

CURRENTS

The Newsletter of SOUND RIVERS
THE VOICE FOR THE NEUSE & TAR-PAMLICO RIVERS



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Fall 2019

A New Normal

By Heather Deck, Executive Director

As Hurricane Dorian slowly approached our coast, I was thinking about the number of storms my children have experienced. My oldest, who is 8, has experienced five large storms since birth (Hurricanes Irene, Arthur, Matthew, Florence, and Dorian) and numerous other tropical storms. My youngest, age 6, has experienced four large hurricanes since her birth in December of 2012. Of those storms, we saw the devastation that Hurricanes Matthew and Florence left in so many communities. My children have seen firsthand the power of nature and experienced a home that was impacted by flood waters. For us, the minimal disruption to our lives from these storms was easily overcome, but many have not been as fortunate.

We are, unfortunately, living in a new normal. A team of North Carolina researchers, led by UNC Institute of Marine Sciences professor Hans Paerl, released a paper this summer that includes some sobering statistics. The researchers analyzed 120 years of data and confirmed that the increased frequency of large rain events is due to climate change. The study noted that six of the seven highest precipitation events since 1898 have occurred within the last 20 years.*

The research paper, "Recent increase in catastrophic tropical cyclone flooding in coastal North Carolina, USA: Long-term observations suggest a regime shift," noted that hurricanes Floyd in 1999, Matthew in 2016, and

Florence in 2018 resulted in flooding that was well above the typical probabilities for large flooding events over that short period of time. What the researchers now have data to show is that these extreme rainfall events are the result of a warming climate. Data compiled after Hurricane Florence noted that 50% more rain was dumped on eastern North Carolina as a direct result of warming oceans. Couple that with sea level rise since 1970, and 11,000 more homes were flooded than would have been absent rising and warming oceans.



Post-Hurricane Florence flooding at a Goldsboro industrial hog facility

We are all too familiar with what extreme flooding events do to the Neuse and Tar-Pamlico Rivers -- effects that can be seen for years. The large amount of runoff means more nutrients and organic matter from farmland, industrial animal operations, and urban areas ends up in our waterways, causing harmful algal blooms and fish and shellfish kills. The researchers point out that this is all a vicious cycle: as organic matter decomposes in the ocean, more greenhouse gases are released back into the atmosphere.

To make matters worse, since Hurricane Matthew in 2016, sources of pollutants in floodplains remain virtually the same. More than 75 industrial hog and poultry operations were flooded during hurricane Florence in the Neuse, Trent and Cape Fear River basins. All of those facilities remain today. Numerous city and county wastewater systems continue to operate in floodplain areas, and they

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One thing we all come to appreciate with time is this: the only constant in life is change. I would venture that most of us dislike change; I know I enjoy periods of my life when life's curveballs are few and far between.

But change, while inevitable, is also necessary. The vast majority of the time the results following a period of change are wonderful. Sound Rivers has experienced change this year with the departure of two of our staff who moved on in their careers. Each staff person who spends time with the Sound Rivers organization brings value, passion, dedication, and unique skills and perspectives. When they move on, the change at first is clearly difficult as our staff always leave big shoes to fill. **But with change comes a great opportunity to open new doors.**

I am so excited by the addition of Jill Howell as our new Pamlico-Tar Riverkeeper. When I hired her to be our Projects Manager, I recognized right away that her skills, passions, and interests in environmental justice match very well with the Riverkeeper position. **Additionally, we are fortunate to have Clay Barber, a Martin County native and avid kayaker, join our team this past month.** Clay has stepped right in and is working to build 3 camping platforms and 3 kayak launches for the expanding Tar-Pamlico Water Trail, and building beneficial stormwater projects on our partnering school campuses.

So bring on the change! It is the only way we all will make this world a better place. See you on the water!

Heather Beck

P.S. I hope many of you will be at the Oyster Roast this November to get to meet Jill and Clay in person!

