KWA ~ National Wildlife Federation’s New Affiliate

We have some really exciting news! In April, after more than a year of discussions and board visits, KWA became the newest and 49th state affiliate partner of the National Wildlife Federation! What does that mean? It means that KWA and NWF have agreed that there are a number of common priorities we share, and that whenever possible, we are going to work together. We share water quality and protection goals. We also share concerns about climate change and its impacts on water resources and habitat, particularly the impacts of coal - from mining to burning for energy to the disposal of waste water from power plants and ash ponds.

NWF state affiliates are all independent non-profit organizations. So KWA will remain an independent organization focused on protecting and restoring Kentucky’s waterways. But, through this new partnership, we will have access to more resources and allies. We hope to strengthen our efforts by reaching out to more wildlife conservationists, sportsmen, and recreational enthusiasts across Kentucky – activities which are, of course, reliant upon clean water. We already work on aquatic species conservation, propagation, and habitat issues in Kentucky. Now we have the opportunity to expand our reach.

NWF has some amazing programs, such as Backyard Habitats and Keep the Wild Alive, we plan to utilize in our strategic outreach to broaden our audience. These proven programs will empower our coal work to focus more on climate change impacts to water quality and quantity.

KWA has been working with NWF staff and several other state affiliate partners for years. This action will only serve to strengthen those ties. NWF state affiliates are a diverse group of organizations across the country and include several other water-focused organizations, such as Prairie Rivers Network and the West Virginia Rivers Coalition. There are also many sportsman and wildlife organizations, broader conservation organizations, and even the National Aquarium in Washington DC! It’s a big tent, and we feel like KWA will fit within the scope of the tent very comfortably. It’s a voluntary, mutual relationship that we are required to reaffirm every year so in the unlikely instance that the partnership doesn’t work out, we can bow out at any time.

The NWF has been without a Kentucky affiliate partner organization for several years. Now NWF members in Kentucky have an organization to represent Kentucky’s interests at NWF meetings and in NWF actions and priorities. If you are a NWF member and are not familiar with our work, we invite you to learn more about us! We have a close working relationship with both the US Fish and Wildlife Service in Kentucky, and we also work closely with a number of individuals at the Kentucky Department of Fish and Wildlife Resources.

We are proud to be the newest state affiliate of NWF and we hope that NWF members in Kentucky give us a chance to represent your interests and priorities at the national level. Only by working together will we have the clout and the resources to make certain we have clean habitat for our children and for wildlife in the coming generations.

A win for KWA, NWF, our members and all of the wildlife resources we work to protect!
Message From the Director

NWF, KWA, Mussels, and Sunlight - All Winning!

Hi everyone. It was a hard winter, but spring is finally here! I know our February newsletter was a little on the serious side, but it seemed like there for a while all the water news was bad. In this issue, we are focusing on the positive. And, there is a lot of good news to report.

This is KWA’s 21st year of working in Kentucky – and like many individuals when they reach a certain age – we’re trying new things. We think the new partnership with the National Wildlife Federation is going to be great. Both NWF and KWA have gone into the affiliation with our eyes wide open and after careful courting and getting to know each other. We hope the partnership will expand our reach and make us more effective in Kentucky.

You’ll also read about some of the Kentucky Department of Fish and Wildlife work in understanding mussels in the Green River. As long time members know, I live in the Green River Watershed and have for nearly 30 years now. I knew just looking at the Green River all those years ago that there was something really special about it – and wow was I ever right!

On a personal note – your Executive Director is “Walking the Walk.”

This is a recent photo of our garage roof in Munfordville. In May, we installed 20 (300 watt) solar panels. We’ve had our inspections and are now selling clean, solar energy to our rural electric cooperative! We’ve had the thrill of watching our electric meter run backwards, and the solar panels are even producing some energy on rainy days.

While you can’t see it in the photograph, the other side of our garage roof drains to a 220 gallon rain barrel we use to water our garden.

In the photo from left to right are: Steve Petersen, Ted Diamond, and Sam Avery. This was the installation crew. All three are (of course) KWA members. We bought our panels through Sam who has a solar energy installation business Avery and Sun. His Hart County home also features solar panels.

I’ll give you all an update in a year to let you know how the system is operating.

Let the sun shine in!

On behalf of a healthier Kentucky,

Judy Petersen
Kentucky is home to some of the rarest and most unusual creatures in the world. Mussels, a type of mollusk that live in waterways, are invertebrate creatures that look like clams, have unusual life cycles, and can be very sensitive to water quality.

