



West Virginia Safe Water Final Report



Engaging citizens in protecting their drinking water provides public education opportunities for increased participation in nonpoint source pollution reduction.

Collaboration in source water/watershed protection

Water utilities in West Virginia now have source water protection plans to demonstrate how they plan to protect local drinking water supplies, including addressing nonpoint source pollution. Source water protection areas may overlap with existing watershed based plans that define how state agencies address nonpoint source pollution. The strategies are similar in both plans, with public education an important component. For citizens to meaningfully participate in the water protection strategies, they need to know their role in helping to protect watersheds and thus drinking water sources. West Virginia Rivers Coalition developed the Safe Water for WV program to educate citizens through a series of public forums, educational tools, local partners network building, and follow-up technical assistance.

Problem

The 2014 Elk River chemical leak and ensuing water crisis was an awakening to the vulnerability of our water supplies. The State responded by passing a law requiring water utilities to develop source water protection plans (SWPPs); however, the law did not detail the SWPP implementation phase.

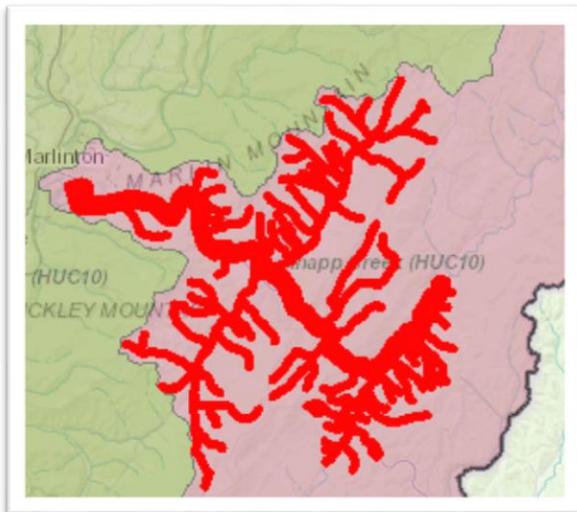
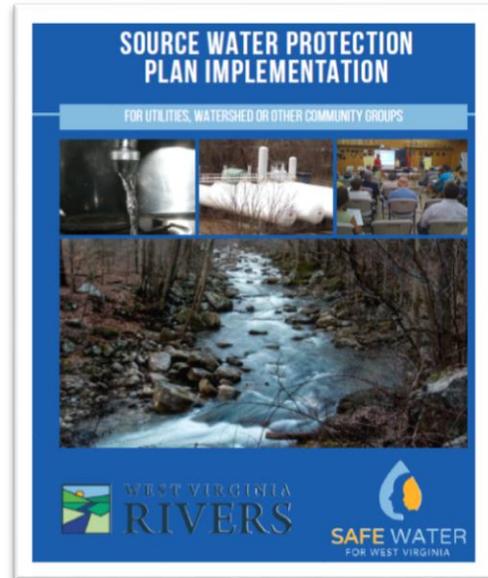
WV Rivers Coalition (WVRC)' Safe Water for WV program, developed to assist water utilities in the source water protection planning process, convened stakeholders whose goals might overlap to assist in the implementation of the SWPPs. There are a few regions in the state where source water protection areas overlay with waterbodies that have developed watershed based plans (WBP). A WBP addresses the nonpoint sources of pollution in a watershed and a SWPP identifies both point source and nonpoint sources of pollution that may impact a water utility's drinking water source. In regions where a WBP was written for a waterbody that is also a utilities' source water protection area, the goals in the WBP and SWPP overlap. While SWPP management strategies focus on preventing contamination, the WBP management strategies aim to reduce contamination already occurring within a watershed. Key areas of overlap include public outreach and education, communication with potential contaminant sources and best management practices. These overlaps present a unique opportunity for co-implementation of these plans, but deliberate collaboration is required.

Project highlights

Before the public could meaningfully engage in source water protection, they needed to know what source water was, how it relates to their drinking water, and what information is included in a source water protection plan. Once equipped with this knowledge, WVRC then provided citizens with an opportunity to learn about their source water protection plan, engage with their water utility and connect with other groups working to protect their local drinking water supplies. The following objectives advanced those goals:

Source Water Protection Implementation Guide

WVRC worked with Downstream Strategies in the development of a guide to aid water utilities by illustrating the commonalities between SWPPs and WBPs and detailing how the water utility can work with watershed groups and state agencies to help with the SWPP implementation process. *Source Water Protection Implementation Guide* is available for download at: <http://wvivers.org/resources/publications/>



Marlinton's source water protection area on Knapp Creek overlaps with the WBP.

