

NewsStreams



A publication of Kentucky Waterways Alliance: Working to protect and restore Kentucky's waterways.

When Does It End?

By Tim Joice, Water Policy Director

The current situation is no longer defensible. Government is failing to protect our water. Big industry and business is failing to protect our water. Collectively, regular citizens are failing our own communities and fellow residents by failing to demand better of government, industry, and each other. How long will this go on? How long until we finally say enough is enough? I say now.

Charleston

By now, the story has been told many times over. On January 9th, chemical storage tanks at Freedom Industries' facility in Charleston, WV, leaked into the Elk River, and contaminated the drinking supply of 300,000 West Virginians. Initial estimates suggested a few thousand gallons of 4-methylcyclohexane methanol (MCMH) leaked. Then, that number increased to 7,500 gallons. Then, the company told the state another chemical mix of glycol ethers, abbreviated as PPH, was present. Next, the spill estimate increased to over 10,000 gallons. Weeks later, questions continue to arise regarding the details of the spill and complaints abound regarding drinkability of the water and skin irritations. Many asked, could it happen here in Kentucky?



Chemical spills cause untold environmental and economic damages that can never be recovered. Images courtesy of the Associated Press.

Old storage tanks may change ownership, from time to time, the chemicals stored within them may also change, with sometimes very lax - or nonexistent - oversight and record-keeping. The permits intended to protect against such a spill are rarely denied by regulators in most states. Even when we know the chemical in the storage tank, we don't know much about the chemical itself. Industry currently has over 80,000 chemicals registered and in use, but only about 200 (less than one-quarter of a percent) have

been tested by EPA due to resource limitations, yet some think EPA does too much. Often, the Material Safety Data Sheet, intended to provide the range of chemical and physical data for a chemical, is vastly insufficient. Chemicals are usually tested on rats, in lab settings. For a great many chemicals, not much is known about how the chemical might react with other contaminants in our streams, or in other conditions outside of controlled laboratory settings, and how the impacts to humans differ between chronic and acute exposure.

300,000 to 500

This state of affairs is about much more than the 300,000 people affected in West Virginia. The primary chemical in these tanks, MCMH, is used to process freshly-mined coal. Along with other chemical agents, it helps remove impurities from coal to make it more potent for burning. Once this process is complete, the coal gets moved to its destination. The leftover mix of "stuff" from the cleaning process is generally referred to as "coal slurry."

Mostly, coal slurry gets dumped into impoundments or ponds, typically nearby the processing facility. Usually these ponds are high up in valleys, or hollows, overtaking areas that were once beautiful headwater streams. There are around 115 impoundments in Kentucky – and upwards of 500 in Appalachia. They look like death - seriously. Gray - maybe black - water, sometimes frothy, full of awful chemicals and heavy metals, some of which are toxic, some of which we know very little about – these impoundments are ticking time bombs. Just ask the folks in Martin County, Kentucky. In 2000, the impoundment failure there sent over 300 million gallons of slurry downstream and into the landscape. It left a disaster 30 times larger than the Exxon Valdez spill in Alaska. You could also ask the folks in West Virginia, who just experienced yet another coal slurry spill from a processing facility.



Image courtesy of Geary Broome/AP

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Message From the President

W VA Spill - been down this path before

I spend a lot of my working time these days as the oldest person in the room. I am not complaining. I'm glad to be there. But I recognize more and more that the history I know and experienced is different from the people who are 40 years younger. That is especially true for the Clean Water Act, a set of laws enacted in 1972 - the same time I graduated from college and started my career as an environmental engineer.

Some of you may remember these events when they happened: Valley of the Drums, 1981 Sewer Explosion in Louisville, Lee's Lane Superfund Site, Maxey Flats, the MSD Hex-Octa Incident. All of these incidents shared a common theme - improper use and disposal of hazardous chemicals and wastes combined with a lack of industry reporting and accountability.

The West Virginia spill is a huge wake-up call that these tragedies are still happening. We are losing hard-fought ground needed to keep our nation's water resources protected.

From the incidents in the Louisville area came a public outcry for change and, in 1985, the City of Louisville and Jefferson County jointly approved one of the first and strongest hazardous materials ordinances in the United States. When Mayor Harvey Sloane and I helped write this ordinance with the Task Force, it went on to become an early model for the federal SARA Title 3 legislation that imposed similar requirements nationally.