North America hosts the most diverse freshwater mussel fauna on Earth, with approximately 300 species representing more than a third of the world’s mussel diversity. Kentucky has one of the most diverse mussel populations in North America, with over 100 recognized species. In Kentucky, 12 mussels are presumed extinct, and another 28 are listed by the U.S. Fish and Wildlife Service as Threatened or Endangered.

The Green River is rated fourth for highest aquatic biodiversity in the United States. The most significant stretch is the 114 un-impounded stream miles between Lock and Dam 6 in Mammoth Cave National Park and Green River Lake Dam. It is especially rich in fishes and freshwater mussels and even home to a number of endangered cave species including the endemic Kentucky Cave Shrimp.

The Green River alone is home to 74 species of freshwater mussels many of which are listed as endangered. Their names are often quite practical, reflecting resemblance to objects. Examples include: ring pink, fanshell, rough pigtoe, clubshell, pink mucket, the scaleshell, catspaw, rayed bean, sheepnose, rabbitsfoot, orangefoot pimpleback, cracking pearlymussel, and fat pocketbook. The Green River also supports one mussel found nowhere else in the world, the Kentucky creekshell.

But don’t let these playful names fool you. These organisms play a critically important role in our ecosystems. There are many species of wildlife that depend on mussels as an important source of food, and mussels are one of nature’s most efficient filter systems. A mussel will filter on average about 8 gallons of water a day – and help to eliminate *E. coli* and many other pollutants from the water.

So what are we doing to help out these often overlooked organisms?

In 2002, the Center for Mollusk Conservation (CMC) initiated propagation efforts for many of the rare and imperiled freshwater mussels in KY. The CMC has a modern facility with a greenhouse, research lab, fish research building, algae culture capabilities, and much more. With several full time staff, the CMC has made considerable advances in the area of mussel life history, propagation, and culture.

In 2005, the CMC began working with the endangered pink mucket (*Lampsilis abrupta*) and the non-listed black sandshell (*Ligumia recta*) for augmentation in the Green River. Both species are rare in the river, and researchers have only observed a few pink muckets in the last 10 years. Efforts have been undertaken to boost the pink mucket populations starting in 2005. Several thousand juveniles have been cultured at the CMC and then released into the river at multiple sites. Ongoing monitoring is being conducted to check the status of these individuals and track recruitment of other species at long-term monitoring sites. Much work is needed on the development of propagation methods for Green River and other Kentucky mussel species, especially those whose life history is limited or unknown. Mussels rely upon a fish species in order to reproduce – and not just any fish will do.

Individual mussel species have adapted to rely upon particular fish species to reproduce. Immature mussels attach to the gills of the female mussel. Once mussels’ eggs develop into the larval state, they must attach to the fins or gills of fish species to further mature. In some species, these immature mussels will release from the female’s gills only when a fish attempts to attack, an example of aggressive mimicry. The host fish species are still unknown for many mussels. CMC researchers are developing techniques to bypass the fish host using incubators and modern cell culture methods. As of 2013, CMC biologists have successfully been able to reproduce over 40 mussel species without a natural fish host. This is ground breaking science!

Without concentrated effort to help our imperiled mussel species, more animals are expected to become listed as federally endangered or even extirpated (locally extinct) from Kentucky. We can all do our part to help protect our rich mussel diversity by supporting habitat restoration, pollution prevention, and the continued advancement of mussel propagation by the CMC. In fact, rest assured that you are doing your small part just by being a member of KWA. Through the Kentucky Aquatic Resource Fund, KWA has been supporting these exciting new mussel projects at CMC for years and will continue to in the future.

So the next time that you see a mussel in your local waterway, know that it is working hard to keep the streams clean and you are helping to keep it that way.
KWA Works Every Day on Behalf of Our Families for Clean Water

POLICY UPDATE: How we are WINNING!

By Tim Joice, Water Policy Director

KWA is your voice in the fight for clean water in Kentucky! As advocates for protection and restoration of our waterways, we don’t see a lot of victories in our line of work. We know that it takes time. Victories aren’t easy to come by and are often hard won. Our last newsletter included an article on the reality of present water pollution issues in society and the challenges we face. But for all of our challenges, we do have some victories, thanks in large part to all the effort of you: our members, our volunteers, and all of our partners along the way. Without further ado, we hope you enjoy this newsletter - a celebration of WINNING!

