



RIVERS Conserving and Restoring West Virginia's Exceptional Rivers and Streams

On our rivers: joy, sorrow, a homecoming

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COVER PHOTO

Photo by Chad Cordell: Adam Swisher and Matt Kearns take out on the Kanawha, finishing their journey down the Elk River.



3501 MacCorkle Ave. SE #129 Charleston, WV 25304-1419 (304) 637-7201 www.wvrivers.org wvrivers@wvrivers.org

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WV Rivers Executive Director Angie Rosser, center, with volunteers from Huntington's Cabell Huntington Hospital, who came to a remote part of Clay County to provide relief and medical care.

Receding Waters, Rising Hope

I didn't get out on the river much this summer. Usually venturing out on summer weekends is my time to recover from long office days, lobbying in Charleston and Washington DC, and meetings where the rooms somehow always want for windows.

I treasure every moment to be on the water enjoying our rivers, especially my beloved Elk, which I wake up to each morning as it flows past my backyard, changing its characteristics and colors day to day.

I didn't get out on the river this summer because the river got in. My home was one of countless that were severely damaged by this year's floods. Instead of playing in the water, I and friends and volunteers spent time removing what it left behind in my home.

No, I didn't get outside much this year. But I did get out. Out into many corners of West Virginia to meet with and learn from people about how they are working to ensure their communities have safe water.

We always say at West Virginia Rivers that



Our new logo! Teeshirts at WVRivers.org. our job is to inspire activism. The people that I and our staff met with and assisted in local communities this year may not be aware of it, but it they who inspired me.

When 70, 80, or 100 or more people take time from their lives to attend a meeting, forum, or hearing, I know the seeds we have sown are bearing fruit. I see communities coming together and supporting their own, as well as their neighbors' right to clean water.

When I hear their stories, understand their local knowledge, and feel the passion in their voices for the places and waters they love, it makes every day in a cramped meeting room feel worthwhile and uplifting.

I see, too, how each time we connect locally, our voice in the Capitol grows stronger. This year, our activists — you, that is — wrote more than 6,500 letters to state legislators, regulators, Congress, even the president.

Working for water in West Virginia has never been easy. I know, though, that we are getting stronger, and louder. The current of change is building.

If we stick together, and together bring in new people to the cause of safe water, and if we can keep nurturing the kinds of local actions we are seeing across the state, we will have the West Virginia we hope for some day. That is a promise.

That's something worth getting out for.

–Angie Rosser, Executive Director

After The Floods, Amplifying Voices for Safe Water

Before the flood waters receded, you didn't have to look far to see the damage to homes, businesses, roads, and bridges. What couldn't be seen as readily were the impacts of flooding on drinking water or recreation safety. As the state's advocate for clean water supplies, WV Rivers knew people had questions: How were drinking water supplies impacted? How safe were our affected rivers for recreation?

In the weeks after the floods, our Safe Water for West Virginia program got to work assessing immediate safety issues. We learned that more than 20 water utilities were damaged, leaving people in affected counties without access to reliable water service. Raw sewage flowed into rivers and streams from damaged sewage treatment plants and septic systems. Bacteria levels spiked, straining water supplies and making water recreation unsafe, especially in the most heavily impacted rivers — the Elk, Gauley, and Greenbrier.

At 11 stream gages, according to the U.S. Geological Survey (USGS), periods of record peaks were recorded, corresponding with the most heavily damaged areas. They included the Gauley River at Camden-on-Gauley; the Elk River below Webster

To keep up to date on water

alerts and stream gage data

in real time, visit

water.usgs.gov/wateralert.

Springs, at Clay and at Queen Shoals just above Clendenin — a town which lost most of its businesses and many homes. USGS reported that many other areas were heavily impacted, but there are no gages on those streams.

We also inventoried agencies to find where the floods had impacted safe access for recreation. There was extensive damage to the Greenbrier River Trail, a

major tourist attraction. The Williams River access road was ravaged to the point of closure indefinitely. Key access points to the Gauley were blocked, and the sprint was on to get those restored in time for Gauley season.

Seeing many gaps in information flow, we focused on getting this information packaged and shared with the public. We issued news alerts and developed a webpage that was updated daily.

Now we're working to restore our rivers and communities to wholeness. We're advocating funding for communities, public service districts, wastewater treatment plants, bacteria



monitoring, streambank stabilization, and public access sites to receive the aid they need.

The floods also have influenced our thinking on source water protection planning. These plans focus primarily on threats that could impact drinking water within five hours of an incident. They include response plans for emergencies like chemical leaks or spills. Now people are recognizing that floods, although less

predictable, can wreak havoc on public health, not only on lives and property.

