



Vol. 6, No. 4

The Quarterly Newsletter of Sound Rivers

Fall 2020

Two Year Anniversary of Hurricane Florence Reminds us of Work Ahead

Author's Note: The article below was written on the day Hurricane Sally made landfall in Alabama and fires were burning out of control on the west coast- another stark example of the devastating effects of a changing climate.

It was September 14, 2018, when a slow moving Hurricane Florence finally made landfall in eastern North Carolina. By that time, the storm had already dumped two feet of rain in many parts of the east. According to the National Weather Service, “the historic legacy of Hurricane Florence will be record breaking storm surge of 9 to 13 feet and devastating rainfall of 20 to 30 inches, which produced catastrophic and life-threatening flooding.” The storm pushed the Neuse and Tar-Pamlico Rivers over their banks both due to storm surge and flooding. In total, 51,000 homes were flooded in Virginia, North Carolina, and South Carolina. Climate scientists estimated that Florence dropped 50% more rainfall due directly to climate change and warming oceans. We are seeing a repeat of the climate change effect this year in the Gulf with Hurricanes Sally and Laura.

The storm not only caused devastation due to wind and flood damage, but also massive impacts from pollution due to coal ash, sewage, and animal waste spills. This pollution was pushed directly into towns and homes by floodwaters. The impact, however, was not felt equally. A recently released report, “Building a Just Climate Future

for North Carolina,” by the Center for American Progress, noted that, “systemic and historic disparities in North Carolina, driven by discriminatory zoning, housing discrimination, the longstanding practice of concentrating sources of pollution in low-income communities and communities of color, among other unjust policies, have exacerbated the risks and impacts of more extreme weather, flooding, heat waves and other climate change impact in these communities.”

Our work advocating for clean water is, and has been for many years, inherently a fight for environmental justice. There are innumerable sources of pollution impacting the water bodies within the Tar-Pamlico and Neuse River Watersheds. These threats to water quality happen across the basin and ultimately impact us all, as they travel downstream and end up in the waters we swim in, fish, and drink from. However, water pollution, just like the effects of climate change, is not random or evenly distributed; large hog and poultry operations, pipeline routes, landfills, and coal ash



Flooded poultry barns after Hurricane Florence, 2018

ponds are overwhelmingly located in communities of color or low income communities, and the resulting pollution impact of these facilities disproportionately falls onto those living there.

COVID-19 has only served to highlight and exacerbate existing inequities; polluting facilities continue to seek permits and residents are forced to choose between attending in-person public meetings to make their

Continued on P. 3

Greetings from Leadership

Adapting In 2020



I know 2020 has been a difficult year for us all, and while summer gave us the opportunity to continue our popular Swim Guide program, keeping the public updated on water quality, the end of the season brought with it some sad news. In September we announced the cancelation of the 2020 Oyster Roast, which would have been the 35th year of the event. While we will miss seeing your smiling faces to ring in oyster season, we know canceling was necessary to ensure the safety of our staff, volunteers, and guests. The Oyster Roast has been critical to support our work for clean water, but it's more than that – the event has always been a wonderful way to bring together our Clean Water Community and celebrate the amazing work we are achieving together.

We're still working for clean water, and working for you. We are so grateful to our sponsors who continue to support us in 2020 – Grady-White Boats, RES, Restoration Systems, Edward Jones Investments - Rod Cantrell, Mid-town Property Law, and Scott Campbell, REALTOR®. The cancelation of one of our biggest fundraising events means that we need to raise \$125,000 by December 31st; we're committed to making sure your waterways are safe, beautiful, and healthy – but we can't do it without you! I hope you will consider a gift this fall to support our work, and if you have already given, thank you!

We are looking forward to 2021, when we hope to bring the Oyster Roast back and better than ever. In the meantime, make sure you check out our virtual events happening throughout the fall.

Thank you, and we are wishing you a happy, healthy, and safe fall!