Industry lobbyists and others fought against the ordinance and the common sense requirements that industries immediately report spills that could endanger public health and safety and also have a "spill and cleanup plan" available to firefighters and other first responders (and neighbors) who must respond to spills and other accidental releases of chemicals to the air, water, land and sewer and drainage system. The ordinance also imposed requirements for covering response and clean-up costs, which at the time were mostly being absorbed by local governments.

Since the enactment of the federal requirements, industry lobbyists have been successful at whittling away at these requirements and effective enforcement by local, state, and federal agencies.

The West Virginia spill is NOT a one-off event. Too many industries have dropped the ball and have successfully avoided meeting the common sense requirements for using and storing hazardous chemicals. Affected West Virginia residents have endured weeks of "yes," "no," and "maybe" responses of whether their water is safe to drink...including "ignore the smell, it won't hurt you"!!!

As you read this, the US Senate seems ready to pass a long overdue bill to update and strengthen requirements relating to hazardous chemicals use and storage, closing some of the loopholes that industry lobbyists and congress have created over the past 25 years. The House, including most of our Kentucky delegation, seems less enthusiastic, somehow thinking that responsible industry behavior to protect public health and our water and air from the poisonous chemicals they use is "too costly." You have my permission to scream.

On behalf of a healthier Kentucky,

Gordon Garner



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Want to be in the know about water-related happenings?
Visit our website at
WWW.KWALLIANCE.ORG
to check out upcoming events in Kentucky!

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USACE Disposition Study

In 2013 the US Army Corps of Engineers (USACE) received funding to complete the Green and Barren Disposition Feasibility Study. The purpose of this report is to evaluate the feasibility of, and make recommendations regarding, the possible deauthorization and disposal of Green River Locks and Dams 3, 4, 5, and 6 and Barren River Lock and Dam 1. These locks and dams have long been unused in the Green River Basin. The Corps is recommending that they fill in the old lock chambers at each of these dams as a public safety measure.



At one time, these locks served as a vital navigation channel for industry. Outdated and in disrepair, the USACE wants to get these properties out of federal control. Image credit to USACE, Louisville District

Lock & Dam #6 on the Green River is just downstream of Mammoth Cave National Park. The dam is failing and the Corps is recommending the demolition/removal of the dam which will restore 17 miles of the Green River to a free flowing river once again! It will also provide critical habitat to endangered cave species in Mammoth Cave by lowering the river level inside the cave. The small amount of property adjoins Mammoth Cave and will likely be transferred to the National Park system.



The remaining Lock & Dams are of interest to area residents, and the Corps is hoping a responsible party can be found to which to transfer any property and liability.

KWA supports this disposition study. In addition to these dams being old and non-operable, they are a danger to recreation on the river. The only solution that would be even better is the complete removal of the dams while finding alternative water resources for the communities that draw water from the pools. The removal of #6 on the Green has long been a conservation priority, which KWA strongly supports.

The disposition study is now out for **public review until March 17, 2014** and will be revised to address comments received. Check www.KWAlliance.org to make comments. Once the report has been revised, it will undergo additional USACE reviews before submission to Congress. If Congress agrees with the recommendations in the report, then it will deauthorize the locks and dams no longer in use, and authorize the USACE to carry out construction activities outlined in the report and dispose of the properties. After the authorization, Congress will have to appropriate funds to carry out the construction work recommended. At this time, we expect the report to go to Congress in the fall of 2014.



Dr. Richie Kessler delivers his passionate introductory remarks to the crowd.

Green River Summit

Unrelated to the disposition study, the Green River Summit meeting was spurred by a Final Watershed Assessment (FWA) of the Green River by the US Army Corps of Engineers. Under the authority of Section 729 of the Water Resources Development Act, an Initial Watershed Assessment identified problems and opportunities through stakeholder outreach and a review of previous studies in the watershed. The goals and objectives for the FWA are to address problems, needs, and opportunities within a watershed or regional context; to achieve integrated water resources management; to develop general, non-project specific, holistic plans or strategies to address watershed needs; and, where applicable, to recommend programs and the initiation of site-specific project implementation studies. Kentucky Waterways Alliance and The Nature Conservancy were chosen as partners in fulfilling the FWA objectives.



