Recently, several staff had the opportunity to vacation and experience some of the most awe-inspiring landscapes of our country. Tim traveled up to the Boundary Waters Canoe Area Wilderness in Minnesota for a multi-day float with his brothers. Soon after, Aaron made his way out west to visit Yellowstone and Glacier National Parks. Both of these trips provided us with reminders of the value of connecting regularly with nature and our American landscapes that are worth protecting.

Tim’s visit to the Boundary Waters, a first, informed him of proposals for sulfide-ore copper mining that could severely impact the ecosystem of the Boundary Waters. We hope you were able to catch Tim’s blog in September about the experience.

Aaron’s trip included exposure to major wildfires burning in much of Montana, and to the effects of climate change on the receding glaciers in the Park.

As Kentuckians, we’re fortunate to have some amazing waterways. The many man-made lakes combined with the second most miles of navigable waterways in the country provide us with exceptional opportunities to get outside. Among those are Stand Up Paddleboarding Kentucky, a venture to provide a new recreational avenue in unique environments, like old flooded limestone quarries.

Explore Kentucky Initiative has done a great job trying building a movement to get folks doing more outdoors. The number of canoe and kayak liveries continues to increase across the state, and local efforts are growing to implement water trails in some communities for both tourism value and local recreational desire.

All these activities are encouraging for one reason - getting out on the water is fundamental to building a connection to our waterways and to the need to protect our water resources as an environmental and economic asset. We must celebrate our waterways more in order to provide greater protection for our waterways!
An Update on Herrington Lake
Bijaya Shrestha - Water Policy Director

Herrington Lake, located in Mercer, Garrard, and Boyle counties, is the second deepest lake in Kentucky at 249 feet. The lake is the source of drinking water for thousands of people in the Lexington/Harrodsburg area as well as a popular destination for recreational uses such as boating, fishing, and swimming. The lake was created by Kentucky Utilities (KU) in 1925 by damming the Dix River. KU operates E.W. Brown, a 691-megawatt coal-burning power plant located near the lake.

Coal ash, or coal combustion waste (‘CCW), is the second largest industrial waste source in the United States. Coal-fired power plants in the United States generate more than 140 million tons of coal ash, comprised of fly ash, boiler slag, and flue gas desulfurization (FGD) sludge, annually. Of the 136 million tons of CCW generated in 2008, only 46 million tons were disposed of in landfills.

Over 9 million tons of coal ash is generated in Kentucky every year, making Kentucky the 5th in the United States for ash generation. Kentucky has the third largest coal ash storage capacity (more than 64,000 acre-feet) in the United States, “equivalent to covering the Churchill Downs Racetrack... under 800 feet of toxic sludge.” By EPA's calculation, 100% of the toxic chemical releases to land of arsenic, chromium, and mercury in Kentucky come from disposal of coal ash in landfills and ash ponds.

There are currently 6 million cubic yards of coal ash buried alongside Herrington Lake. The plant’s main coal ash pond, dating back to the 1950s, is unlined and leaking into the lake harming its fish population. The contaminated water leaking into the lake is carrying arsenic, selenium...
and lead - all toxins left over in the ash after coal is burned. Testing has found that 9 of 10 fish samples collected in Herrington Lake had high levels of selenium. According to KU’s own tests, contamination has also been found in groundwater at the E.W. Brown site.

KU filed a Corrective Action Plan with the Kentucky Division of Water (“KDOW”) earlier this year. There is no mystery as to the source of the selenium contamination in Herrington Lake and it needs to stop as soon as possible. Yet, KU’s proposal is to spend time looking for other sources of the contaminants. KU will collect samples at 1-mile intervals as far as 28-miles upstream of E.W. Brown, on the off-chance that the selenium source lies upstream. KU plans to issue its findings in April 2019. Only then, will the company start to contemplate remedies.

