it’s nice to be able to have positive feedback to deliver with the release of this report.”

These data show that upgrading wastewater treatment technologies has led to cleaner waters and healthier habitats, lowering vehicle and power plant emissions has lowered nutrient pollution in some waterways and reducing agricultural runoff by planting cover crops, managing manure and excluding cattle from rivers and streams has improved local water quality across the region.

Cover crops and exclusion fence are some of the primary tools the WVCA is using to improve water quality in the Potomac River and Chesapeake Bay watersheds. In 2013, through the Agriculture Enhancement Program, the WVCA in cooperation with local farmers installed 2,343 acres of cover crops and 37,761 feet of exclusion fence.

The continued use of these proven and innovative pollution-reducing practices is critical to the restoration of the Bay: while we have improved water quality, our progress can be overwhelmed by intensified agriculture and unsustainable development, and our patience can be tested by the “lag times” that delay the full benefits of restoration work.

As urban and suburban development expand, managing stormwater will be crucial in maintaining a healthy Bay, while targeting and monitoring pollution-reducing practices will be integral in creating a vibrant watershed.

One way the WVCA is educating the public on watershed and stormwater issues is through West Virginia Project CommuniTree (CTree), a collaborative effort between the WVCA, West Virginia Division of Forestry and Cacapon Institute. CTree promotes urban tree planting and environmental education in Berkeley, Grant, Hampshire, Hardy, Jefferson, Mineral, Morgan and Pendleton counties.

The program is volunteer based and engages participants in the process of making priority decisions within their communities. The WVCA also maintains the state's Chesapeake Bay website, where visitors can sign-up for quarterly newsletters that provide program updates and information on upcoming activities.

Understanding watersheds helps prevent water pollution and protect our rivers. To protect rivers, we must understand the need for such best management practices as stormwater runoff pollution mitigation management and creating buffer zone plantings to reduce soil erosion.

View the full "New Insights" report here, or for more information visit [www.chesapeakebay.net](http://www.chesapeakebay.net).