Over 150 stakeholders from across the region attended to reinforce what we already knew - people LOVE the Green River and want to do whatever it takes to preserve this incredibly biodiverse resource for generations to come. The Summit was successful on all accounts. In fact, it was so successful that those in attendance are keen to keep the momentum moving forward and host similar events in the years to come. Let's all work to make this happen!

Presentations, maps, and project resources can be found on our website. www.KWAlliance.org



USACE Colonel Luke Leonard (left), KWA Director Judy Petersen (middle), and TNC Director Terry Cook (right) address the crowd.



Participants use a breakout session to brainstorm strategies for Green River protection. Mammoth Cave NPS treated attendees to a private cave tour. Image credit to USACE, Louisville District



Harrods Creek Watershed Project

By Tessa Edelen, Watershed Program Director

KWA is proud to announce the Harrods Creek Watershed Planning Project! KWA is teaming up with community groups and other stakeholders in Oldham County to protect the water quality and habitat of Harrods Creek.

KWA Board President and Harrods Creek resident Gordon Garner says, "It's a project whose time has really come. Harrods Creek is very special and deserves the best watershed protection."



Harrods Creek starts in western Henry County and flows southwest through Oldham County until it reaches the Ohio River in Jefferson County. Since our water can only be as clean as the source, the project will initially focus on the headwaters of Harrods Creek and slowly work toward the mouth. Together, we will create a watershed plan specifically for Harrods Creek to help guide its protection and restoration. Creating this plan will require help from community members, businesses, organizations, and local governments – anyone who has a stake in the project. Collectively, this watershed team will meet every six to eight weeks to review and edit watershed plan chapters, plan recreation outings and/or creek cleanups, and other activities the group chooses.

The project officially got started with a Community Kickoff Meeting on February 24 at 6:30 p.m. at the John Black Community Center in Buckner, KY. The meeting featured a discussion on what watershed planning will mean to Harrods Creek and a chance for citizens to provide feedback.

The first watershed team planning meeting will be held at the John Black Community Center on March 25 at 6 pm. All Harrods Creek stakeholders are invited to watershed team meetings and project activities. If you're interested in getting involved, contact Tessa Edelen at Tessa@kwalliance.org or (502) 589-8008. Visit the project web page:

www.HarrodsCreek.org

Upper Green River Watershed Watch

The UGRWW met on Saturday, February 1st to discuss data collected during 2013 – our 14th year of data collection in the watershed! It was great to see the familiar faces – as well as the new ones and to know that this incredible volunteer monitoring program will continue. Dr. Ouida Meier with Western Kentucky University, co-director of the Green River Biological Preserve and KWA board member, provided an overview of watershed watch data. Dr. Kim Cook with the National Resources Conservation Service (NRCS) Agricultural Research Service presented her research on antibiotic resistance *E. coli* in streams in the watershed. Dr. Cook used UGRWW data and sampling locations for her cutting edge research. The research is still underway but interested parties should look at the NRCS web site for additional information in the future.

*Dr. Kim Cook
taught Upper
Green River
Watershed Watch
volunteers about
antibiotic resistant
E. coli, similar to the
one shown to the
left, in the Green
River. Image from
www.pitch.com*



Beargrass Creek Community Meeting featuring historian Tom Owen

The Beargrass Creek Alliance and the George Rogers Clark Neighborhood Association are proud to announce the Beargrass Creek Community Meeting in honor of Earth Day on April 21 at 7 p.m. at George Rogers Clark Park lodge. Councilman and historian Tom Owen will present *The History and Course of Beargrass Creek*. This exciting event is free and open to the public. The park is located at 1024 Thruston Ave., 40217 (Poplar Level Road and Thruston Avenue).



Beargrass Creek Alliance Volunteer Suzanne Hoehne hard at work at Cherokee Park.