Upcoming Events

November 9, 2019 - 34th Annual Oyster Roast
Washington Civic Center, Washington, NC

March 10, 2020 - Taste of Coastal Carolina
NC History Center, New Bern, NC

Visit soundrivers.org for more info

spill millions of gallons of sewage during these events. Many of these wastewater systems also have old, leaking pipes in dire need of replacement. And the problem goes beyond wastewater. Not one bucket of coal ash has been removed from the HF Lee waste pits along the Neuse River in Goldsboro.

The problem is large and it requires a supersized response. We are pleased to see Governor Cooper prioritize the work to reduce greenhouse gas emissions from North Carolina with Executive Order 80, which addresses climate change in a serious way, and with a recently released draft of a state Clean Energy Plan. But much more is needed and we have an obligation to push for positive change.

We need you to help our Neuse and Pamlico-Tar Riverkeepers convince our state leaders to support these strong clean water protections:

- Increase funding to buy out industrial animal facilities located near our rivers. Currently, 109 swine and 46 poultry facilities are in or close to the 100-year floodplain. As of 2016, 138 hog operations in the state have applied for funding to shut down and properly close waste lagoons. The state has only funded 42 and has bought none since Hurricane Florence. The program exists and should be prioritized for funding.
- Support local governments with funding and incentives to relocate wastewater infrastructure out of flood-prone areas and to repair aging pipes. Since 2016, the state has invested \$900 million in city and county wastewater systems. That is a great start, but continued investment is needed.

We can all take action to minimize the impacts of this new era of extreme storms. Plant vegetative buffers around streams, support restrictions on development in the floodplain, convince local leaders to address stormwater pollution, avoid using fertilizers, especially during hurricane season, and do all that you can to reduce your personal carbon footprint.

Our Neuse and Tar-Pamlico rivers are treasures worth protecting, and we all need to step up to protect them in this new era.

** Press Release from UNC Chapel Hill, July 23, 2019*

Sound Rivers Happenings

Forrest Moving On, Jill Stepping In

Editor's note: In August we said goodbye to Forrest English who filled the Pamlico-Tar Riverkeeper position when Heather Deck moved up to Executive Director.

by Forrest English

As an avid traveler and lover of all things nature, I took a job with Sound Rivers here in eastern North Carolina to see and experience new ecosystems, new people, and, let's be real, to eat some local fish and seafood. I dove in, working to protect our right to clean water in an area I didn't know yet using my previous years of experience in the waterkeeper movement, and seeing if this place would become home. In my time here I've loved paddling through cypress swamps and marshes, watching fireflies blink in the darkness, catching fish at dawn in the estuary, and dodging rip currents on the beach.

I've also smelled raw waste from hog facilities where I collect water samples and empathized with neighboring communities impacted by this industry. Of course, I also stumbled into another poorly conceived fracked gas pipeline project, just with a different name than the one I fought in Oregon.

I've worked with a great crew at Sound Rivers, and the broader environmental community in North Carolina is something special. However, after much consideration, I'm headed back over to the other side of the Rockies where I'll get to see my family a little more often. For everything wonderful here, it turns out that, unbeknownst to me earlier, my heart would appear to be firmly lodged in the deserts, mountains, and forests of the west.

Jill will be taking over my role moving forward; with the support of all of Sound Rivers' staff and our allies, I have every confidence that she'll fight even harder and smarter than I did for our right to swim, drink, and fish from the Tar-Pamlico River basin.

by Jill Howell

I came to eastern North Carolina for many of the same reasons as Forrest. I was drawn by the opportunity to explore and experience a new place, and eager to work for an organization whose values and mission I believed in. It made the decision to leave behind New England for eastern North Carolina an easy one.

In the short time I've been here, I've seen firsthand some of what Forrest mentioned – impacts from the hog

facilities and the construction of the Atlantic Coast Pipeline; just two of the many issues threatening our waters. And while it can seem as though threats to the health of our rivers and streams are ever growing, like Forrest, it has also become clear to me that the environmental community here is a strong one. I find myself surrounded by seasoned Riverkeepers, both within Sound Rivers and across the state of North Carolina, many partner organizations tackling water quality issues from a variety of angles, and Sound Rivers' members and volunteers who are eager to mobilize and help on anything from contacting legislators to cleaning up a camping platform.

