

The Official Newsletter of POTOMAC RIVERKEEPER® NETWORK

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LOOKING FORWARD TO 2021



Participants of our RioPalooza Festival enjoying a paddle down the Shenandoah River. Photo Credit Alan Lehman

PRKN still had more than our share of successes. This past year has taught us about how to overcome limitations; it has also taught us that, relying on energy and resilience, we can accomplish much. We remain filled with optimism -- after all, if we did well this past year, imagine what we can accomplish with a new Administration in Washington and the possibility of an effective vaccine. In this issue of RiverWatch, we will describe our goals for 2021. Come along for the ride!

For us, 2021 will be a time to deepen our relationships with communities who use and appreciate the rivers but have less familiarity with what Potomac Riverkeeper Network does to protect and defend them. Those communities include folks throughout the watershed who are under-resourced and underrepresented even while they are overburdened by pollution. Both staff and the Board's Justice, Equality, Diversity, and Inclusion committee will seek meaningful ways in 2021 to achieve that goal.

Increased visibility is also important to our mission. In 2021, we hope to implement plans that were shelved

Despite the challenges that we all faced in 2020, in 2020 due to the pandemic. For example, we'll see a return of RiverPalooza and RioPalooza. We also hope to share our research vessel, Sea Dog, with communities up and downstream from its home at National Harbor in a number of Ports of Call. Let's hope that 2021 brings us good news and that we'll be able to begin making our interactions real and not virtual!

> We also hope to build upon the campaigns that we launched in 2020: Respect the Shenandoah, Swimmable Potomac, Trash-Free Potomac, and 50 Million Mussels. One aspect of this will be expansion of our successful Citizen Science Water Quality Monitoring Program. We have several local groups who have contacted us already about wanting to bring monitoring to their favorite local Potomac River access points. Stay tuned for more information about this next spring.

> And be absolutely certain of this: during 2021, you will see more investigation, more enforcement, and more advocacy as we continue to be the voice of our precious rivers. Read more about our plans in these pages.

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A LETTER FROM THE PRESIDENT



CLEAN RIVERS SUPPORT LOCAL ECONOMIES

HELLO FRIENDS,

Having looked back at the challenges and successes of 2020, we are feeling proud of our accomplishments and are now looking

forward to 2021. With January's transition of power happening within the federal government, I'd like to share with you Potomac Riverkeeper Network's goals that we will be setting for EPA leadership as we work with them to enforce and protect our environment.

Our first priority is the strengthening of protections for our rivers, including the smaller streams and wetlands that feed into the Shenandoah and Potomac. The wetlands filter out pollution that would otherwise flow into the Potomac and ultimately the Chesapeake Bay. If not protected under the Clean Water Act, the small streams can transport unchecked pollution dumped into them into downstream waters. 2022 will be the 50th anniversary of the Clean Water Act, and we are counting on the new EPA to revise and strengthen protections by then to better ensure clean water not only for our rivers but the waterways of all Americans.

Secondly, we will push for a strengthening of authority for the states and DC to set and enforce water quality standards at the level they deem necessary to protect the public health and aquatic resources against pollution. Watershed protection works most effectively when states have the authority to ensure that watershed-specific pollution challenges can be adequately addressed, rather

than being capped by more generic federal standards. Our hope is that an increase in authority for states and DC to enforce their own water quality standards will help organizations like ours ensure our aquatic resources are better protected from local pollution issues.

Finally, we will also be continuing to collaborate with the EPA to ensure that all the rivers that flow into the Chesapeake Bay reduce the amount of pollution that they dump, improving the health of the Bay and all of its tributaries. The current deadline for meeting water quality standards in the Bay is 2025, but we are not going to meet this deadline unless much stronger steps are taken to stop preventable pollution from flowing into the waterways. With the Potomac being the second largest tributary, it is critical we do our part to reduce pollution levels in the Potomac and Shenandoah or we won't have a ghost of a chance to meet the water quality standards set for 2025. With hard work and support from the new administration, this ambitious water quality goal is achievable and will benefit everyone.

We are optimistic about working with the new EPA and hope that they will see eye-to-eye with us on the importance of clean water, particularly in our nation's capital. As the saying goes, "We all live downstream."

Cheers to a prosperous and productive New Year, Sincerely,

Nancy Stoner, President



In 2021, we will work alongside the EPA to strengthen protections for our waterways, including this beautiful section of the North Fork of the Shenandoah River. Photo Credit Kevin McCarthy.