Beargrass Creek Alliance is happy to announce our **Spring Cleanup Saturday, March 22** at Big Rock at Cherokee Park! This family-friendly event will start at 9:30 a.m. and wrap up at noon. Supplies will be provided, but please do bring a refillable water bottle and dress for the weather. For information on other exciting projects, visit us: www.BeargrassCreek.org

KWA Works Every Day on Behalf of Our Families for Clean Water POLICY... IN BRIEF: what we're doing to protect your water resources

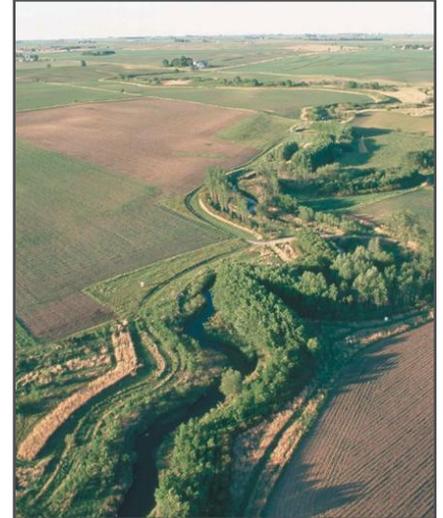
By Tim Joice, Water Policy Director

KWA is your voice in the fight for clean water in Kentucky! Find out what we've been doing lately on behalf of the health of our waterways and communities.

Farm Bill Passed

Finally, after two years (or more) of failed efforts and partisan politics, the House and Senate were able to come together and pass the Agriculture Act of 2014, more commonly referred to as the Farm Bill. So, how did Congress do? Well, the jury is split. On one hand, conservation program funding was cut almost \$6 billion over ten years. This reduces the amount of funds available to actively protect important wetlands, riparian buffers, and other critical ecological habitat. On the other hand, a strong coalition of conservation groups was able to get basic conservation compliance requirements relinked to crop insurance. This linkage makes sure farmers that receive tax-payer subsidized crop insurance are required to utilize conservation practices that help protect soil and water quality. Also retained were the Swampbuster and Sodbuster provisions. In addition, the Farm Bill included a Sodsaver provision for six specific states. This provision forbids farmers from plowing up any native grasslands if they receive federal payments of any kind through Farm Bill programs. We kind of won! Pat yourself on the back for advocating with us!

Image from www.ent.iastate.edu



LG&E Re-proposes Coal Combustion Waste Landfill for Trimble Plant

After being told by Division of Waste Management in 2013 that their permit application was insufficient and should be withdrawn, LG&E has reapplied to construct a coal combustion waste landfill at their Trimble County plant. The plant is on the Ohio River, and the landfill is proposed for a ravine just east and above the plant.

The primary reason the Kentucky Division of Waste Management previously denied the permit was due to a cave that had been discovered where part of the landfill would have been constructed. As a result, LG&E shifted the



Image from ValleyWatch.net

border of the landfill in this revised application to avoid the cave. The cave isn't the only problem, though. The original proposal included impacts to 58,000 linear feet of 344 stream segments, plus 0.36 acres of open water and 2.02 acres of wetlands. That's almost 11 miles of stream impacts. That's simply not acceptable. The Division of Waste Management is accepting public comments on the landfill until March 3. Check out our website for more information, and we'll let you know when the commenting period is open for the Clean Water Act permits needed for the project!

Selenium Lawsuit Revised to Include Nutrient Narrative Changes



In December, KWA and partner organizations filed a lawsuit against EPA, in which we challenge EPA's approval of Kentucky's revised selenium water quality standard. In the lawsuit, we criticize both the process of approval and the standard itself as not scientifically defensible. The revision to the selenium standard, though, was a part of the broader triennial review process, where Kentucky Division of Water (DOW) reviews existing water quality standards and proposes any needed revisions. In addition to the selenium standard, DOW proposed a change to the nutrient narrative and language related to that narrative. We voiced our concerns over those changes in our comments to DOW – specifically, that the changes would allow nutrient pollution and algal blooms to occur before DOW took any action. We felt as though our concerns were not sufficiently addressed. As a result, we have amended our selenium lawsuit to include challenges to the approval of the nutrient-related language as well.

Left unchecked, excessive nutrient pollution will make algal blooms similar to the one at the left commonplace throughout Kentucky lakes. Image from www.processingmagazine.com

When Does It End?...continued...

Coal slurry impoundments are not indestructible - in fact, they will fail, and will pollute our waterways and communities. Yet, our government continues to allow these to be constructed at the risk of the public's health and our waters. Why? Should industry not be responsible for developing methods to reuse or eliminate their own waste stream? Should government not be protecting the health of our citizens, and not the pockets of industry?