Heather Beck

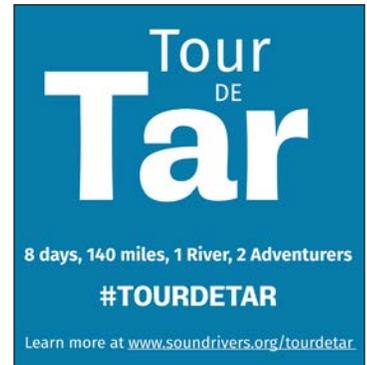
We would like to thank the Z. Smith Reynolds Foundation, the Eddie and Jo Allison Smith Family Foundation, and the Seattle Foundation/Lemonade Fund for their continued support of Sound Rivers and our mission to protect the Neuse and Tar-Pamlico Rivers.

Upcoming Events

October 8 - 17

Tour de Tar

Your Pamlico-Tar Riverkeeper Jill Howell and Environmental Projects Coordinator Clay Barber are embarking on a journey to paddle the length of the Tar River this fall – rescheduled from the spring – and you can come along, virtually! Jill and Clay will be hosting Facebook lives while on the water, sending photos, videos, and meeting up with special guests along their 9-day paddle starting October 8th. You can also make their work to protect the Tar possible by sponsoring their paddle – learn more at soundrivers.org/tourdetar, on [facebook.com/pamlicotar](https://www.facebook.com/pamlicotar), or [facebook.com/soundriversnc](https://www.facebook.com/soundriversnc).



October 13, November 10, December 8

Tell Me About It Tuesdays

“Tell Me About It Tuesdays” is our new monthly series featuring your Riverkeepers and Sound Rivers’ program staff, along with special guests, talking about issues facing your waterways, and taking your questions! The series will be held on Zoom, so you can join in from the comfort of your home. We plan to post recordings of future presentations on our website after they occur; even if you can't make it, you'll be able to watch it later!

November 9 - December 1

Online Silent Auction

A beloved part of the Oyster Roast each year, the Sound Rivers Silent Auction is always a fun way to support your Riverkeepers and protect your rivers – while finding some great gifts and treats for yourself!

This year we are taking the auction online, so you can shop from the comfort of your home. The online auction will open at 10am on November 9th, 2020 and will remain open for bidding until 5pm on December 1st, 2020. The link to the auction will be available at soundrivers.org and on our social media, and we will be featuring some great items and experiences. We hope you'll join us to shop for a cause, and spread the word!

More info at soundrivers.org

Working for Your Water

Florence Anniversary Cont. from P. 1

voice heard while risking their health, or not be heard at all (as we saw with the landfill hearing in Kittrell, for more on that see page 4). And while people are forced to stay at home, those living in and near polluted areas are now spending more hours of their days potentially exposed.

So what does this actually mean for Sound Rivers, and the work we are doing on a day-to-day basis? When choosing what issues and problems to take on, given our limited capacity and resources, we are committed to considering impact and equity. We need to better support partners in our watersheds who are working specifically on issues of equity and justice. We need to continue using our power, influence, and networks to elevate these voices and make sure that those most impacted by decisions regarding water resources have their say in decision-making processes. It means talking about how degraded waters affect communities that rely on them to swim, fish and drink from, as frequently as we talk about impacts to water quality and aquatic life.

Through our work towards ensuring that the most vulnerable communities are safe from the impacts of climate change and pollution threats, and have access to fishable, swimmable, drinkable water, we can truly fulfill our mission of protecting the Neuse & Tar-Pamlico River Basins for all.

Fighting for your water quality presents tough challenges; when we are also working to address underlying inequities that result in the siting of polluting industries in already vulnerable communities, this can seem like an even more incredible task. But it's one we know we must take on, not just because it is right, but because we will be more successful in our work and mission - to protect your water, and make a clean water future possible - when we do so. We know that progress will be difficult, it will not come fast enough, and we will undoubtedly make mistakes along the way, but we will move forward anyway. Extreme flooding events, like Hurricane Florence, are possible every year, and we need to be prepared. Our work is not possible without you, our clean water community. Thank you for all your support, as we continue to fight for clean water and justice for everyone in the Tar-Pamlico and Neuse River Basins.