Potomac Riverkeeper Network is a proud member of both EarthShare Mid-Atlantic and Combined Federal Campaign (CFC). Employees can choose to designate a portion of their paycheck to Potomac Riverkeeper Network. Our EarthShare and our CFC number is the same – #87828.

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SHENANDOAH RIVERKEEPER

STEPPING UP RESPECT FOR THE SHENANDOAH

To improve the health of the river, not much compares to Shenandoah Riverkeeper Mark Frondorf's recent achievement with the Virginia General Assembly to pass legislation to set a deadline for the exclusion of cattle and their excrement from the Shenandoah and other Virginia rivers. Mark is now preparing to build on that success in 2021.

Readers of *RiverWatch* will remember that 2020 launched the *Respect the Shenandoah* campaign – Mark's effort to bring together stakeholders from across his watershed to act in ways both small and large for the health of the river and the Valley. In 2021, he will expand volunteer involvement in the campaign while increasing the visibility of Shenandoah Riverkeeper. Thus, you'll see him continue to make presentations to local groups – about the pollution problems in the Shenandoah River, the solutions, and how you can assist in being a river protector. He'll be in the halls of the statehouse in Richmond, in person or virtually, to garner support for robust funding and best practices to keep excess poultry manure out of the river.

And he will always speak for the river. His highly regarded Mid-Atlantic Smallmouth Bass Assessment gathering from 2019 will be repeated in 2021. This unique workshop brings together state and federal scientists, along with fishing guides and regulators who compare research and experiences to improve the health of the Mid-Atlantic rivers and the smallmouth bass population, from spawning to adulthood.

Virginia's Department of Environmental Quality (DEQ) is developing nutrient standards for the Shenandoah River systems which will be expressed in the form of Chlorophyll A, which is an indicator of the amount of algal growth in the river. Tracking Chlorophyll A in the river and its relationship with pollution sources will help to target cost-share dollars and other resources effectively to limit the growth of nuisance algal outbreaks, protecting the health of the people and wildlife who depend upon the river. DEQ's consideration of these new water quality standards is a result of over a



Algae is one of the biggest problems in the Shenandoah River, and Riverkeeper Mark Frondorf is working with VA DEQ to get protective standards put in place.

decade of work first started by Jeff Kelble and carried on by Mark to get the agency to focus on algae, its sources, and its consequences.

As Mark works with local cattle farmers to improve the health of the river, he will also take advantage of his newly acquired skill in drone flying to team up with Program Manager Alan Lehman to patrol the 250 miles of river – and to identify problem spots where herds of cattle are defecating in the river and where poultry litter is improperly stored and spread. Much of the nutrient pollution from which the Shenandoah suffers is directly the result of poor agricultural practices. The drone will provide photographic and real-time documentation of problems that can be fixed, leading to a clean and healthier Shenandoah for everyone.



One of our enthusiastic participants of the bilingual Snorkel the Shenandoah event hosted in conjunction with the USFS and Hispanic Access Foundation.

FRESHWATER SNORKELING – ENJOYING THE RIVER FROM BELOW

Shenandoah Riverkeeper Mark Frondorf leads in reaching new and underserved audiences in the Shenandoah Valley and the Potomac watershed. His RioPalooza events are wonderfully well received by the Latino community and are made possible with his partners, the U.S. Forest Service and the Hispanic Access Foundation, to ensure that all residents of our region have an opportunity to enjoy the beauty and joy of the Shenandoah River.

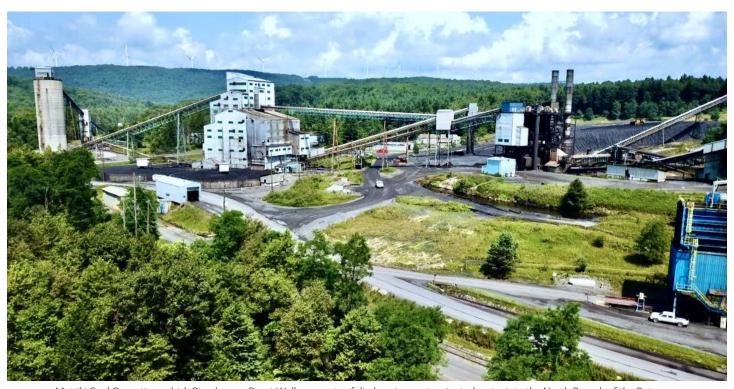
In spite of Covid-19 restrictions, Mark was able to host a very successful and socially distanced snorkeling event, also bilingual and again with help from those same partners. These efforts are unique – no other organization combines this sort of outreach with the investigation, advocacy, and enforcement we do.

