# Protecting Source Water in West Virginia

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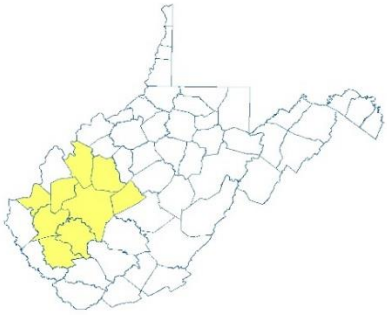
*US Environmental Protection Agency (EPA) funds helped West Virginia residents and utilities engage in source water protection efforts in the wake of the Elk River chemical spill of 2014. The spill contaminated the water supply of nearly 300,000 people in the capitol city Charleston as well as multiple surrounding counties.*



### *AT A GLANCE*

- *Above: Counties impacted by the Elk River spill.*
- *Safe Water for WV project engaged citizens across the state after the spill.*
- *Elk River spill details page 2*

The West Virginia Department of Environmental Protection (WVDEP) used $15,000 from its EPA §319 grant to support a community education and engagement project to actively involve citizens in plans to protect their drinking water sources. The $15,000 was the largest contribution to the $50,000 project.

The "Safe Water for WV" project led by the West Virginia Rivers Coalition (WVRC) included a series of public forums, social media, educational tools, local partner network building and technical assistance to provide citizens with information on source water planning and their role in the process. A key activity was the development of a "Citizen's Guide to Drinking Water Protection."

The overall goal of the project was to help protect drinking water supplies throughout the state by ensuring that watershed groups and other community stakeholders assumed a constructive role in the source water planning process.

A law passed by the state after the spill (SB 373) required public water systems across the state to draft or update source water protection plans with the public's involvement. The plans are designed to help manage pollution from general sources that could endanger drinking water supplies.


Per WVRC, the Elk River chemical leak and ensuing water crisis was an awakening for many to the sources and vulnerability of their water supplies. It was the first time many people thought about where their drinking water comes from and the connection between watershed protection, public health and economic security.

Among the results of the Safe Water for WV project were five public forums attended by at least 345 community members, 72 local partners and 10 public water utilities. The Citizen's Guide was distributed at the forum and was discussed in a statewide webinar.

WVDEP will use funds from its 2017 §319 grant award for a pilot project, which integrates Source Water Protection Plans and Watershed Based Plans in two watersheds. Contact Timothy Craddock for more information.

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## Above Ground Storage Tank Chemical Spill into Elk River

**On the morning of Jan. 9, 2014**, inspectors from the Department of Environmental Protection's Division of Air Quality responded to citizens' complaints of a licorice-like odor near Barlow Drive in Charleston. A site visit led the DAQ inspectors to the Freedom Industries storage tank facility along the Elk River, where they discovered a tank on the property was leaking a coal-processing chemical called 4-Methylcyclohexane Methanol (MCHM).

Further inspection by the DEP revealed that not only was the chemical leaking from tank No. 396, it also was breaching a dilapidated secondary containment wall at the facility and spilling into the Elk River, approximately 1.5 miles upstream from the intake to West Virginia American Water's Charleston treatment plant.

Early estimates by Freedom Industries had the spill volume between 5,000 and 7,500 gallons of MCHM, but were later modified to approximately 10,000 gallons by the company. Also, nearly two weeks after the incident, Freedom revealed that a second chemical, PPH, had also leaked from the faulty tank.

By 5:15 p.m. on the day of the spill, officials at West Virginia American Water, along with Gov. Earl Ray Tomblin, announced that the treatment facility had not been able to effectively remove the chemicals through the water treatment process and a "Do Not Use" order was issued to a nine-county region. More than 300,000 West Virginia American Water users were affected, advised only to use their water for flushing toilets or for fire protection. President Obama signed a disaster declaration for the region and the West Virginia National Guard, along with other federal and state agencies, began distributing water to residents in the impacted counties.

After a 1 part per million health threshold for MCHM in drinking water was set by the U.S. Centers for Disease Control and Prevention (CDC), the state began lifting the "Do Not Use" order by zone on Jan. 13. West Virginia American Water provided guidance to its customers on how to properly flush their systems of contaminants. On Jan. 28, the National Guard began testing tap water in all affected schools for the chemical down to 10 parts per billion and later to 2 parts per billion, well below the CDC threshold.

As a result of the spill, Gov. Tomblin ordered Freedom Industries, which ultimately declared bankruptcy, to dismantle and remove all of the aboveground storage tanks at its Elk River facility. The Freedom chemical spill also led to new legislation. In March 2014, the West Virginia Legislature passed Senate Bill 373 (the "Tank Bill"), which established a new regulatory program for aboveground storage tanks and instituted registration and inspection requirements for tank owners.



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