



How West Virginia State Agencies use Volunteer Data



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<http://www.dep.wv.gov/WWE/Programs/nonptsource/Pages/usingvolunteerdata.aspx>

Abstract

Since the Izaak Walton League of American (IWLA) introduced citizens to volunteer monitoring in the early 1970's, West Virginia volunteers have actively participated. This participation increased dramatically when the state started its own program in 1995. Even though there was interest and enthusiasm state agencies have been hesitant to use volunteer generated data. When the second Citizens Monitoring Coordinator was hired in 2000 things began to change.

The Coordinator partnered with a variety of experts, supported a peer reviewed study that showed the weakness and strengths of the data, and held meetings and workshops statewide introducing more scientifically rigorous methods based on recommendations from experts. The new procedures were much more stringent evaluations based on SOPs from the WV Department of Environmental Protection (WVDEP) Watershed Branch, EPA's Bioassessment Protocols and other expert recommendations. The final piece was a strong training and certification program.

Since introducing these procedures volunteer data has been accepted for the Integrated Report, Anti-degradation Tier 3 nominations, and 319 project monitoring, just to name a few uses. The volunteer groups are now much more sophisticated and have learned to use their data as a powerful tool to improve awareness and make positive changes to their local communities.

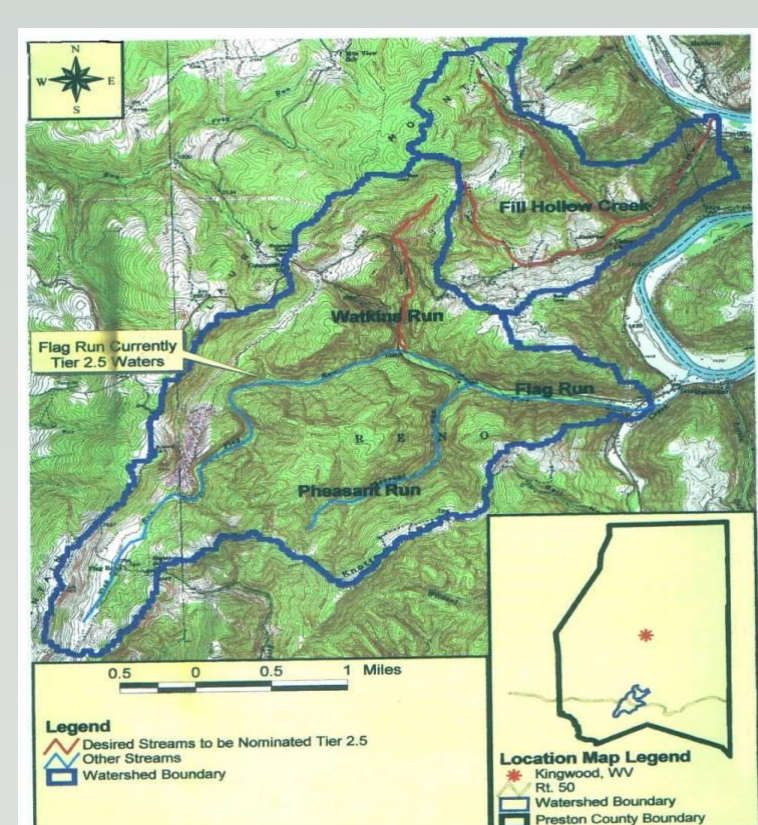
Integrated Report

The screenshot shows the WVDEP website with a search bar and navigation menu. The main content area is titled 'Third Party Data Guidelines' and includes sections for 'Guidelines for Submitting Data to Watershed Branch', 'Documents', and 'How and who to submit data to at DEP'. It lists various reports and documents available for download.