Mark's experiences and leadership made him the perfect choice as staff liaison to PRKN Board's JEDI Committee – that's not Star Wars; it's Justice, Equality. Diversity, and Inclusion. Reaching groups historically underserved and under-resourced is a major part of our strategic plan for 2021 and beyond; they are definitely river users, both for recreation and, in many instances, for subsistence, and so the safety and health of the water is of critical importance. We want to hear from all communities, and by doing so, are better able to understand how to serve everyone throughout the Potomac watershed.

Next year, look for Mark to host another bilingual snorkeling event and add a second – with U.S. Forest Service and organizers of the Get Black Outside and the National Association of Black SCUBA Divers – sharing the common goals of engaging diverse audiences in safe, welcoming, and inclusive recreational opportunities in nature.

UPPER POTOMAC RIVERKEEPER

ACROSS THE WATERSHED UPPER POTOMAC RIVERKEEPER TAKES ON POLLUTERS



Mettiki Coal Operation, which Riverkeeper Brent Walls suspects of discharging contaminated water into the North Branch of the Potomac.

As Upper Potomac Riverkeeper Brent Walls looks ahead to 2021, he sees opportunities to apply his expertise in coalition building and drone water quality monitoring technology to investigate and stop pollution. (In this latter, he literally teaches the Nation's Waterkeepers!) We'll describe some of his plans – some new projects and some follow up on projects started in 2020, an amalgam of old and new.

Watchdog of Pollution from Mega-Poultry Operations

What will be new? An effort to work with local community groups to stop manure pollution from contaminating the river from an astonishingly huge and problematic poultry house development in West Virginia. Pilgrim's Pride, a major national and regional poultry producer, is a partner in WV Poultry Partners, which is building a 19-house industrial operation for raising chickens. Each of the 19 houses can hold between 50,000 and 70,000 chickens, so the operation could have a million or more birds and their manure on site at any one time. This facility is expected to add thousands of tons of excess nutrients and pathogens from fecal matter to the already overburdened and stressed watershed.

And, to date, West Virginia's Department of Environmental Protection (DEP) has failed to insist that WV Poultry Partner obtain a Clean Water Act discharge permit for the operation. Brent has already put DEP on notice that this failure is unacceptable. You can be sure that he stands ready to take the necessary action to protect the river from this threat.

And Watchdog of Pollution from Mettiki Coal

Brent has long had his eye on the Mettiki Coal operation in western Maryland, which he suspects is periodically discharging contaminated water making its way into drinking wells and the North Branch of the Potomac River. Past inspections have shown evidence of possible metals pollution.

The Mettiki facility has submitted a request for a reissuance of its Clean Water Act discharge (NPDES) permit and, by the time you read this, Brent will have submitted his comments to the request and participated in a public meeting on the draft permit. He will also have encouraged his supporters to submit comments. Brent's ability to energize a community was amply demonstrated by his success with the No Potomac Pipeline campaign in Maryland.

Brent's relationship with Maryland's Department of the Environment (MDE) is difficult to characterize, because sometimes he and they are on the same side and sometimes, well, not so much. In this case, Brent is working the issue from two angles; advocating for a stronger discharge permit, and investigating whether those discharges sometimes run afoul of the permit and pollute Sand Run, the tributary of the Potomac that flows near the site. If Brent finds evidence of permit violations, PRKN will take action to hold Mettiki Coal accountable and stop the pollution.

Part of his effort at Mettiki will be continued monitoring of discharges from all outlets including an in-stream pond used as the source of water for coal washing and also as a settling pond for pollutants. The in-stream pond is essentially a sink for heavy metals, which, during a major rainstorm, could send a pulse of pollution into Sand Run and into the North Branch of the Potomac.

These are just some highlights – you can be sure that Brent will be kept busy with these and other important work, throughout 2021. Wish him luck and give him your support!

POTOMAC **RIVERKEEPER**



Marina at the Wharf. Photo Credit Randy Benn

POTOMAC RIVERKEEPER - FROM A SOLID FOUNDATION COMES GREAT GROWTH

Potomac Riverkeeper Dean Naujoks had his challenges in 2020, especially in engaging the public in watershed protection through the water quality monitoring program and stream cleanups. De-

spite the disruption caused by the pandemic, Dean persevered in pursuing his most important work, and can still look back on a year that was unexpectedly productive.