Clean Water Act Protections Clarified

In late April, U.S. EPA and the Corps proposed what we are calling the Clean Water Protection Rule. The proposed rule clarifies protections to streams, wetlands, and other “waters of the U.S.” under the Clean Water Act. Interestingly enough, in April 2013, KWA blogged about “waters of the U.S.” and the need for EPA to take this very action.

After years of requests for clarity, EPA and the Corps finally felt the time was right to propose a new rule on the matter. As noted in the EPA’s press release, “About 60 percent of stream miles in the U.S. only flow seasonally or after rain, but have considerable impact on the downstream waters. And approximately 117 million people get drinking water from public systems that rely in part on these streams.”

Kentucky has the second most “navigable miles” of any continental U.S. state at roughly 1,100 miles, thanks in large part to the Ohio River along our northern border. But Kentucky has an estimated 92,000 stream miles in total, and this rule would provide clear protections to over 49,000 miles of critical seasonally-flowing headwater streams and provide more clear protections to wetlands. These are most often the waters damaged by industry and development, actions of which can cause significant water quantity and quality impacts downstream. In Kentucky, EPA has estimated that 3.2 million citizens are served by public drinking water systems that rely on headwater stream contributions. Our headwater streams must be protected!

The Clean Water Protection Rule is important to protect our future, but unfortunately there is a lot of opposition to it. EPA is requesting comments on this proposed rule, so make sure to visit our webpage with details about how you can voice support for EPA’s proposed rule! Take action now to support the Clean Water Protection Rule!

Stream Buffer Zone Rule Changes Struck Down

In 2008, KWA and partner organizations challenged a George W. Bush administration rule that weakened protections for valuable streams near mining operations. We were promised that a replacement rule would be proposed by the Obama administration. Well, that never happened, so we took legal action in October 2013 to get the rule reversed. We found out in February that the court sided with our claim and struck down the Bush administration rule. It’s safe to assume we jumped around in the office a little after hearing this news!

The rule, called the Stream Buffer Zone Rule, actually existed prior to President Bush - in fact, since 1983. However, the Bush administration changed the rule as they left office, and removed significant barriers for coal mining companies that wished to destroy streams in order to surface mine for coal. The federal court said the rule was illegal because it disregarded the Endangered Species Act requirements and proper consultation with U.S. Fish and Wildlife Service. Let’s be honest - it’s downright ridiculous that this was approved as Bush left, with the failure to sufficiently follow federal laws, and that it subsequently required a lawsuit from concerned citizens to get it overturned. That withstanding, WE WON!
More WINNING...

Coal Mining Polluters Get Fined

In March, two lawsuits in federal court resulted in huge fines to a coal company whose mines violated their Clean Water Act permit over 6,000 times from 2006-2013. Under a settlement agreement, Alpha Natural Resources will be required to pay $27.5 million in fines to the federal government and to several states. Kentucky’s Energy and Environment Cabinet will receive approximately $687,500 of that fine for violations in Kentucky. Alpha will also be required to install wastewater treatment systems and take other measures to reduce water pollution from their coal mining operations.

Pipeline Suspended Indefinitely

First came the news that the Bluegrass Pipeline project partners were delaying the pipeline by one year. At roughly the same time, KWA received the Army Corps of Engineers (the Corps) 404 Dredge and Fill Permit application by the Pipeline Partners that indicated upwards of 750 waterways and wetlands that would be impacted in Kentucky. Ultimately, the Corps determined the application was incomplete. Then, in late April came the news that the Pipeline Partners were suspending the project indefinitely!

It feels like it was just last June and we were hearing the first bits about the pipeline, cutting across our streams and rivers, and over sensitive karst geology. Since then, many citizens have mobilized and made a concerted effort to prevent the pipeline company from steamrolling its way through the state. Clearly, the partnering companies involved in the pipeline did not realize how protective Kentuckians are of their property. Kentuckians are passionate about our land and our water. We did not sit idly by while private companies threaten our state = WE WON!

In another proposed order in federal court, Nally & Hamilton Enterprises would also be required to pay $660,000 in fines for illegal dumping of mine waste into waterways. According to the news, the company dumped beyond their permitted limits and also dumped without a permit. KWA has been working for years to fight the common practice of “hollow fills” in streams.

Even though we weren’t directly involved in either of these cases, it’s encouraging to see signs of progress in protecting our headwater streams from the impacts associated with hollow fills.