We also must push forward the examination of climate change on extreme weather events that impact our rivers and communities — on a state, regional and global scale. We're living in a rapidly changing world, and Appalachia is a key stakeholder in economic transitions and habitat resiliency that determine the planet's future trajectory.

The flooding has not changed our work; as always, we strive to inform and inspire activists. The flooding has expanded this work, and given new urgency to amplify the voices for safe water in West Virginia.

Photos courtesty of David T. Stephenson Photography. Thanks to DT, a Clay, WV native, for documenting the impacts of the flooding and capturing the images of people helping one another during this crisis.





Elkspedition: A Love Story For All Our Rivers in West Virginia

It started as an uncomplicated idea. WV Rivers' public lands campaigns coordinator Matt Kearns and paddling partner Adam Swisher would travel the length of the Elk River to bring attention to the connections between protecting the Monongahela headwaters and the clean water we rely on for recreation and drinking water supplies. Along the way of their "Elkspedition," they would meet people on the river and welcome guest paddlers.

The duo captured the imagination of West Virginia media and everyone who heard the story on radio, saw it on TV, or read about it in newspapers. Nearly everyone Kearns and Swisher met on the river knew about them and their journey. And they found enthusiastic support for the proposal to designate the Birthplace of Rivers National Monument in the headwaters.

On Memorial Day — the journey's final day to Charleston — the Elkspedtioners were joined by more than 60 paddlers for a three-mile trip to a homecoming celebration at Coonskin Park attended by I50 WV Rivers members and Birthplace of Rivers supporters.

There were big smiles, laughter, hand clasps, and hugs. This was more than a party. A graying paddler summed it up: "It's not just a homecoming for those young men; it's my day, too," he said wiping away a tear. He said he hadn't been on the Elk since the 2014 water crisis.

For WV Rivers Executive Director Angie Rosser, who lives along the Elk, the day was about reclaiming the river. The day before the Homecoming, she met a local fisherman named Homer in a remote part of the river. "He knew about Elkspedition, and because of it, about Birthplace of Rivers and the effort to protect the headwaters," she said. "The Homecoming was for everyone who loves our rivers."

Now when Kearns looks back on Elkspedition, it is through the lens of the terrible flooding unleashed in late June. "I'm probably one of the few people who have travelled the whole watershed. It's impossible for me to describe the bonds I feel with the people who live along the Elk," he said. "People who were so generous, who waved to us when they recognized us, who cheered us on — many of them lost their homes and





businesses. I'll always remember their kindness, and I know I'll always share their sorrow."

The Elkspedition is but a footnote in the rich and complex history of the Elk River, a story that includes rugged mountain men, old coal and lumber towns, Sutton Dam, the chemical spill, our largest drinking water supply, the 2016 flood. "Ultimately, I know," Kearns says, "that all we can do for rivers is love and respect them. I want the next chapter of the Elk to be about all the good things its waters can do for West Virginia."



Adam Swisher and Matt Kearns hiked, biked, and paddled the length of the Elk River in May. People across West Virginia joined them in spirit — and many in person — to celebrate the Elk and our deep connections with our rivers.

Photos above by Chad Cordell at the Elkspedition Homecoming. Top, paddlers of the flotilla approach Coonskin Park; below, WV Rivers Program Director Autumn Bryson Crowe gets splashed at the Homecoming's water balloon toss.

Photo left by Keith Lilly, capturing Adam and Matt in whitewater near Webster Springs.

Young Voices for Watershed Protection and Activisim

What's the connection between commercials for Subaru cars and Apple devices and marketing watershed protection? Just ask WV Rivers Coalition's 2016 OneWatershed fellows. The six students, ranging from ages 16 to 25, traveled to Shepherdstown, WV, September 9–11, for a weekend training to learn about branding, identifying audiences, and using social media to attract and keep volunteers for watershed stewardship.

They came from across West Virginia — and from Baltimore and Calvert County, Md. They were joined by leaders from Sleepy Creek and Warm Springs watershed associations. Together the teams applied marketing research and branding concepts to develop plans to help watershed groups attract younger volunteers and leaders.

Now the students will collaborate with the two watershed groups on outreach for stream restoration projects in spring 2017. "I enjoyed working with the OneWatershed youth representatives," said Chuck Marsh, president of Sleepy Creek Watershed Association. "I appreciated their insightfulness, enthusiasm, wanting to learn more, and willingness to get involved to help us out reaching the youth in our watershed."

"OneWatershed weekend has been such a learning experience," added Evan Byrne, a student at Bethany College in West Virginia's Northern Panhandle. "Being able to work with nonprofits to help them was extremely rewarding — adding real world experience to what I learn as a college student."