I'm excited about this new position, and look forward to doing all that I can to fight for and protect our right to swimmable, fishable, drinkable waters in the Tar-Pam River basin.



Ads Doing Good

Rustic river cottage looking for nature-loving new owners!

Just south of Jordan Creek this 860 sq. ft cottage looks due east across the Pungo River. Kitchen and eating area, living room, one full bath and 3 smaller rooms with a porch riverside and a sturdy pier. Rip-rap/bulkhead shoreline. Lot has a combination of trees and meadow, bordered by a canal to the north and woods to the south. **Call Uli or Mary Alsentzer, who live next door, for viewing appointment 252-964-4624.**

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

Advocacy Updates

Historic 540 Settlement



Sound Rivers reached a momentous settlement with the North Carolina Department of Transportation over their proposed 540 expansion in Wake County. As a result of this settlement, changes to the project will be made, which greatly reduce its impact on your environment and waterways. This balanced agreement provides for expanded mobility options in the region, while preserving natural areas and moving North Carolina forward in efforts to balance construction and preservation.

Your Upper Neuse Riverkeeper, Matthew Starr, worked diligently with partners (Southern Environmental Law Center, Clean Air Carolina, and the Center for Biological Diversity) to ensure this settlement sets an important precedent for all future projects across the state. It includes new requirements to reduce polluted stormwater runoff, often a result of construction, and preserves open space, including along your waterways.

“The settlement agreement puts in place key protections for the Neuse River watershed – doubling the amount of stream mitigation that will be provided and setting in motion data-collection efforts that will further enhance clean water protections in Wake County” said Upper Neuse Riverkeeper Matthew Starr. “The North Carolina Department of Transportation now has a blueprint of how to better protect other water resources throughout the state, which they can use moving forward for other projects.”

From SELC: “Land preservation and stream mitigation efforts will significantly assist the preservation of some of North Carolina’s most precious wildlife. In addition, the settlement commits NCDOT to partner with other agencies and North Carolina State University to support numerous research projects for some sites that are home to North Carolina’s most imperiled aquatic biodiversity, including wildlife currently on the brink of extinction.”

The settlement will double the amount of stream restoration required to offset the impact of construction, which is a huge win for your waterways. Lastly, but certainly not least, this massive settlement contains important provisions to address climate change and air quality.

This historic settlement – protecting your waterways now, and in the future – would not have been possible without the dedication from Sound Rivers staff, and your support helped make it happen!

Blounts Creek: Waiting on a Decision from the NC Court of Appeals

Since oral arguments were heard this past May in the case of Sound Rivers vs. NC Department of Environmental Quality and Martin Marietta Materials (MMM), there have been no updates from the court. We are still awaiting a decision, and expect to hear any day now of the court’s ruling.

The appeal stems from a December 2017 decision by a state court to vacate a permit that would have allowed the proposed MMM limestone mine to discharge millions of gallons of wastewater per day into the headwaters of Blounts Creek. In January, 2018, MMM appealed the decision to vacate the permit to the North Carolina Court of Appeals. The Court heard oral arguments on the appeal in Raleigh in May, where more than 20 community members from Blounts Creek were in attendance.

Sound Rivers and others have been working on this case since 2011 when the Division of Water Resources first began researching the potential discharge by Martin Marietta Materials into Blounts Creek, a popular fishing creek in eastern North Carolina with a diversity of fish and abundance of fish habitat. As we await the decision from the court, Sound Rivers remains committed to protecting Blounts Creek and supporting community members who have been advocating for themselves and the creek. We will be sure to communicate any updates on the case as they are made available.



