



# How West Virginia State Agencies use Volunteer Data



Timothy Craddock, Nonpoint Source Program Coordinator  
WVDEP's Watershed Improvement Branch

<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

west virginia state agency directory | online services

west virginia department of environmental protection  
- Promoting a Healthy Environment

DEP Offices | Agency History | News | Outdoor Web Access | Fee Schedule | A-Z

Watershed Map  
Water Quality Monitoring  
Biological Monitoring  
Water Quality and Impaired Streams  
Total Maximum Daily Loads (TMDL)  
Reports  
Special Studies  
Nonpoint Source Program  
Water Quality Standards  
Watershed Improvement Branch

Guidelines for Submitting Data to Watershed Branch

Every two years, the West Virginia DEP solicits water quality data from various local, state, federal, public and private entities for evaluation in helping complete the 303(d) and 305(b) reports. The 303(d) list is a report of a general assessment of state waters. The document below explains what is needed in order to submit data. Please make sure to review all parts of the document and include contact information in case DEP personnel need to follow up with any questions, as well as sample location and other sample information required in order for the sample to be considered for a water body. DEP is currently requesting data collected from July 1, 2010 through June 30, 2015.

Documents

- 3) Third Party Guidelines (Word Document)
- 2) US EPA 303(d) guidelines (link to PDF)
- 3) Press Release (PDF)

How and who to submit data to at DEP:

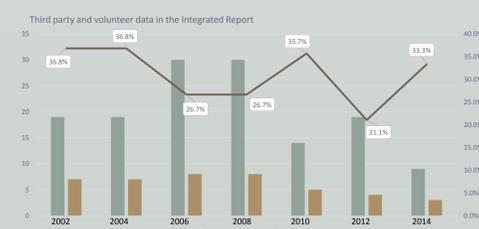
Please submit data to Chris Gaugherty via email at: [Chris.Gaugherty@wv.gov](mailto:Chris.Gaugherty@wv.gov). Data may also be submitted in a non-electronic format (although it is highly encouraged to submit it electronically).

WVDEP, DWWM  
603 57th Street, S.E.  
Charleston, WV 25304  
Attn: Steve Young - 3rd Party  
Deadline: October 16, 2015

DEP Offices | Contact Us | DEP Staff Directory | Site Map | Privacy Notice | EOP Home Page | DEP Vacancy Announcements

<http://www.dep.wv.gov/WWE/watershed/IR/Pages/Third-Party-Data-Guidelines.aspx>

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.

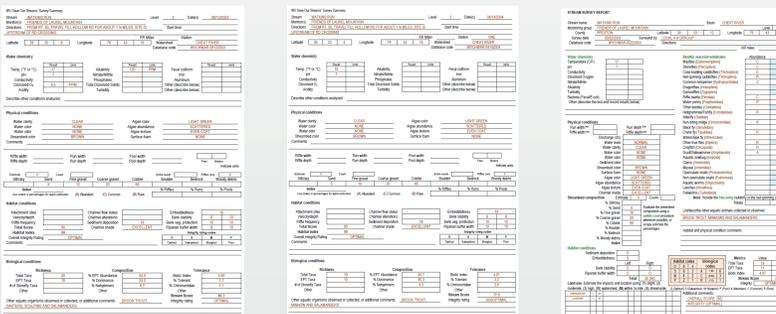


This cluster graph compares the third party and volunteer data submitted since 2002. The volunteer contribution has been relatively consistent through the years. Overall approximately 30% of the external data accepted is volunteer generated.

## 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.

**PLATEAU ACTION NETWORK**

**2014 WOLF CREEK STATE OF THE WATERSHED**

**WOLF CREEK STATE OF THE WATERSHED**  
Plateau Action Network

**Friends of Deckers Creek**  
2014 State of the Creek Report

**Friends of the Cheat**  
Cheat Aquatic Pollution and Baseline Ecological Monitoring Program Annual Report 2011-2012

**CAPABLE Program Grant Budget 2012-2013**

Category	Amount	Percentage
Staff Time	\$17,680	75%
Monitoring Supplies	\$1,800	8%
Data Logger Program	\$1,800	8%
Website Development	\$1,800	8%
ALMAM Training	\$1,800	8%
<b>Total</b>	<b>\$23,680</b>	<b>100%</b>

**THE BEAUTIFUL BLACKWATER WATERSHED STATE OF THE RIVER REPORT I**

**OVERVIEW**

The high elevation Blackwater River flows through the Allegheny Mountains of Tucker County West Virginia. It is a principal tributary of the Cheat River which flows north to the Monongahela forming the Ohio at Pittsburgh. The name "Blackwater" originated from the reddish-brown hue of the river caused by tannic acid from evergreens growing along the river's banks and iron oxide from the Blackwater Creek chert nodules along a long part of Cheat Valley where the river banks are eroded. At 2,500 feet the headwaters of the Blackwater River in the Valley mountains, are joined by the Cheat Valley where the river banks are eroded. The Blackwater River flows through Blackwater Falls. Within the Canyon the river drops 1,500 feet over 20 miles. The Blackwater River is 32 miles long and drains an area of 442 square miles.

The principal tributaries of the Blackwater River starting at the mouth are Big and Top Run, the North Fork running through Trout, Bang, Middle, and Spouter creeks. Tributaries which form the site of Blackwater Park State Park, Boser and Owl's Run (East Shore Dam), Yellow Creek, Little Blackwater River, South Branch, Sand, Hudson, Fossil, Oak, and Mill Run in Casson Valley. In Blackwater Park State Park the tributaries are Tank, Engine, Shaws and Lundy Run which run down the north facing slope of the Blackwater Canyon.

Produced by: Friends of Blackwater  
501 Elizabeth Street  
Charleston, WV 25311

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](mailto:timothy.d.craddock@wv.gov) to request a copy.

## Images from the field



## Results



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

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