The coal ash contains high levels of selenium, water in contact with the ash is leaking from the coal ash pond to the lake, and selenium has been found in fish near the plant. It is clear that E.W. Brown’s massive ash ponds, located adjacent to the area where the state collected its measurements, are the primary source of the contamination. And there are other contaminants in the coal ash such as arsenic and lead, that are also very likely reaching the lake.

On July 12, 2017, with the help from attorneys at Earthjustice, KWA and Sierra Club filed a lawsuit against KU under the Clean Water Act and the Resource Conservation and Recovery Act. We are asking the court to require KU to comply with the Clean Water Act, stop the coal ash from coming into contact with groundwater and surface water, and mitigate the damage that’s been done by the pollution. We also recently submitted comments asking KDOW to reject KU’s proposed Corrective Action Plan.

Important work like this is only possible because of support from our members. Thank you for your continued support!
KARF
Ward Wilson
Executive Director

KWA and the US Fish & Wildlife Service work together to protect threatened and endangered aquatic species in a variety of ways. One is by sponsoring restoration and research projects with the Kentucky Aquatic Resources Fund (KARF). Here are some recent examples of the good works funded by KARF.

- Restoration, enhancement, and preservation of bottomland hardwood wetlands in Livingston County in the Lower Cumberland River basin.
- Mussel surveys and equipment on the Green River to plan for the removal of Green River Lock & Dam 5.
- Maintenance and operation of the mussel propagation system at the Thomas More College Field Station on the Ohio River in Northern Kentucky.
- Fish survey by the Kentucky Department of Fish & Wildlife Resources in the Lower Ohio River and tributaries in Ballard and McCracken Counties.
- Mussel metabolic study by the University of Alabama in support of the Tennessee River freshwater mussel recovery project.
- Duskytail darter genetics study by Austin Peay State University in support of restoration of the species in Kentucky.

Starting Work In The Red River Watershed
Laura Gregory- Red River Watershed Director

Things are moving right along in the Red River Watershed. Soon after KWA’s Summer Newsletter, we had our Swift Camp Creek (SCC) Community Cleanup and Cookout. We had a great turnout of volunteers from the community and Friends of Red River as well as representatives from KWA, Kentucky Division of Water (KDOW), East KY PRIDE, Daniel Boone National Forest (DBNF), and even the Judge-Executive that came out to run the grill for the hungry workers.

Dale Booth from KDOW led a macroinvertebrate talk before the cleanup that the kids especially loved. We walked the creek from three starting points on SCC and its unnamed tributary and met back at the city park. We removed an entire dump truck load of trash in less than a few miles. Many were astounded at what came out of the creek and we all felt proud to have been part of cleaning it up for the health and well-being of the community and the water itself. It was a great introduction of the Red River Watershed project to the community.

Recently, I was involved in back-to-back cleanups on the Clay City Loop in the Lower Red River. The first cleanup was by a class of 17 Powell County High School seniors. Kentucky Environmental Foundation (KEF), Friends of Red River, and I worked together to make it happen. Standup paddleboards were donated by SUP KY and canoes were donated by Canoe Kentucky. We cleaned the last mile of the four mile loop, removing 59 tires, scrap metal, and many bags of trash. The students couldn’t believe the mess in the river. After the cleanup, KEF gave a lesson...
on environmental health and students engaged in conversation about ways they can continue to make a difference locally for their water, environment, and health.

Two days later, 17 Friends of Red River volunteers tackled the challenge of cleaning the middle 2 miles of the Clay City Loop. We removed 138 tires, a boat, box springs and other metal, and many bags of trash. In total we overfilled 3 dumpsters (big thanks Powell County Judge-Executive for dumpsters and help removing trash we collected!) with garbage that had been discarded or washed into our beautiful river; a shocking total of 197 tires were removed in 3 miles... this was after Friends of Red River removed 150 last year. That’s nearly 350 tires in a four-mile section of river! This is a serious problem. Getting the students, local and regional volunteers engaged and social media created quite a stir about the problem. All the buzz around these cleanups has caused more people to speak up, make donations, and get involved. Furthermore, we are working closely with Friends of Red River, the thriving group with great volunteers and passion for the RR, on becoming a non-profit to carry on the Red River Watershed goals into the future.