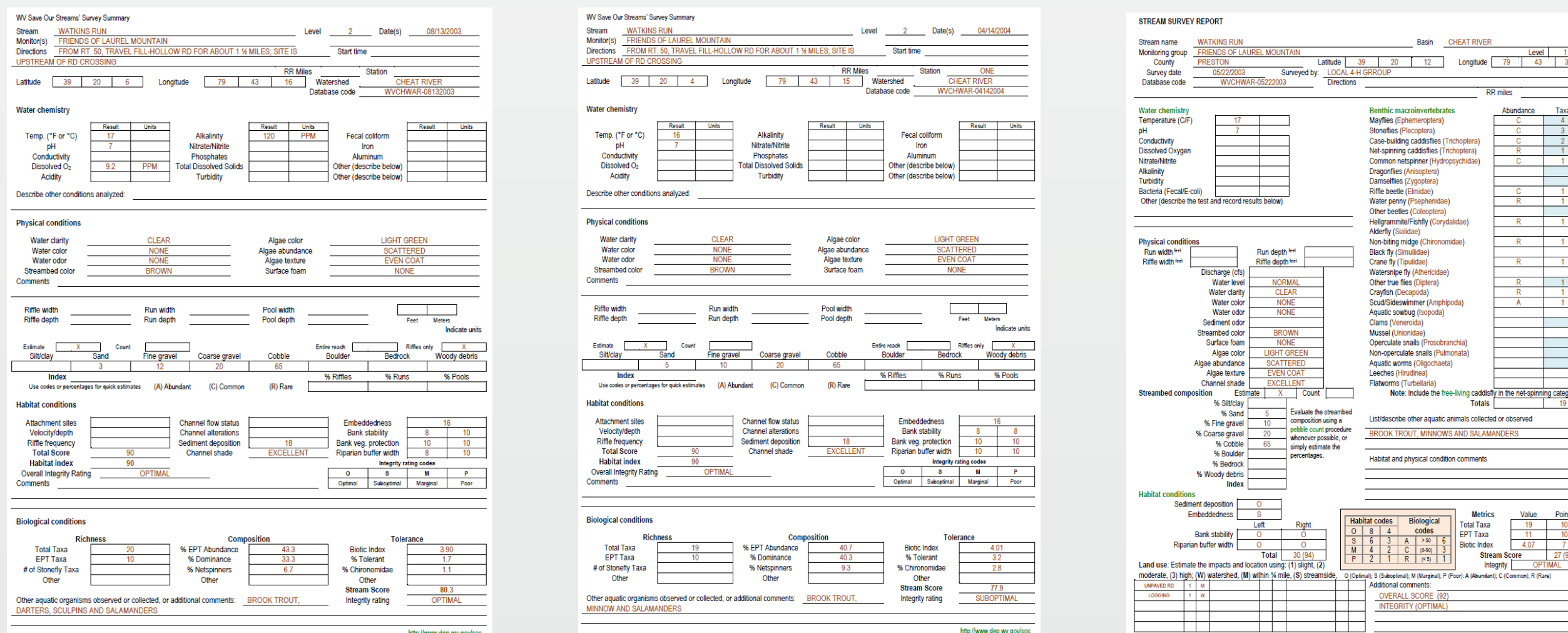
State agencies charged with assessing the condition of their watersheds used two major reports to inform the public and EPA. The 303(d) list is a listing of impaired waters and the 305(b) report was a description of those conditions. The two reports became one, the Integrated Report in 2002. WV Save Our Streams volunteer data was first published in the 305(b) report in 2000, and volunteer data has been used in every Integrated Report since 2002.

This cluster graph compares the third party and volunteer data submitted since 2002. The volunteer contribution has been relatively consistent through the years. Overall approximately 30% of the external data accepted is volunteer generated.

Anti-Degradation



In 2009 Friends of Laurel Mountain and the local 4H group nominated Watkins Run for Tier 3 protection. After public meetings, and a final meeting before the Environmental Quality Board, WVDEP Water Quality Standard Program approved the nomination. Several WVDEP stream surveys and multiple volunteer surveys were the data sources. Summaries of the volunteer surveys are provided next. Thus far, this is the **only successful Tier 3 nomination**.



<http://www.dep.wv.gov/WWE/Programs/wqs/Pages/default.aspx>

Watershed Reports

Many volunteer groups in WV have used local financial support, state funds and 319 funds to complete numerous projects designed to restore streams impaired by a multitude of nonpoint pollution sources, acid mine drainage being the most prominent. In addition to the rigors of projects and grant management, watershed planning etc. these groups are able to produce reports to inform their communities on the condition of the streams and rivers. Here are a few examples.

This collage features several watershed reports. The top left is the '2014 WOLF CREEK STATE OF THE WATERSHED' report from the Plateau Action Network, which includes a map of the watershed and a table of water quality trends. The top right is a report titled 'ABOUT THIS REPORT' from the Plateau Action Network, discussing the importance of volunteer data. The bottom left is the 'Friends of Deckers Creek 2014 State of the Creek Report', which includes a map and various data charts. The bottom right shows reports on 'Acid Mine Drainage' and 'Water Quality' with detailed data tables and graphs.

This report, titled 'THE BEAUTIFUL BLACKWATER WATERSHED STATE OF THE RIVER REPORT I', features a large, scenic photograph of a waterfall cascading over rocks. Below the photo is a map of the Blackwater River watershed, showing its course through the Allegheny Mountains. The report includes an overview of the watershed's history and current status, as well as information about the various tributaries and the challenges they face.

Shown here are various sections from watershed and state of the stream reports provided by Plateau Action Network, Friends of Deckers Creek, Friends of the Cheat and Friends of Blackwater. Contact: timothy.d.craddock@wv.gov to request a copy.

Images from the field



Results



Since 2009 volunteer/agency partnerships are responsible for two 303(d) de-listings (**Indian Run and Windmill Gap**) and millions of pounds of pollutant reductions.

Acidity	646,458	lbs/year
AMD metals	211,837	lbs/year
Fecal coliform	3.88E+14	cfu
Nutrients	48	lbs/year
Sediment	10	tons/year
Suspended solids	39,201	lbs/year

Unless someone like you cares a whole awful lot, nothing is going to get better, its not!

This collage includes a report from 'Friends of the Cheat' titled 'Cheat Aquatic Pollution and Baseline Ecological Monitoring Program Annual Report 2011-2012'. It features a pie chart showing the 'CAPABLE Program Grant Budget 2012-2013' with categories like 'Data Logger Program' and 'Water Sampling'. There is also a map of the Cheat River watershed and a report on 'Acid Mine Drainage' with detailed data tables.