Photo by Bob Daw

Advocacy & Staff Updates

Novozymes Agreement Reached

Sound Rivers has been working since 2017 to prevent harm to your waterways from a proposed wastewater discharge to the Tar River near Louisburg by Novozymes North America. In July, Novozymes was issued a new discharge permit to Cedar Creek, a tributary in the upper Tar. The company agreed to move the discharge location, per the request of your Pamlico-Tar Riverkeeper, to a location which will cause less damage to waters, wetlands and critically important aquatic wildlife. There will be ongoing monitoring to review this permit in the future, as we continue to have concerns about the discharge's effect on endangered mussel species in the area. Your RIVERKEEPER®s advocated for the company to use the best available technology; Novozymes will be employing state of the art wastewater technology that we hope will be duplicated by many other industries across North Carolina. **Without our involvement, there would have been no challenge to this new wastewater discharge that, as originally proposed, could have irreparably damaged the river basin.**

Atlantic Coast Pipeline Update

Progress on the construction of the 600-mile Atlantic Coast Pipeline remains at a standstill, with a number of permitting and legal challenges halting their progress.

Courts have tossed out seven separate permits for the ACP, the most recent of which was an U.S. Fish and Wildlife Services permit vacated by the Fourth Circuit on July 26 because it failed to protect endangered species along the path of the pipeline. With the exception of erosion control methods, construction has been stalled on the pipeline since December 2018.

In addition to permitting issues, the ACP is being challenged by two North Carolina groups who filed a petition with the state regarding a Clean Water Act certification. Friends of the Earth and the North Carolina Climate Solutions Coalition filed the petition with Secretary Regan of DEQ and Director Culpepper of DWR on August 13, requesting the revocation of a 401d Clean Water Act certification issued in January 2018. The basis for revoking the certification is the assertion that pipeline developers vastly understated the project's environmental impacts, especially at its proposed terminus in Robeson County, by failing to take into account the cumulative impacts of the county's two existing gas projects with ACP infrastructure.

The future of the pipeline, though, really hinges on the U.S. Supreme Court. Both Dominion and the federal

government have asked the Supreme Court to review the 4th Circuit's ruling in the case of Cowpasture River Preservation Association v. Forest Service, which ruled that the Forest Service cannot allow the ACP to cross the Appalachian Trail on federal land.

We expect to hear a decision from the U.S. Supreme Court as to whether or not they will hear this case sometime this fall.

Welcome Clay Barber!



Clay joined the Sound Rivers team in August 2019 as our new Environmental Projects Coordinator. Having spent most his life along the rivers and coasts of Eastern North Carolina, like much of his family, he developed great respect for the precious wetlands, waterways, and estuaries that are the lifeblood of this state.

Clay has both a B.S. in Recreation and Park Management and M.S. in Sustainable Tourism from Eastern Carolina University. While at ECU he helped launch the Hatteras Island Ocean Center, a non-profit eco-tourism center. He formed an internship program where students create recreational and educational programs that teach visitors about the natural environments, culture, and history of the Outer Banks. During graduate school he assisted multiple departments with research projects ranging from reports on the importance of public recreation to sustainability, to an economic impact study of boaters using the NC section of the Intracoastal Waterway (ICW) for transportation and leisure.

After college he pursued his passion for outdoor recreation and tourism as a River Guide and Assistant Manager for Knee Deep Adventures, a mobile paddle sport rental company in Greenville, NC that specializes in providing safe, memorable paddle experiences to people of all skill levels. He is also a BSA Eagle Scout and credits his love for the outdoors to being engaged with nature and adventure at a young age. Clay looks forward to taking on the role of Environmental Projects Coordinator, and being able to fight for clean, accessible water.

Riffles & Runs

School Stormwater Partnerships Continue



Through our campus stormwater project, we have been partnering with community colleges and high schools to decrease the impacts of stormwater pollution from their campuses. In Craven County, we have partnered with four high schools to assess areas of stormwater concern. With the help of NC State University (NCSU), each campus is surveyed and potential stormwater control measures are identified. These control measures are then installed based on the school's needs.

The benefits are both environmental and educational. The control measures both mitigate the amount of stormwater runoff from roofs and parking lots and also become outdoor classrooms. Students are able to learn first-hand what a rain garden or cistern is and can see how it works and therefore better understand the concepts. We also provide free lesson plans to teachers through the program.