It’s not all river cleanups in the Red River Watershed. I have been working with Wolfe County teachers on developing water-focused environmental education in schools. I am working with an enthusiastic high school science teacher on a water monitoring unit, field trips (and a cleanup) in the Red River Gorge, and a number of other brainstorm ideas. I intend to have a Project WET-Make a Splash Water Festival in the spring for Elementary students in conjunction with Wolfe 4-H and Family Resources.

Finally, we recently had a meeting with DBNF and East KY PRIDE to iron out all the details for the septic program where we will work with PRIDE and the County Environmentalist to repair or replace failing septic systems in the Red River Watershed. Applications will be available shortly with a priority area focused around Swift Camp Creek.

More projects are in the works pertaining to environmental education, pollinator and rain gardens, but I’ll wait until next time to delve into those details! Thank you for your continued support that helps make valuable Red River projects possible!
A Letter From Our Director

Ward Wilson
Executive Director

Fall is slipping into winter and it’s a beautiful time in Kentucky.

After nine months in the Executive Director chair, I am getting the hang of things (mostly) and my appreciation of Judy Petersen, Executive Director Emeritus, continues to grow.

As we wind up 2017, we are managing changes and looking to the future. We will have a new Development Director on board at the end of November - Lisa Anne Hale. We are so pleased to have her on the team and will introduce her in future messages and events. Tim Joice, longtime Water Policy Director and most recently Watershed Program Director, has moved on to a new position so we are taking a fresh look at our watershed program and how we can be most effective in this time of changing funding sources. We have a new board member! Linda Cowan of Louisville will bring new perspectives as an experienced attorney and national board member with political experience.

We are making big plans for our 25th birthday next April, too. We will have some events to celebrate - watch your email and our Facebook page for details. If you remember, we had a lot of fun for our 20th and this will be at least 25 percent better!

Finally, we staff do a lot of things, but could not accomplish anything without your support. Our board and committee members are always there to guide us and help with everything from strategy to stuffing envelopes. Our volunteers are critical to getting our events done, like the Beargrass Photo exhibit and Red River cleanups. You, our members are the base from which we work. Of course your dues and donations fuel the engine, but your comments and involvement are what KWA really is about. It is all of us. We need you. We appreciate you. Please renew when it’s time and give till it feels good for our end-of-year appeal. We will use your hard-earned dollars wisely protecting, restoring, and celebrating the waterways of this beautiful state.

Happy end of 2017 and looking forward to 2018! Water is worth it.

Ward

Board of Directors

Executive Committee:
Gordon Garner - President
Kay Harker - Vice President
Pamla Wood - Treasurer
Hugh Archer - Secretary
Bacon Creek Grant Wrap Up
Tim Joice - Watershed Program Director

For many years, we've been working in the Bacon Creek Watershed of the Green River to try and reduce pathogen, sediment, and nutrient loads in the creek. On September 30th, we finished up a Clean Water Act Section 319 grant for implementing agricultural best management practices and septic system repairs and replacements. In sum, with the help of our Agricultural Coordinator Mark Howell, we were able to complete 17 agricultural practices. Included among those were heavy use areas for feeding cattle and managing manure, fencing cattle out of streams and wetlands, and watering facilities that keep cattle out of creeks and ponds and up on higher land. We also pumped out three septic systems and replaced three others. Collectively, we spent over $18,000 on the septic system projects and over $109,000 on the agricultural projects.

Though we've closed out this grant, we certainly intend to get additional funding to continue with our work. The Bacon Creek Watershed remains a focus of our Strategic Plan, with the long term goal of fully cleaning up the creek so that locals can fish, swim and recreate in the creek!