New Wetlands Constructed at Havelock High and Beaufort County Community College

After years of planning and collaboration, Sound Rivers is pleased to announce the completion of two newly created wetlands built to help control and treat polluted stormwater runoff. Sound Rivers has partnered with the NC State University Biological and Agricultural Engineering Department to improve water quality at public campuses and offer unique STEM learning opportunities.



In August, work was completed at Havelock High School to convert a grass swale into a 10,000 square foot constructed stormwater wetland. Just this month, work finished on a wetland on the Beaufort Community College campus. The stormwater projects are fully funded through grants awarded by the Environmental Enhancement Grant, Bosch Community Fund, Harold Bate Foundation, and the Craven Community Foundation. The projects aim to reduce flow of stormwater runoff while removing harmful pollutants with native plants and shrubs.

Sound Rivers' Campus Stormwater Program has 24 K-12 and college campus partners across the entire Neuse / Tar-Pamlico region. In the past five years, we have installed 14 stormwater management practices at six campuses including rain gardens, cisterns and constructed wetlands. Students there can now incorporate the green infrastructure into their coursework as an outdoor classroom. We also recently installed two rainwater storage cisterns at New Bern and West Craven High School. We plan to work with Nash County Community College next year to develop similar projects.



Working for Your Water

Riverkeepers Join Opposition to Landfill

A few weeks ago, concerned residents of Kittrell, North Carolina contacted your Pamlico-Tar Riverkeeper – they had unexpectedly received letters in the mail stating that there would be a hearing regarding a zoning change on a property in Kittrell to allow for the construction of a landfill right next to their homes.

The proposed landfill sits on an 83 acre property off of Egypt Mountain Road, and would allow for the disposal of “land clearing and inert debris” – this includes things like tree stumps, yard debris, unpainted concrete, and bricks. While landfills for this type of debris bring less impact than something like a municipal solid waste or hazardous waste landfill, after some initial investigating, Sound Rivers shares the concerns of these neighbors about the impacts that this proposed landfill would have on water quality of nearby creeks, one of which runs through the proposed landfill site, and feeds into the Tar River.



Thanks to support by your Pamlico-Tar Riverkeeper, the Vance County board of adjustment called a second hearing in November to give local residents time to bring in experts and provide additional information on the potential environmental impacts of the project.

Potential Impacts to Water Quality, Wetlands, and Endangered Species

Long Creek and associated wetlands run through the site of the proposed landfill, and Tabbs Creek runs along the border of the property. Both of these creeks empty into the Tar River a little bit more than a mile from this proposed property.

Tabbs Creek is home to two federally listed freshwater mussel species – the dwarf mussel (endangered) and yellow lance mussel (threatened) – under the Endangered Species Act. Given the topography of the property, which sits atop a hill, both Long Creek and Tabbs Creek are threatened by potential sediment runoff associated with a landfill operation and clearing/grading of the landfill.

Flooding Issues

The proposed development of this undeveloped, forested property into a landfill brings major flooding concerns. A portion of the property in the vicinity of Long Creek includes land within the 100 year floodplain. We know that climate change is only making flooding concerns worse – we do not need to be building landfills in the floodplain, close to critical water resources. Residents have also recounted that heavy storms in the area cause significant flooding of Egypt Mountain Road, and their properties along Tabbs Creek.

How to Take Action

There is a group of Kittrell residents organizing to oppose this project and they are in need of support. If you would like additional information, and want to know how to get involved, including speaking at the upcoming Board of Adjusters hearing regarding this conditional use permit, contact Jill at jill@soundrivers.org.

Thanks for a Great Summer Swim Guide!

The end of summer means the end of another year of Swim Guide. Despite the many challenges this year posed, it wouldn't have been the success it was without the help of our rockstar volunteers. This was the third year of our summer Swim Guide program. While maintaining proper social distancing guidelines, volunteers collected water samples each week from popular recreation sites to analyze for E. coli bacteria levels. Our three interns, Amelia, Cait, and Nicole then shared the results with the community through our website, text alerts, and weekly water report videos on our Facebook and social media pages. Each year the interns also put together a report summarizing the summer's results which will be published this fall.