This summer, Sound Rivers and Mitch Woodward from NCSU Cooperative Extension installed a 5,000 gallon cistern at New Bern High School, through funding from Bosch Community Fund. It collects rainwater from the roof, and stores it for use irrigating sports fields or watering the greenhouse. The cistern prevents rainwater from picking up pollutants on the sidewalks and parking lots, and acts as an excellent interdisciplinary educational tool. Math and physics teachers, as well as science teachers, can use the cistern as an example for solving various real-world math problems. Calculating the area of the roof and how much rain has to fall to fill the cistern, and at what rate, is a challenging task, but it can be more clear (and interesting!) when accomplished outdoors.

We also hosted a teacher workshop for Craven County teachers during the Craven Summit. 21 Craven County teachers were taken through the stormwater lesson plans they will be receiving to use in their classes. The teachers worked through one of the lesson plans that brought them outside to calculate how much water was produced by one inch of rain on a parking lot.

We're thrilled we can offer this innovative program to area schools through grant funding and your support. This type of solution lessens pollution and provides valuable resources to teachers and students.

Update from Along the Water Trail

By Clay Barber and Jill Howell

In early August, we found ourselves in Franklinton, North Carolina, walking a few paces behind Mr. Wyatt McGhee as he hacked a path through overgrown brush and low hanging branches with old, rusted corn knives. We jumped a cow-fence at the edge of the rolling pasture; the land leveled out and grew shaded with tree cover.

Before too long, we came to the edge of the river bank. Below us was a sand bar along the river, a perfect spot to pull up your kayak and rest for a night.



Mr. McGhee owns a farm along the Tar River in Franklinton, and has generously leased a piece of pastureland for us to build the newest of Sound River's camping platforms; this will make a total of 12 platforms from Bunn to Washington. The platforms themselves are raised wooden structures with both an open deck and a screened in area – a perfect shelter for a stopover on a night paddle, or a break during a day's outing.

Construction began in mid-September on this platform, with two more to follow this fall in Whitakers and Tarboro. The additional camping platforms, along with three more ADA compliant kayak launches planned for Washington and Greenville, will increase access and recreational opportunities to the Tar River throughout the Basin.

If you would like to explore the Tar-Pamlico water trail, be sure to call us at 252-946-7211 – some are still closed. Our platforms are built to withstand heavy storms, but can suffer damage from high winds, floodwaters, and debris. A group of wonderful volunteers handle the maintenance of the platforms; we'd like to sincerely thank for their hard work and dedication.

Check out our Tar-Pamlico River Camping Platforms Facebook page and Tar-Pamlico River Water Trail Instagram to keep up with what's happening along the river!

Riffles & Runs

Why I Give, with Tom Irons



Tom Irons has been a Professor of Pediatrics at ECU's Brody School of Medicine in Greenville, NC, for 38 years. His parents built a family cottage on the river at Island View Shores,

near Bath, in 1952, and the cottage still exists today. In the late 1990's, it became Tom and his late wife Carol's year-round retreat. It remains an important place in Tom's life, and he says, "I have loved the Pamlico for as long as I can remember and our children and grandchildren likewise."

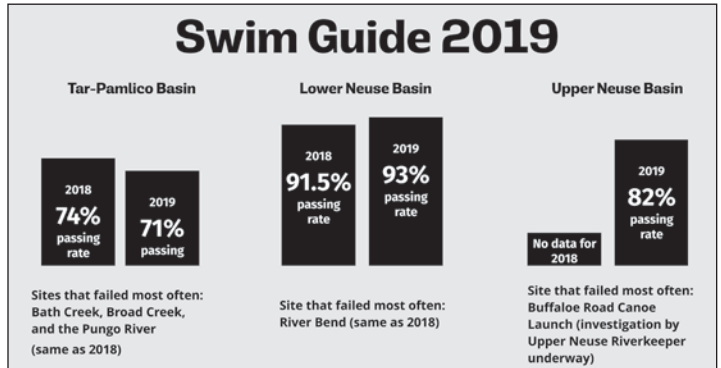
In 1978 Tom and Carol returned to North Carolina from their military tour in Germany. Soon after, their longtime friend (and current Sound Rivers Board Member), Ernie Larkin, told them about the organization, then known as the Pamlico-Tar River Foundation. Tom is fairly sure that was the year PTRF was founded, so he has been with us since the beginning!