What We Can All Learn From OneWatershed

Watershed organizations struggle with the same challenges: replenishing leadership, communications and marketing, and attracting younger volunteers. OneWatershed fellows formed a focus group on attracting young people, then took turns facilitating the discussion. Their findings should be helpful to any volunteer organization:

Create a community of people who care. Young people, our fellows say, are social beings. Create a sense of belonging, use the word "You." Remind young adults about our shared responsibility; invite them to step up and take responsibility. In short, "It's about you!"





Mix work and play. Make it social. Invite people into the fun as well as into the work, with post-volunteer activities like live music or time on the water. Transform volunteer projects into social events with food, Frisbees, and music. It doesn't have to be fancy — 2 guitars and pizza make a party.

Invite young people as equals. There's no need to solve every problem, then get volunteers for the solution. Give them the problem, ask them to help solve it; let them involve their peers to figure it out and get it done.

Explain the need and the results. Take time to explain why. If you're planting 50 trees, explain why it's important, how much pollution will be prevented from getting into the water. No need for a dissertation, but always talk about impacts.

Make it immediate. Special projects are about Right Now! Students, like adults, are overloaded these days. If a project will have immediate impact, share it! If you're going to select certain projects to target young people, pick ones with shorter timelines. Most don't know where they will be in a few years — but they want to help now.

Don't sugar-coat the truth, and don't make things up. Two things drive this focus group nuts: stretching the facts, and avoiding the facts. Be honest about threats to water quality, with questions like, "Would you want your kid to play in water contaminated with bacteria?" On the other hand, don't create a boogey man for every problem. Don't talk doomsday scenarios unless it's real.

Use images and video. A 30-second slideshow with images of young people helping out goes a long way. It doesn't need to be high-production, just honest.

Follow up! Young people want to get emails and social media posts about how they are making a difference.

Nurture advocates. Young people are willing activists who respond to action alerts. Invite them to be part of political solutions.

Our OneWatershed fellows will continue their involvement over the coming months, as they team up with Eastern Panhandle watershed groups to turn these ideas into action.

For bios on our 2016 OneWatershed Fellows, see http://tinyurl.com/onewatershed.

Water Quality Standards Headed Back To Legislature

Stakes especially high for women and children, as industry seeks to increase pollution levels on toxins

It happens every three years; it's one of WV Rivers' biggest efforts; and it always involves clashes between people who use water — which means all of us — and industries that want to weaken protections. It's the Triennial Review of Water Quality Standards, and WV Rivers is the nonprofit that leads the technical analysis and advocacy to keep more pollution out of our rivers and out of the water we drink.

Water Quality Standards are the legal basis for controlling the amount of water pollution. They are designed to protect and maintain water quality so that wildlife can survive and we can safely use it for drinking and recreation.

Over the objections of the public, WVDEP is forwarding industry backed changes to the legislature. WV Rivers is tracking three fronts.

1. Design Flow Standards

You may have heard the phrase "the solution to pollution is dilution." This is key to understanding why flow rate plays a critical role in the amount of pollutants allowed in our waters. A higher flow rate —more water moving through a river — creates a higher pollution dilution factor. This could potentially allow the state to permit more contaminants into water.

Currently, the state calculates flow based on the lowest stream flow for seven consecutive days that would be expected to occur once in ten years. For carcinogens, the state wants to change to a harmonic mean flow, or an average flow rate. By using an average flow instead of a low flow, the state assumes that waters have a higher flow rate — more dilution — and can hold more pollutants.

The change was first proposed in 2003, and dubbed the "Cancer Creek" bill because it would allow more carcinogens

Help WV Rivers defend water quality standards!

Category A is in place to protect us from the pollutants most dangerous to human health. These include toxic and cancer-causing chemicals. It is particularly important to vulnerable populations like pregnant women and babies. Examples of impacts of exposure to Category A toxins include:

- **Dioxin**: known to cause neurological defects and malformations of human embryos.
- **Lead**: is transferred across the placenta and increases risk of abortion, premature birth, birth defects, and delayed mental and physical growth.
- **Arsenic**: also crosses the placenta, and may result in spontaneous abortion or stillbirth.
- **Benzene**: has been found in umbilical cord blood and linked to spontaneous abortion and stillbirth.

See http://tinyurl.com/wvh2o for the full report.



into rivers. After many people argued that more studies were needed before making the change, the proposal was dropped.

Thirteen years later, the concerns are the same. What are the health impacts of allowing more carcinogens in our waters? Who benefits?

2. Category A

Category A is the category applied to waters which, after conventional treatment, are used for human consumption. Most West Virginia surface waters are designated Category A to protect them from harmful levels of more than 80 pollutants. In 2015, the legislature restored Category A protections for the Kanawha River. This provided an option for WV American Water to place a secondary intake on the Kanawha.