Farm Bill Passed

The Farm Bill has many programs and components that can impact water quality, and we couldn’t go after everything - so we picked our battles. We focused on the critical relationship of water quality and conservation compliance and the need to relink conservation compliance with taxpayer-subsidized crop insurance. We also advocated for the continuation of conservation programs at existing funding levels.

The result: in February Congress finally agreed on a new Bill, and Obama signed it into law. The new Bill slightly reduced funding in conservation programs, but we scored a major accomplishment by getting conservation compliance measures relinked to crop insurance.

Corps Green River Lock & Dam Disposition Study

Recently, KWA collaborated with the Corps to host the Green River Summit. At this two-day meeting, KWA became familiar with a recent Corps study that looked at decommissioning and disposing of federal government ownership of several locks and dams in the Green River watershed. This was exciting news - even considering this is a win for the Green River.

KWA is a strong advocate for removal of lock and dams due to the aquatic habitat and recreational benefits that would result. To that end, a big win for the Green River will be the removal of at least one dam, and we’ve actually asked the Corps to remove others as well. We’re also aware that a number of communities depend on the existing pools from those lock and dams as a water source. KWA and allies have requested that the Corps use resources to study retrofit options for existing water intakes. Doing so would allow local communities to still have a dependable water source, and provide for the removal of several dams that would move the Green River and tributaries closer to free-flowing aquatic ecosystems.
Still WINNING ...
In The Past Year

NWP 21
Going back to April 22, 2013, KWA and our allies won an important lawsuit that ultimately banned the use of the Corps-issued Nationwide Permit 21 for surface coal mining that had caused enormous losses of stream miles in Appalachia. Surface coal mining companies can no longer operate with the 2007 version of Nationwide Permit 21. The lawsuit victory follows the Corps actions dating back to 2010 that resulted in the recent 2012 version of this permit to include a limit of 500 linear feet of impacts to streams, and the permit would no longer cover valley fills. This has significantly shifted the burden back to surface coal mining companies to prove any proposed stream and wetland impacts are absolutely necessary and those impacts will be sufficiently mitigated for by restoration on-site or elsewhere.

Trimble Lawsuit
On September 10, 2013, a judge ruled in our favor regarding a challenge to a recent permit issued by Kentucky Division of Water for a discharge from the LG&E Trimble Generating Station’s coal ash pond. The permit was extremely weak, particularly with no limits on toxic heavy metals like arsenic and mercury that are very harmful to humans and aquatic life. The judge ruled that the state did not conduct a necessary analysis that would justify the lack of limits in the permit, and sent the permit back to the state to be rewritten. WIN (pending appeal)!

Proposed Trimble Landfill
In addition, over the past three years, LG&E has attempted to propose a new coal combustion residuals landfill at the Trimble plant. The initial proposal in 2011 was rife with issues, not the least of which was the existence of a cave system within the boundaries of the proposed landfill. If you weren’t aware, Kentucky has a law, called the Kentucky Cave Protection Act, that prevents destruction of cave systems in the state. Aside from the cave, the landfill would have impacts to several miles of perennial, intermittent, and ephemeral streams in what is presently a beautiful forested ravine. Fortunately, KWA, partner organizations, and many citizens spoke up about the proposal. The Division of Waste Management found the original application to be insufficient, but LG&E didn’t give up. The company recently reapplied with a modified landfill boundary that protected the cave, but still had enormous stream impacts.

KWA staff work on behalf of our members, and on behalf of all citizens of the Commonwealth, to protect our water resources for future generations. When we win, YOU win, your family wins, your grandchildren win. KWA also depends on citizens like YOU to be our eyes and ears across the state. Call us, email us, or stop by our office if you’re in Louisville. With that in mind, keep your eyes peeled for some more big news very soon!

Winning in Kentucky’s Watersheds

By Tessa Edelen, Watershed Program Director

Kentucky Waterways Alliance is very proud of the work being done in watersheds across the state. This watershed planning work is made possible by the support of KWA members, project partners, and volunteers dedicated to improving the health of their local waterways!

Bacon Creek
KWA’s long term collaboration with the Bacon Creek Watershed Council in central Kentucky has resulted in a watershed-based plan, educational events and workshops, and implementation of septic systems and agricultural Best Management Practices (BMP) with the funding of three 319(h) grants and local community support. We have received additional 319 funding to install even more BMPs. Residents report that fish can be seen in the creek again = win!