Tom was motivated to join Sound Rivers as a member because of his deep connection to the area's waterways. "We love being in, on, and around the river, and have always believed we should make it a high priority to see that this beautiful body of water is kept clean and full of life for future generations," Tom says. And his dedication isn't limited to the Pamlico - he and Carol spent three years living in New Bern when he first began his career at ECU, and he can recall many happy hours on the Neuse.

When asked what about our work at Sound Rivers is most important to him, we loved his answer, "I don't think Sound Rivers does things that are *not* important. That's why we became life members of PTRF over 3 decades ago and sustaining members when that option became available." He continues, "We believed then that it was a very important investment, and I continue to believe so. **The river gives life. We have a sacred duty to preserve it.**"

Thank you for your commitment to clean water Tom, we are so grateful for you, and all our supporters!

Swim Guide Successful Season!



The second year of our Swim Guide was a great success and many strides were made in accessibility and outreach for the program. Programs on the Tar-Pamlico and Lower Neuse River Basins were run by intern April Turner, and the first year of the program on the Upper Neuse River Basin was run by intern Laurel Holloman. Both interns worked to expand the program's audience via social media, text alerts, and weekly press releases to local media stations. Perhaps the most exciting expansion to the program this season was the addition of a Spanish version of the Swim Guide results and resources. Both interns collaborated using their Spanish skills to make results videos in Spanish as well as engage local Spanish media outlets in order to make Swim Guide available to the Spanish speaking communities in all three river basins. The Sound Rivers Swim Guide website was translated by April and is now available in Spanish.

Swim Guide is made possible by your support and the dedication of our volunteers who help us take water samples each week. We want to send a huge thank you to:

Robin Beilby, Guy Blackwell, Diana Breiner, George Bryan, Roy Carlton, Bob Griffin, Patty Hudson, Tracy Jones, Eddie LaBonte, Kay Leager, Brian & Patty Leonard, Meredith & Mira Loughlin, Barbara Maurer, Bob Morris, Caroline Phelan, Doug Rogillio, Mike Sagaser, Bill Sholl, Tim Smith, Larry Tolbert, Lew Travis, Melinda Vann, Sarah Whitfield

Interested in becoming a citizen scientist for next year's Swim Guide? Get in touch with us at volunteer@soundrivers.org!



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Oyster ROAST

SOUND RIVERS

NOVEMBER 9, 2019 - WASHINGTON NC

Unlimited
steamed oysters,
local craft beer,
chili & chowder,
live music, silent
auction

This beloved event is one of the largest fundraisers for Sound Rivers and your Pamlico-Tar Riverkeeper, featuring unlimited steamed oysters served under the stars, local craft beer from Duck Rabbit, Brewery Bhavana, and Uptown Brewing Company, live music from the Adam Decker Trio, chili & chowder, and the best Silent Auction on the Pamlico River!

Early bird pricing until October 10th: \$50 members/\$55 non-members
(After 10/10, prices increase to \$55 members/\$60 non-members)

VIP Tickets are \$100; includes early entry (5 pm) for the first crack at the oysters, wine tasting, welcome gift, raffle ticket, and more! New this year: access to a VIP lounge inside, during the event.

Tickets at SoundRivers.org or 252-946-7211
(or return a check, memo line "Oyster Roast," in the enclosed envelope)

Help make the Oyster Roast Silent Auction a success! Last year the auction raised almost \$10,000. We hope you'll consider donating an item, or help us reach out to local businesses! **To donate an item or get involved with the Silent Auction, email corinne@soundrivers.org or call 252-637-7972.**