Regional Stakeholder Convening's

WVRC selected two regions in the state where a WBP was written for a waterbody that also serves as a public water supply: Marlinton and Buckhannon.

In each of the regions, stakeholder meetings were held to explore the goals and management strategies shared between the two plans. The meetings brought together the water utilities, watershed groups and agency representatives tasked with overseeing and implementing the plans. We discussed the primary pollutants identified in each plan and explored the shared interest in achieving pollution prevention and reduction. An important component identified in each plan was public education and outreach.

Results

Two community events were held receiving attendance from total of over 100 community members, 18 local partners and two public water utilities participating:



April 27, Marlinton with approximately 30 people in attendance and eight partner organizations tabled at the event. Delegate Hartman and Mayor Felton provided opening remarks. Jim Mitchem, Marlinton Water Operator, spoke about the Town's SWPP and Dennis Burns, detailed the work being done on Knapp Creek per the WPB. A panel of guests made up of Greg Hamons (WVU Extension Service), Jennifer Baker (Greenbrier River Watershed Association), Dennis Burns (WV Conservation Agency) Allen Johnson (8 Rivers Council) and Jim Mitchem (City of Marlinton) discussed priority water projects. The panel, facilitated by Angie Rosser

(WVRC) introduced their work and took comments and questions from the audience about the work to protect the watershed and drinking water.

A list of priority projects emerged that were further discussed at follow-up meetings. These priorities include: Water Resources Task Force (dialogue with County Commission), bacteria, stream bank erosion, local jobs, tourism and advocacy, public education and community parks. The group decided to pursue a project converting a swampy vacant city lot into a community park around wetland education. Additional funding for this project is being pursued.

"The process of thinking beyond the corporate limit, where our water source comes from, into the plant itself and what happens there, has all been a good experience." – Mayor Sam Felton, Town of Marlinton

"I believe it definitely strengthened relationships with local and state government agencies and gave us more time to interact and network about watershed work." – Greg Hamons, WVU Extension Service



August 22, Buckhannon with approximately 75 people in attendance and 10 partner organizations tabled at the event. Delegate Hamilton provided opening remarks. Additional speakers at the event included representatives from WVRC, Mountain Lake Preservation Alliance, Buckhannon River Watershed Association, WVDEP Watershed Improvement Branch, Buckhannon Fire Department, Mayor of Buckhannon, and Senator Karnes. The event also featured live music by Seth Maynard and a Native American historical presentation titled "Environmental Lessons from the Past" by Doug Wood, a local naturalist and historian. Tygart River Outfitters provided raft and kayak rides on the Buckhannon River. Locally grown and prepared food was provided by Fish Hawk



Acres and Green Acres Farm. Four local faith leaders from different denominations held an interfaith water blessing. Hands-on kid's activities were available for children to make flower wreaths that they tossed into the river as part of the event closing. The event was so successful that the partners want to make it an annual event.

"We appreciate WVCA sponsoring the event and hope to do it again next year." – Kelly Arnold, Buckhannon Water Department



"I feel that our local water protection efforts have been strengthened, while relationships with other organizations and agencies have been improved, setting the stage for more such events and stronger water protection efforts in the future." – April Keating, Mountain Lakes Preservation Alliance

Partners and funding



Many key partners were involved in implementing the SWPP Implementation project. WVRC was the primary lead for this project. Downstream Strategies helped to develop the guide and provided technical support for the webinar.

Statewide partners included: WV Conservation Agency, WV Bureau of Public Health, WV Department of Environmental Protection, WV Rural Water Association, and WV Land Trust.

Marlinton partners included: Town of Marlinton, WVU Cooperative Extension Office, Greenbrier River Watershed Association, and Eight Rivers Council.

Buckhannon partners included: City of Buckhannon, Mountain Lakes Preservation Alliance, Buckhannon River Watershed Association, Tygart Valley Conservation District, Upshur Indivisible, DT Solar, Upshur County Health Department, Beech Tree Yoga and Sam's Pizza.

The total project cost was \$32,280. Project funding was provided by: WV Department of Environmental Protection (\$17,000), WV Bureau of Public Health (\$12,150), Mountain Lakes Preservation Alliance (\$780) and the Unitarian Universalist Congregation Clean Water Fund (\$2,349).

Source	Budgeted Amount (\$)	Actual Expended
AGO Funds	\$17,000	\$17,000
Matching Funds	\$14,500	\$15,280
Total	\$31,500	\$32,280