Dead Streams

The chemical industry is just the first chapter of this inconceivable, but very real, page-turner. Burning of coal has provided energy to our nation for well over a century. But science and medicine has caught up. At the national and global scale, the act of burning coal has led to widespread air pollution and health issues, as well as climate change. But at the source of extraction, coal operations are both ongoing and looming threats to our waters and the health and safety of our communities.



Acid mine drainage is going on in your backyard. We, as citizens, must demand more accountability from those responsible.

Photo courtesy of Matt Wasson/Appalachian Voices

In Kentucky, and other parts of Appalachia as well, surface coal mining itself has been wreaking havoc on our environment and our streams. The U.S. Army Corps of Engineers and

the Kentucky Division of Mine Permits have authorized thousands of miles - no exaggeration - of streams to be removed or buried for surface coal mining projects. To replace these impacts, the public is promised restoration elsewhere - sometimes, over 60 miles away. It may not even be restoration or creation. It may only be enhancement or protection. Don't be mistaken - we certainly need to protect streams and riparian buffers. But these projects should occur where they are needed, and not almost exclusively where they are most convenient.

Meanwhile, permitting continues, and water quality impacts continue to pile up. Sediment ponds at operating mine sites, intended to hold and store stormwater runoff from the site, constantly spill over into streams after bigger storm events. Valley fills permitted by the Corps and state agencies leach toxic levels of pollutants. Slurry impoundments sit quietly, though they hold back a mountain of pollution. The hydrologic and ecologic systems are being entirely disfigured. Many headwater streams are effectively dead. Citizens of Appalachia have cancer rates suggestive of chronic water and air contamination.

Lately, there's been talk of an alternative economic future for eastern Kentucky's coal region. If the status quo continues much longer, the destruction there will prevent any possibility of a meaningful future. How is it possible that our government has been a willing participant in this tragedy of the commons? How

have fellow Kentuckians allowed this economic and environmental injustice to continue?

500 to 5 million

Downstream of the coal slurry impoundments, downstream of the continued degradation being permitted in the coal fields of Appalachia, the Ohio River provides drinking water to some 5 million people. Cities like Wheeling, Huntington, Cincinnati, Louisville, and Evansville depend upon the Ohio. Yet, the Ohio has the highest levels of toxic pollution of any river in the country. The Clean Water Act was passed 42 years ago. Certainly, the Ohio is not nearly the pot of raw sewage and remains from pork processors that it was years ago. Still, our government continues to allow industry and economic interests to trump public and environmental health.

The Ohio isn't just contaminated with pollution related to coal mining. A number of factories sit on the banks of the Ohio and discharge wastewater into "mixing zones" on a daily basis. The problem? That wastewater still includes toxic cancer-causing pollutants, like mercury. Yes, this is still allowed, 42 years after the Clean Water Act. Why? Good question.

Want to read more? **Visit our website for the full article!** Learn more about the Bluegrass Pipeline, fracking wastewater, why the Clean Water Act is falling short of protecting the public's health, and how you can...

BECOME A  **WATER ACTIVIST**

...to affect change in the status quo, and provide greater protections for our waterways!

Visit www.KWAlliance.org today!



Clean water is a basic human right being stripped away at an alarming rate by industrial greed and bureaucratic negligence! Cartoon depiction of Charleston disaster courtesy of otherwords.org