Category A will be up for debate again in the 2017 legislative session. Certain industry groups rejected not only making the Kanawha available for drinking water use, but want to remove Category A protections for all waterbodies — except for limited areas immediately above existing drinking water intakes. This would be the most drastic weakening of statewide drinking water protections since West Virginia established its Water Quality Standards in the 1960s.

Changing the current application of Category A would make all of our rivers and streams susceptible to more dumping of the pollutants most harmful to human health. And our options for finding water suitable for future drinking use will be severely limited.

3. Bacteria

Bacteria is the most abundant pollutant in our rivers and can make water-contact recreation dangerous. We support WVDEP's proposal to use E. coli, instead of fecal coliform, as the new indicator for bacterial contamination, but the ability of the agency to show it can do the monitoring required to ensure public safety is in question.

There must be a procedure in place to monitor both indicators during the transition process. The protective threshold is based on a monthly average value; however DEP does not conduct enough sampling to get a monthly average — anywhere. Sampling must be increased to know when and where it's safe for us to swim, boat, and play in our favorite rivers and streams.

WV Rivers In Communities

Live Monumentally in Birthplace of Rivers

Our Best of Birthplace of Rivers weekend has been rescheduled for May 20, 2017. Join us for a weekend of Living Monumentally with guided hikes, bike trips, and fly-fishing outings. This family-oriented weekend is a terrific opportunity to learn a new outdoor activity and explore the proposed national monument area.

Elk River Touring Center is the home base for the weekend. On Saturday evening, join us for a relaxing supper at Elk River Inn followed by music, a bonfire, and stargazing. Here are a few of the outings planned so far: An easy hike to the Falls of Hills Creek followed by a Cherry River picnic, hiking the Tea Creek Trail, a Cranberry River bike trip, and fly fishing on the Elk. See http://tinyurl.com/WVBOR for details.



Chad Cordell



Chad Cordell

Grab Your Camera and Win!

Do you have a favorite photo of West Virginia's public lands? Somewhere in The Mon or along the Gauley or New? Or Harpers Ferry National Historical Park? Enter WV Rivers Photo Contest and you might win a pair of KEEN shoes or have your photo published in Blue Ridge Outdoors magazine. Your photo could be the next cover of Headwaters! The contest will showcase special places in West Virginia's public lands and help WV Rivers show the world that our state deserves a national monument.

Pictures of people enjoying the outdoors, landscapes, rivers — we'll take your best shot! Let's show the country and the world the beauty of the Mountain State!

For details, see www.WVRivers.org/news/photocontest.

Safe Water For WV

One Hundred Twenty-five. That's a number that should make every WV Rivers member proud. That's how many utilities produced source water protection plans this year, thanks to a 2014 law WV Rivers championed after the water crisis. One of the most important parts of the law is a requirement to involve the public in the plans — and WV Rivers has spent 2016 helping communities get informed and involved.

More than 350 people attended a series of forums hosted by WV Rivers in four regions of the state; they received copies of our Citizen's Guide to Drinking Water Protection to activate them in the planning processes. After plans were filed with the Bureau for Public Health, we reviewed several plans, attended public hearings, and helped residents and business owners file comments. The next step is to make sure the strategies outlined in the plans are put into action. Stay tuned; we'll need your help!





Communities Impacted By Fracking

The proposed Antero landfill and wastewater treatment facility encompasses 486 acres in Doddridge and Ritchie counties. The facility would treat fracking wastewater for re-use and dispose of the salt byproducts in the attached landfill. The project would impact 89 streams and 11 wetlands; it is located upstream of Ritchie County's drinking water intake.

WV Rivers collaborated with Friends of the Hughes River Watershed Association to facilitate meetings with WVDEP, WV Bureau of Public Health, Antero and the greater community to give people a chance to ask questions and express concerns. About 70 residents turned out to the meeting, but the work doesn't end there. We'll continue working with watershed groups and residents to monitor the project through the process to make sure water, public health, and community concerns are front and center.

Volunteers Take a Snapshot of Water Quality

In October, 27 of our volunteer water quality monitors gathered in Elkins, WV for the 2nd Monongahela National Forest Watershed Snapshot Day, an event WV Rivers implements in partnership with Trout Unlimited's WV/VA Water Quality Monitoring Program. Volunteers collected critical water quality data in advance of potential development within or adjacent to the national forest. We collected 102 samples on 51 streams of priority concern. Stay tuned to wvrivers.org to learn about upcoming opportunities to become a volunteer water quality monitor. We'll be scheduling trainings to monitor water quality along proposed natural gas pipeline routes soon.





3501 MacCorkle Ave. SE #129 Charleston, WV 25304-1419

Return Service Requested



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