Beargrass Creek
The Beargrass Creek Alliance endeavors to motivate Louisville residents to understand stormwater pollution and to do their part to reduce it. From the Pledge to the Storm Drain Marking program, their outreach is creative and thorough. Empowering local citizens to be a part of the solution = win!

Darby Creek
Four years ago, KWA and local partners finished the first iteration of the Darby Creek Watershed plan. We just won more funding to update the plan and start implementing BMPs. Using watershed plans to protect and improve water quality = win!

Harrods Creek
KWA members came to us and asked for a watershed planning project in the Harrods Creek Watershed – and then they raised the money to make it happen. Community members taking charge of their watersheds = win!

Red Bird River
KWA is always looking for ways to improve watershed planning. The EPA has developed the Recovery Potential Tool to help prioritize in which subwatersheds to implement Best Management Practices. This tool is currently being put to use on the Red Bird River project! KWA projects on the cutting edge of watershed planning = win!

Red River
Kentucky’s only Wild and Scenic River, the Red River is a state treasure. KWA is working with private land owners and watershed communities to keep it clean. Protecting valuable resources for future generations = win!

For a lot more in depth look at all of these current projects and completed ones, see the Watershed Planning section of our website...www.KWAlliance.org
May 30–June 2 River Rally The three rivers city of Pittsburgh, PA will host this year's largest annual gathering of grassroots environmental leaders working to protect and restore our most valuable natural resource - fresh water.

June 5–8 Orvis Grand Opening in Louisville KWA has been chosen as their state conservation partner and will receive a portion of proceeds for helping to raise awareness about water quality and protection in Kentucky. We hope you will join us in welcoming Orvis to Kentucky!

June 21 Ohio River Sweep Encompassing 3,000 miles of shoreline and over 18,000 volunteers, this regional cleanup removes over 7,000 tons of trash and debris from the banks of the Ohio and its' tributaries.

July 10 Nature Photography Workshop Ever wish you could take beautiful nature photos like the ones you see featured in some of our publications by Lucent Dreams Photography? Now's your chance! Join us at Big Rock in Cherokee Park at 6:30 pm to learn some tricks from the pros. Class limited to 10 participants. Register on our website or by calling the office at (502) 589-8008. Must be a current KWA member. Not a member? Join today!

Banklick Creek Cleanup
Saturday, June 7
9 AM at Pioneer Park
3951 Madison Pike

Volunteers will gather at 9 am at Pioneer Park in Covington, KY. Lunch will be served at noon and the Licking River Watershed Watch will host their annual meeting and a training in the afternoon. Thanks to Aveda Salons and Northern KY University for making this event possible.

Green River Fest
Saturday, June 14
Thelma Stovall Park
Munfordville, KY
8 a.m. CDT / 9 a.m. EDT

Each participant will receive a free canoe rental, t-shirt, water bottle, lunch, afternoon snack, plus a chance to win a kayak! You must RSVP to reserve a canoe!

August 9 Clean The Green Greensburg, KY. Mark your calendars for another opportunity to help protect one of America's most biologically diverse rivers.

September 16–17 Rockcastle River Mussel Workshop

This two day course is designed to provide attendees with an increased level of knowledge on several aspects of freshwater mussel identification and biology. Register online today at our website.

October 10 KWA Gala Join us in celebrating our 21st birthday at BBQ, Bourbon, and Blues! The event will be held at the Gheens Foundation Lodge at Beckley Creek Park in Louisville, overlooking the iconic Floyds Fork. Come out for great food, great music, and great fun!

As always, please refer to our website www.KWAlliance.org for a complete list of events!

Now that you’ve read about some of our recent successes, give yourself a pat on the back! Without our members’ support, NONE of this would be possible. Keep showing your support for KWA and we will keep fighting to protect and restore all of our water resources.

THANK YOU!
Help Protect Kentucky’s Rivers and Streams. Become a Member Today!

Name:

Address:

City       State     Zip:

Telephone:      E-mail:

__Yes, I support the mission and goals of Kentucky Waterways Alliance.

INDIVIDUAL MEMBERSHIPS:

__$ 25 Individual
__$ 35 Family
__$ 50 Supporter
__$ 100 Watershed Guardian
__$ 200 Watershed Steward
__$ 500 Watershed Angel
__Other $__________

Your donations are tax deductible! Mail to KWA, 120 Webster St., Suite 217 Louisville, KY 40206

Did you know you can become a member of KWA for only $25 a year? Visit WWW.KWALLIANCE.ORG to join us in the pursuit of healthy waterways today.