Thanks to some incredible depth of bench, including Volunteer of the Year Carl Scheider who worked tirelessly with a team of volunteer scientists. Dean was able to continue the Citizen Science Water Quality Monitoring Program. In fact, he was able to expand the number of sites! The data collected is of immeasurable importance in providing timely information to the public about whether water contact is safe. This information also helps regulators and policymakers determine where resources are needed to address pollution issues.

So what's new about WQM for next year? More sites! Dean has plans to add locations in Charles and Montgomery Counties, and he will be working to expand his partners, too. The Port Tobacco River Conservancy stepped up last year to sponsor monitoring on \$2500 a year for sampling and testing, so, if you can, please support this important program.

More 2021 plans on Dean's list include further development of

his Trash Free Potomac Campaign, which he was able, in spite of everything, to launch in 2020. More cleanups, of course, but he is also hoping to leverage state funding for "trash traps" that can be installed in Potomac tributaries to collect plastic bottles and other trash before it reaches the river. You will be hearing from him, frequently, about the steps he will be taking to eliminate plastic pollution, from their source - namely, us. Dean's creation of a Rapid

Response Team is also a major goal for 2021. Relying, as always, on dedicated volunteers, he will build a program that can expand PRKN's reach in investigating, publicizing, and solving pollution problems that are identified to us by our members, supporters, and partners throughout the watershed. Greater visibility of the problems, and of the work Potomac Riverkeeper Network is doing to combat them, will leverage our ability to protect and defend the river.

Support Dean and his team of volunteers – sign up for

cleanups, water sampling training, and call our hotline or use Water Reporter to send him photos of pollution problems that you observe!



Three of our wonderful volunteers at a National Harbor river cleanup event, part of Potomac Riverkeeper's Trash Free Potomac campaign.

the Port Tobacco River, and the National Marine Sanctuary Foundation gave PRKN a grant to monitor water quality at Mallows Bay National Marine Sanctuary. Remember, each site costs about

DEDUCT MORE WITH CARES ACT CONTRIBUTIONS

This has been a year fraught with turmoil and loss, but the Shenandoah and Potomac Rivers are there for us in tough times as in happy ones. They provide solace, beauty, safe drinking water, and they provide fun – and we need all those things now more than ever in these difficult times.

We are hard at work fighting pollution, and we are winning! But we really need your help right now to plan for the future, and to ensure this vital work continues full speed ahead in 2021.

Did you know that this year, CARES Act changes to the tax code allow you to deduct even more of your gift to PRKN? if you take the standard deduction on your taxes, you may deduct up to \$300 in charitable gifts? And, if you itemize, you can take an even larger deduction so long as you make the donation before December 31, 2020? (Check with your tax advisor for more information.)

Please consider making a CARES Act contribution today? Every donation will help keep up the good fight during these very uncertain times.

In every year, our work is valuable, but this year it was indispensable as EPA and state agencies shut down their enforcement operations during the pandemic. But your Riverkeepers were undeterred. Working alone, working smart, and using state-of-the-art technologies, like drone surveillance, they go where others fear to tread – to find and stop illegal pollution and protect the rivers we love.

Why should you care about the state of the Potomac and the Shenandoah Rivers? Because you rely on the Potomac or Shenandoah for your drinking water. And now more than ever, we all enjoy these rivers as a playground for boating, fishing, birding, and other recreation and as a refuge for quiet reflection.

The threats to Potomac and Shenandoah water quality are everpresent and significant.

Together, with your support, we can make real progress in 2021 for the rivers you cherish. With a small, dedicated staff, and low overhead, you can be sure your contribution to Potomac Riverkeeper Network is going where it should: to safeguard the health of the Potomac and Shenandoah Rivers for years to come.



Make a CARES Act contribution today to support your Shenandoah, Potomac, and Upper Potomac Riverkeepers' work. Your tax-deductible donation is vital to protecting the Potomac and Shenandoah Rivers from pollution and in enhancing access to these resources that can enrich the lives of so many across the watershed.

On behalf of all of us at Potomac Riverkeeper Network, Happy Holidays and thank you for your generosity.

PUBLIC EMPLOYEES FOR ENVIRON-MENTAL RESPONSIBILITY – GIVING MUCH NEEDED HELP

Potomac Riverkeeper Network is the beneficiary of a remarkable array of organizations that support us with both dollars and in-kind help. We feature one of them in each issue of *Riverwatch*. Today, we honor Public Employees for Environmental Responsibility (PEER), which is providing Upper Potomac Riverkeeper Brent Walls with invaluable help in his investigation of PFAS, a group of toxic legacy chemicals whose pervasiveness and impact on public health and the health of our rivers we are just beginning to understand.