Board Members:
Scott Vander Ploeg - Lower Green River
Tom Vierheller - Big Sandy River
Bob Johnson - Jackson Purchase
John Niland - Licking River

Evan Holladay - Salt River
Marcia Boone - Salt River
Linda Cowan - Salt River

Emeritus Board Members:
Beverly Juett
Frank Elsen
Beargrass Creek Happenings
Tim Joice - Watershed Policy Director

Beargrass Creek Alliance has been moving right along with activities. On October 21st, we held our Fall Cleanup on the South Fork of Beargrass Creek, up in the Bon Air neighborhood along Hikes Lane. This stretch of the creek picks up a bit of trash from the shopping areas and complexes along it, and rarely gets the attention it needs. As you can tell on maps, like much of the South Fork, this stretch has also been straightened and channelized for parts of it. A big thank you to all the volunteers that came out to help!

Most significantly, we have done some great Every Drop projects in the last year. We still have a few projects to complete before the winter takes hold, so look for volunteer chances soon. Our goal is continue to build capacity in Every Drop in the coming year, so we hope to be able to share news on that front in the near future.

Additionally, BCA is among a group of nonprofit organizations, agencies, property owners, volunteers, and citizens along the South Fork that have come to together to create an informal “South Fork Beargrass Creek Consortium.” The two primary goals of the Consortium are to work on the South Fork from Trevilian to Eastern Parkway to eradicate invasive species and replant with native species and to examine the potential for a multi-use pathway along the creek. Why this area? Well, the land involved includes the Louisville Nature Center and Beargrass Creek State Nature Preserve, who are already doing invasives work. The Passionist Earth and Spirit Center has also been doing significant ecological stewardship work on the property, and is working on plans to continue that effort. Other landowners in the area hold easements along the riparian zone that offer significant potential for restoration. In short, it is an excellent opportunity to repair the ecological capacity of the riparian buffer, floodplain area, and some forested uplands. KWA recently applied for some grant funding on behalf of the Consortium. The goal is to conduct work throughout 2018, so please let us know if you are interested in this effort and contributing to the work.
Our members are what makes everything we do here at KWA possible, and we would like for all of you to have the opportunity to get to know each other. With that in mind we asked our good friend Barry Tonning if he would mind sharing a little bit about himself.

Barry has been a member of KWA for nearly 25 years and is a former Director on the Board. He is a water resource management consultant with Tetra Tech, an international consulting firm. He works on watershed planning, stormwater compliance, and Clean Water Act implementation projects all over the US from his home base in Mt. Sterling.

How did you get involved in KWA?

I remember attending some meetings back in the early 1990s on the need to better coordinate water quality protection efforts in the state. This was during the time when I was the chair of the Kentucky Conservation Committee, and on the board of the Kentucky Resources Council. KWA was formed as a result of those discussions.

What is your first memory of a waterway that you enjoyed?

When I was growing up in South Georgia, we would visit my grandparents’ farm in eastern North Carolina twice a year - for about six weeks during the summer, and at least a week or so during Christmas. We played for hours in a small creek in the woods on the farm nearly every day. There were deep pools to cool off in, riffles to dam up with rocks, minnows to watch, mint and wildflowers, big trees, footpaths - it was heaven on earth to us kids.

What is your favorite waterway?

We like to sail on the lower Potomac River, between Colonial Beach VA and the Chesapeake Bay. It’s a beautiful landscape, though the river has its problems with sediment and nutrients, among other things. But here in Kentucky, we have the most scenic waterways in the country. The Licking River is breathtaking in the fall, with the colors, the blue heron rookeries, the mussels, and the darters and minnows. The Red River and the Gorge are world class assets. Even our little old Hinkston Creek here in Montgomery County has some nice stretches, where there are still trees lining the banks and the cattle are fenced out.

Favorite restaurant?