We cannot thank our wonderful volunteers in Raleigh, Greenville, Washington, Kinston, and New Bern enough for all of their support and dedication to the program. Swim Guide will return Memorial Day weekend of 2021. **Many thanks to our generous sponsors!**



Partnership Updates

Re-visioning the Jack's Creek Watershed: Sound Rivers working with City and Mid-East Commission

By Betsy Kane, Sound Rivers member and City of Washington Councilor

Jack's Creek drains much of the land area of Washington, N.C, into the Pamlico River. Labeled as the "Town Ditch" or "Windmill Creek" on some older maps, Jack's Creek today carries stormwater from parking lots, city streets, shopping centers, and neighborhoods. Aquatic life in the creek is smothered by massive surges from piped tributaries, ditches, and street runoff. Heavy metals, coliform bacteria, and sediment are likely pollutants that then make their way to the Pamlico River.

Despite the damage, the creek still has much life and beauty. I have seen sunfish in the clear stream near Sixth Street after a short drought, and the city greenway along the creek is an eBird.org hotspot where I have observed 63 species including Spotted Sandpiper, Wood Duck, Baltimore Oriole, Loggerhead Shrike, Green Heron, Osprey, and six kinds of woodpeckers. Blue-flowered pickerel weed and pink swamp mallows grow at the creek's outflow into the Pamlico River, where anglers gather under the cypresses in a city park.

These lands also have potential for low-intensity recreational uses. Perhaps there could be a boardwalk and observation area, restored natural vegetation at the creek's banks, and canopy trees to shade its broad channel. Play structures, informational signs about wetlands and the creek's place in local history, and public art could be part of this vision.

If restored, the Jack's Creek watershed can improve water quality, help manage chronic street flooding, and also become a recreational and greenway amenity that connects Washington's interior neighborhoods to the Pamlico River – in effect, becoming Washington's "Second Waterfront."



Major Gift Establishes Memorial Water Quality Fund



A new Sound Rivers Water Quality Monitoring Fund was established in memory of Gene Pate to preserve the long-term health and vitality of the Pamlico and Neuse River watersheds and the families who live, work and recreate in the communities that he loved.

The Water Quality Fund will allow Sound Rivers to expand sampling programs to include pollutants currently too expensive to monitor, such as algal bloom toxins, PFAS (also known as forever chemicals) and microplastics.

"The generous gift that made this fund possible will enhance Sound Rivers' ability to do work that is vital to our mission," said executive Director Heather Deck. "Water quality testing helps Sound Rivers determine the causes of things like fish kills, toxic algal blooms, and other issues so that we can work to eliminate those sources of pollution."

As climate change warms our rivers, the amount of dissolved oxygen in the water drops, stressing the ecosystem. Sadly, fish kills are becoming ever more common in warm months, and in this new normal, it is crucial to minimize all other stresses on the environment. This new fund comes at a vital time, and the work it will support enhances Sound Rivers' ability to protect the waters we all love. Work supported by the fund will provide valuable data that researchers will be able to use in an era where funding cuts at universities have limited scientific inquiry.

The fund will also ensure that our water quality monitoring program, Swim Guide, can continue for many years. Each summer, Sound Rivers' Neuse and Pamlico-Tar Riverkeepers work with interns and volunteers to monitor water quality sites for harmful bacteria.

Gene Pate was born and raised in Kinston and practiced medicine there for his entire career. As a physician, he was invested in the health of the community and he also kept a sailboat for many years in Oriental. He spent much of his time at a family home on the Pamlico, and he loved to reminisce about his years as a counselor at Camp Leach and his time on the river with family during his youth.

If you'd like to learn more about this fund, and ways to contribute, contact Heather Deck at heather@soundrivers.org.