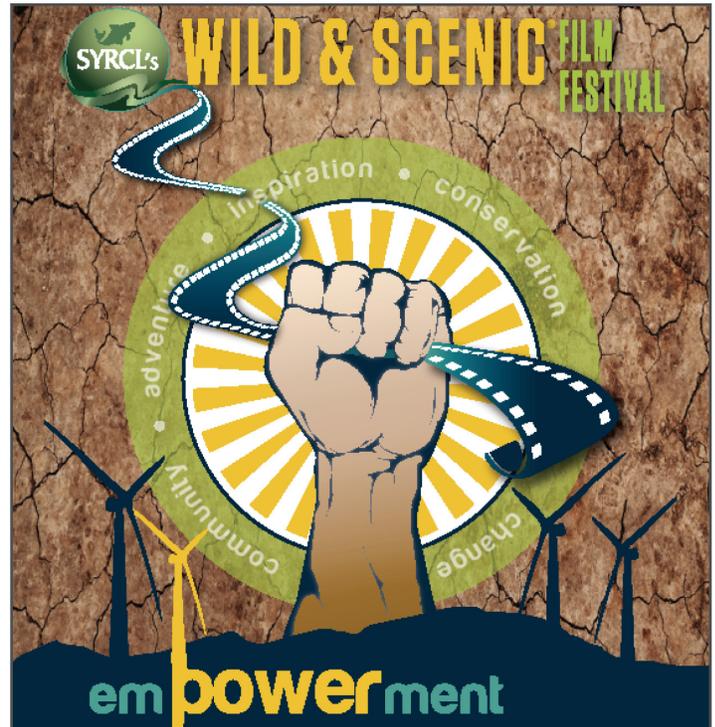
Wild & Scenic Film Festival

Thanks to the support of our generous sponsors **Quest Outdoors, Wiltshire Pantry, Metro Councilwoman Tina Ward-Pugh, Metro Councilman Tom Owen, Citizens Union Bank, U.S. Fish & Wildlife Service, C&H Audio Visual Services, and Kentucky Ale**, KWA will present the 6th Annual Wild & Scenic Film Festival on March 15th, at the Clifton Center in Louisville. Quest Outdoors owner **Ryan King** will be the emcee for the evening's festivities!

Come for the food, drinks, and camaraderie, stay for the amazing films and a **chance to win a Jackson Journey kayak!**

We've got a fantastic lineup of films this year, but we're particularly excited about screening a portion of *Forty Panes: A Portrait of Wendell Berry*, produced by Robert Redford and Terrence Malick. Directed by Laura Dunn, and recently screened at the Sundance Film Festival, *Forty Panes* takes a look at Berry as a long-time advocate for land stewardship, sustainable farming, local economies and rootedness to place, challenging us to imagine a better, healthier, saner world.

For more information about the films and the reception, or to purchase your tickets in advance, go to our website at www.KWAlliance.org.



AVEDA Earth Month

You can support KWA by pampering yourself at participating AVEDA salons and retail stores across the state! Through the month of April, AVEDA locations will be supporting KWA by hosting fundraisers and in store promotional events!

Make sure to save these dates:

- ◆ April 12, Alure Fashion Show in Lexington
- ◆ March 23, All-For-One Great Cause Fashion Show at Diamond's Pub & Billiards on Barret Ave hosted by Louisville area salons

Make sure to check the KWA website for updates and other events!



Upcoming Events

March 10 KWRRRI Symposium This Annual Symposium encourages information transfer by providing opportunities for individuals conducting water-related work to discuss their activities, preliminary or final, with others interested in the waters of the Commonwealth. Marriott Griffin Gate Resort in Lexington.

March 15 6th Annual Wild & Scenic Film Festival The Clifton Center in Louisville will host a night filled with fun, food, drinks, raffles, and a list of films to inspire "emPOWERment!"

March 22 Beargrass Creek Spring Cleanup 9:30 am to noon at Cherokee Park's Big Rock to clean up our stream!

March 25 Harrods Creek Planning Meeting The first watershed planning meeting will start at 6 pm at the John Black Community Center.

ALL April AVEDA Earth Month Salons across the state will host events and raise funds to support KWA

April 21 Beargrass Creek Community Meeting 7 pm at George Rogers Clark Park. Free event open to all!

May 30-June 2 River Rally This year, Pittsburg, PA will host the nation's largest gathering of environmental leaders in their quest to protect and restore our most valuable natural resource - fresh water!

June 14 Green River Fest "The best cleanup ever" will be held at Thelma Stovall Park in Munfordville, KY. We will give you free stuff, feed you, put you on a boat down one of the most beautiful rivers in the world, and even give you a chance to win a kayak. Excited yet? We can't wait!

August 9 Clean the Green will follow our cleanup momentum. Using Greensburg as our home base, volunteers will branch out to rid the Green River of unsightly trash. As always, only the best for our volunteers!

Oct 10 KWA Gala at the Gheens Foundation Lodge KWA will be celebrating our 21st birthday overlooking the iconic Floyds Fork, a creek that winds through the extensive network of parks developed by 21 Century Parks on the eastern end of Louisville.

Please see our website for the full list of events!



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