I’m pretty partial to Miguel’s, near Natural Bridge in the Gorge. The Rock House down the road is right up there, too. Thoroughbred’s in Lexington is also great, if you like country style home cooking.

Where are you most likely to be found on a Saturday?

Walking - either around town, at the local parks, Pilot Knob, the Gorge, or someplace where I can defrag my internal hard drive.

What is something about you that might surprise your friends?

I used to be a carpenter, and did a lot of remodeling projects, deck jobs, custom furniture, repair work, and so on back in the day.

Do you have any hidden talent?

I like to pick and strum around on my guitar every now and then, and even sing a little. This talent is so well hidden that I myself am still waiting for it to emerge and morph into something that can be displayed publicly.

Do you have a hero? Who and why?

The young Pakistani woman and education activist Malala Yousafzai is probably one of the gutsiest, most remarkable, and inspirational people on the planet. They shot her in the head when she was just 15 years old to try to shut her up. Nevertheless - as they say - she persisted.
Clean Water Better Beer At Braxtons Brewery
Jessica Kane Community Engagement Director

On August 31st Braxton Brewing Company hosted Kentucky Waterways Alliance for our northern Kentucky 2020 event. We had a wonderful turnout with lots of great members, partners and supporters. A big thank you to all of the folks that joined us that evening for strategic plan excitement and new partnership opportunities. We are so grateful to Braxton Brewing Company for being such a wonderful host and donating a portion of all the Storm brews sold that evening to help protect, restore, and celebrate Kentucky’s waterways. Clean water makes better beer! Make sure you sign up for our e-news so you don’t miss out on any of our upcoming events! Thank you for your continued support. Cheers!

Show Us Your Waterways
Aaron Sole Communications Director

Calling all photographers, explorers, and water lovers. Kentucky has some of the most beautiful waterways in the world and we want to see your pictures of them! From now until the end of 2017 we will be accepting submissions for our first ever photo contest. It is absolutely free to participate and we will have some great prizes!

The first place winner will receive:

- A 16x24 inch print of their winning photo from Murphy’s Camera
- A $25 gift card from Murphy’s Camera
- A swag bag full of KWA gear
- The opportunity to showcase their work at our annual Wild & Scenic film festival

Our runner up will receive:

- A 8x12 inch print of their winning photo from Murphy’s Camera
- A $15 gift card from Murphy’s Camera
- A swag bag full of kwa gear

Visit www.kwalliance.org for more details or to submit your photo!
KWA friends, I am sad to let you all know that at the end of October, I’m moving on to another opportunity. Over the past six years, I have truly enjoyed working at KWA, getting to know our members and supporters, defending clean water, and recently, working to restore waterways through our Watershed Program. KWA will always hold a special place in my heart. I wish the organization, staff, board, and all our KWA supporters across the state all the best.

Thank you,

A Farewell
Tim Joice
Watershed Program Director

Get your holiday gifts here!
Doris Holland
Bookkeeper

Get the beer, bourbon, and clean water lovers on your list one of our great t-shirts! Not only do they make fantastic gifts, you are also supporting KWA in our fight to protect, restore and celebrate clean water. All t-shirts are $20.00 and for $35.00 you can get a KWA membership and shirt of your choice.

We also have beautiful Beargrass Creek limited edition 36 x 24 posters featuring photography by Louisville’s own John Nation. The poster would make a wonderful gift for a favorite teacher’s classroom or someone’s office or home. The posters are only $10.00 so they won’t last long!

For $10.00 you can also purchase one of our Klean Kanteens. Put down the plastic and pick up a Kentucky Waterways Alliance pint – steel that is. Made of 18/8, food-grade stainless steel, the 16oz Kanteen Steel Pint Cup is durable, reusable, and won’t break like glass. Perfect for the campers, outdoor lovers and everyone else on your list!

Order online at:
https://kwalliance.org/category/whats-flowin/merchandise/

or call KWA to purchase any of our merchandise for yourself or someone that appreciates clean water.