Riffles & Runs

“Time to Rethink Our Food System”

March 17, 2020

by Gabe Brown and Shane New

Below is a blog post, reprinted with permission from the publication “Understanding Ag.” in which the authors highlight the shortcomings of industrial agriculture. This directly relates to the work that Sound Rivers continues to do to stop pollution and improve industrial animal agriculture operations. This also goes hand and hand with the work that your Upper Neuse Riverkeeper has done to highlight and promote regenerative agriculture as a means to improve our environment while keeping farms profitable and supplying healthy food to our communities.



Upper Neuse Riverkeeper Matthew Starr sampling Butler Farm in 2019

A trip to the local grocery store today turns up many empty shelves—a sight that most Americans have not seen before. This is just one of a myriad of ramifications of the coronavirus outbreak. Without a doubt, this will affect us for months to come.

But we feel this puts a spotlight on a larger problem: the fragility of our food system.

Contributing to this fragility is the fact that the average American shops for food every fourth day and it is estimated that the average meal travels over 1,500 miles to get from farm to plate. How can anyone think that this is not a fragile system? We, the American consumer, are to blame for this.

We, through our buying dollars, have dictated that this is the system we want. By purchasing food that is grown elsewhere, that does not support our local farm and ranch families, we set the system up for the empty shelves we are seeing today. Americans are in a panic because they are not confident in their food supply.

Not only are they not confident in the supply, but that food supply is also failing their health. The nutrient density of the food produced in the industrialized, commoditized model has decreased in nutrient density anywhere from 15-65 percent in the last 50 years. A person today would have to eat twice as much

meat, three times as much fruit and four times as many vegetables to get the same nutrients and minerals, as compared to the same food in 1940.

How do we instill confidence in a system that is 1,500 miles away? The answer is, of course, you don't. The solution, instead, is to identify local farmers and ranchers who are applying the principles and rules of soil health. Go to their farms, see for yourself. Is the farm alive? Can you smell the flowers? Do you see a diverse abundance of plants and animals? Can you hear the buzz of honeybees and other insects?

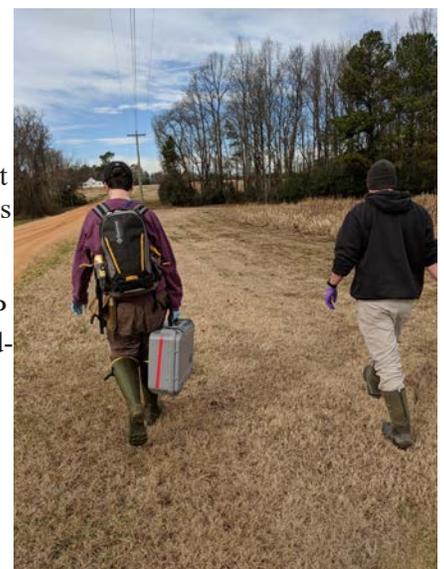
What are they growing? Is it only one or two crops or is it a cornucopia of plenty? Most importantly, find out if they are feeding their own family what they grow.

A crisis often becomes a wake-up call. The current coronavirus outbreak is that wake-up call and must result in a serious re-examination of our food system, including asking and answering the following questions...

Do you know where your food comes from? Do you know who grows your food? What practices do they use? Do they focus on healthy soil? Is not your health and the health of your children worth knowing?

Interested in learning more? Upper Neuse Riverkeeper Matthew Starr will host a Tell Me About It Tuesday Science Series Zoom call on Regenerative Agriculture on November 10th. RSVP to get the link at soundrivers.org/events/!

Matthew Starr with a researcher at Butler Farm



Riverkeeper Patrol Logs

Walnut Creek still at risk

Upper Neuse Riverkeeper, Matthew Starr

Water quality samples at two locations indicate that an urban creek running through a low-income area of southeast Raleigh is still at risk, potentially from raw sewage from the Terry Sanford Federal Building. Matthew Starr, Upper Neuse Riverkeeper, continues to conduct bacteria testing and share data with the state and the City of Raleigh to assist in resolving the issue.