PEER supports current and former public employees who seek a higher standard of environmental ethics and scientific integrity within their agencies. PEER protects public employees who protect our environment. Founded in 1992, PEER is a service organization for environmental and public health professionals, land managers, scientists, enforcement officers and other civil servants dedicated to upholding environmental laws and values.



Public Employees for Environmental Responsibility is helping UPRK Brent Walls with his investigation into PFAS pollution in the Potomac.

PEER often asks government oversight bodies to investigate improper or illegal governmental actions. This helps ensure that elected leaders and the public have information to make better decisions which are based on good science.

And that's where PEER has helped Potomac Riverkeeper Network and Upper Potomac Riverkeeper Brent Walls. Through funding for water sampling and testing at the Air National Guard site and nearby drinking water wells in Martinsburg, WV, and two wastewater treatment plants on the Antietam Creek, Brent has been able to identify previously unknown and disturbingly high levels of PFAS.

Brent has shared this information with Maryland's Department of Environment and has urged it, based on the gravity of the findings, to undertake PFAS testing at wastewater treatment plants throughout the state. Without the help from PEER, Brent would not have been able to obtain the data. With more help from PEER in 2021, he hopes to undertake testing of the sludge produced by sewage treatment plants when they remove contaminants from wastewater. Brent is concerned that PFAS in this sludge (which is also sometimes called "biosolids") may be moving into the rivers and into the food chain as biosolids are applied to the land, including to farm fields.

CLEAN RIVERS FOR PEOPLE AND WILDLIFE



One mussel can filter up to 15 gallons of water a day. PRKN is working to reintroduce 50 million mussels into the Potomac by 2030 to help improve water quality.

The Potomac River Basin is home to not only 6 million people, but also thousands of species of plants and animals. The presence of many of these species speaks volumes about the health of our watershed. Many of them, such as dolphins and smallmouth bass, can act as bioindicators for the health of our waterways, and we can even enlist the help of some species, like the native freshwater mussels of our 50 Million Mussel Campaign, to support the work we do to promote clean water.

History has shown us that when the environment is threatened, wildlife is the first to feel the heaviest impacts, as we saw with the damage that DDT did in the late 1960s. This widely used toxic chemical polluted our waterways, and many of the Bay's iconic piscivorous (fish-eating) birds experienced bioaccumulation of this toxin through their diet causing their populations to plummet. The toxin was banned by the EPA in 1972 and, as a result, these bird populations have bounced back, with osprey and bald eagle sightings now common throughout the watershed. A fantastic example of how regulation, litigation, and conservation can be successful, and why water quality impacts every living thing throughout the watershed.

We continue to monitor toxins in the watershed through research focused on the wildlife. Upper Potomac Riverkeeper Brent Walls is working with biologists from the Department of Natural Resources and the United States Geological Survey to study evidence of PFAS bioaccumulating in smallmouth bass. PFAS is a group of emerging biotoxins that do not break down and pose significant health risks to both humans and wildlife. Many members of the community fish for smallmouth and other species, including catfish and perch, and

often bring these fish home for dinner. Livestock and pets in the region may drink the water, unknowingly consuming contaminated water. Understanding the presence of these dangerous chemicals and how it affects wildlife and domesticated animals, and, through them, our community is critically important, and may eventually lead to better controls on these pollutants in the environment.

While studying the wildlife within the rivers can help us better understand the presence of pollutants, observing the wildlife can also provide evidence of the Potomac Riverkeepers' success in improving water quality. For example, bottlenose dolphins serve as an important indicator species for the Chesapeake Bay and Potomac River ecosystems because they are an apex predator, and a healthy population indicates that the surrounding habitat is supporting appropriate amounts of prey species at lower levels of the food chain. Thanks to the research of Dr. Mann of Georgetown University and Dr. Bailey of University of Maryland Center for Environmental Studies Chesapeake Lab and their DolphinWatch initiative, we now know the lower, tidal Potomac River is providing a habitat clean and bountiful enough to support over 1000 bottlenose dolphins who are living and reproducing in the river.

The biodiversity within our region allows us to be better tuned in to the current state of our waterways. The healthier and more abundant the wildlife, the better off the river is for people as well. We understand that our work is directly linked to the health of the river's ecosystem, and we remain dedicated to ensuring that our waterways are safe and habitable for all who depend on it, people and wildlife alike.