In early June, an investigative news story by Trent Brown, a reporter from the News and Observer, found that the Sanford building has been discharging raw waste into the city's stormwater system for years, possibly decades. That stormwater system discharges directly to local streams, and the federal government has known about this discharge for years and has refused to fix the problem. Due to years of pollution and inaction, Sound Rivers became involved and in early June started sampling the streams that receive the stormwater and sewage from the federal building for E. coli. Over the next 12 weeks, Sound Rivers found that, at two locations, every sample failed the recreational water quality standard for E. coli. We continue to share our data with the state, who has taken the lead, and the City of Raleigh. To date, the state continues to investigate the pollution.

Riverkeeper calls on the City of Havelock and DEQ to contain ongoing sewage spills

Katy Hunt, Lower Neuse Riverkeeper

Sound Rivers is pushing the Department of Environmental Quality and the City of Havelock to take immediate corrective actions to stop the chronic discharge of untreated human waste into Slocum Creek and the Neuse River. On August 6, 2020, the city had its fourth spill of 2020, which now totals 468,750 gallons of raw waste illegally discharged into tributaries of the Neuse River. This year is not an anomaly as the city has experienced 20 spills at one manhole alone since 2015. While DEQ has required the City to assess and complete corrective actions under a Special Order by Consent, the problem persists. Sound Rivers is requesting the immediate construction of a spill containment area for any locations that have had more than one spill in the past five years.

Victory: Atlantic Coast Pipeline Project Canceled; Work turns to restoration

Pamlico-Tar Riverkeeper Jill Howell

Sunday, July 5th, 2020, Dominion Energy and Duke Energy announced they would cancel the Atlantic Coast Pipeline, a proposed 600 mile project. This pipeline was not needed to meet the energy demands of North Carolinians. It would have further entrenched the fossil fuel industry and contributed to climate change in a state where the threat of hurricanes serves as a constant reminder of the climate crisis. It would have overburdened communities of color with the dangers and pollution that come along with having pipelines run through and compressor stations placed in your communities. Unfortunately, in North Carolina tree clearing occurred along the route, and the pipeline was installed beneath the Tar River. We'll celebrate this win, but the fight is not over as we now turn our attention to holding Duke and Dominion accountable in restoring impacted areas.

Weakened Clean Water Act rules now in effect in North Carolina

On April 21, the Environmental Protection Agency finalized rule changes to the federal Clean Water Act that greatly weakens clean water and wetland protections. In May, a number of lawsuits, including one that Sound Rivers has joined, were filed against the harmful rule changes. In addition, the NC Attorney General, Josh Stein, and NC Department of Environmental Quality also filed a legal challenge noting the rules "would set back wetland protections decades."

Unfortunately, legal requests to stall the implementation of the rules were denied, so the weakened rules are now in effect in North Carolina as our legal challenges progress in court; a process that at times can take years. Your Riverkeepers are being vigilant in assessing the impact and doing what they can to protect our region's wetlands and waterways until the court rules on our case. If you are concerned about a project near you, we want to know about it. Your eyes and ears, working together with our Riverkeepers, are the best way to protect our waterways.

For updates on all of these issues and more, please visit soundrivers.org.

Sound Rivers, Inc.
P.O. Box 1854
Washington, NC 27889

NON PROFIT ORG.
U.S. POSTAGE
PAID
WASHINGTON, NC
PERMIT NO. 66



Tell Me About It TUESDAYS SCIENCE SERIES



Join your Riverkeepers and guests from the NC scientific community to talk about issues affecting your water and your health every Tuesday via Zoom! RSVP to info@soundrivers.org to get the link.

October 13

7pm-8pm

TELL ME ABOUT:

Plastic Problems - what is happening and what can I do?

Hosted by Environmental Projects Coordinator Clay Barber & Dr. Barbara Doll

November 10

7pm-8pm

TELL ME ABOUT:

Regenerative Agriculture - how can we bring our soil back to life?

Hosted by Upper Neuse Riverkeeper Matthew Starr

December 8

7pm-8pm

TELL ME ABOUT:

PFAS - how are chemicals affecting our water quality and what can be done?

Hosted by Pamlico-Tar Riverkeeper Jill Howell & Dr. Jamie DeWitt