

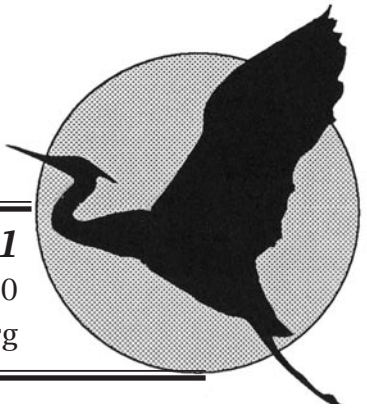
Voice of the Haw



The Haw River Assembly *August 2021*

P.O. Box 187 · Bynum, NC 27228 · (919) 542-5790

email: info@hawriver.org · www.hawriver.org



The Health of the Haw River

The Haw River is about 110 miles long, and covers 1,700 square miles of land within Forsyth, Guilford, Rockingham, Caswell, Alamance, Orange, Durham, Wake, and Chatham counties. The river has seen a great revival in its ecosystem health over the past 50 years, as new regulations against pollution came into being. Beginning with the U.S. Clean Water Act in 1972, that brought better wastewater treatment and stormwater management, state and local governments also enacted new laws to protect our waters. Riparian buffer rules have allowed forests to re-grow along stream banks, providing habitat again for plants and animals, including the beautiful bald eagles we see soaring overhead, and river otters playing in the waters. Other efforts have resulted in new parks, paddle access, and hiking trails throughout the watershed, giving more people the chance to enjoy the beauty of this river. Haw River Assembly has proudly been an important leader and partner in these changes that have benefitted the river and people of this watershed.

But in this same period of time, the population has tripled, gobbling up more and more of the forestland for houses and commercial development. Even with better laws and practices, the volume of wastewater and stormwater pollution from cities and suburbs has increased. There are 7 major municipal wastewater treatment plants that discharge into waters of the Haw in Greensboro, Reidsville, Burlington, and Graham. Jordan Lake (a reservoir on the downstream Haw River) receives treated wastewater from Pittsboro, Chapel Hill, and Durham. Certain amounts of nutrients and heavy metals are allowed in treated wastewater. In addition, there are often unknown amounts of chemicals from factories, commercial and residential users – chemicals that are not monitored under wastewater permits. When sewer lines break in these systems, or are overwhelmed by major floods, the sewage goes into creeks that flow to the Haw.

What does monitoring data tell us about water quality?

The Haw River Assembly's River Watch water monitoring program has been gathering data by our staff, and citizen scientist volunteers since 1995 about the health of the river and many creeks. Recent data on 51 sites showed that over half were rated in good quality or better for macroinvertebrate health, a great biological indicator for stream health. 35% ranked fair and 5.8% ranked poor. However, monitoring by the volunteer team at the Haw 64 Bridge earlier this summer showed much

continued on page 4

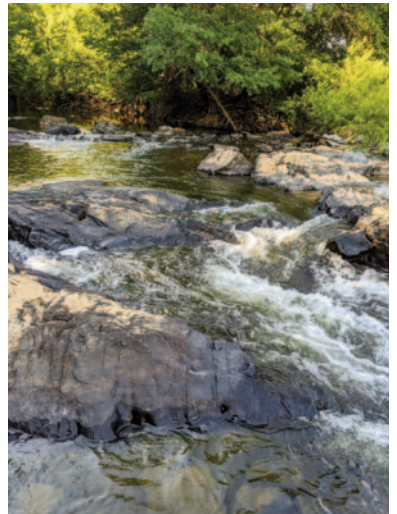


Photo by Cynthia Crossen



It's Back! The Wild & Scenic Film Festival!

TWO Showings:

❖ **Tuesday, November 2, 7 pm, Carolina Theater in Downtown Greensboro AND**

❖ **Thursday, November 4, 7 pm, at the Varsity Theater on Franklin Street, Chapel Hill**

The Haw River Assembly is hosting the nationally recognized Wild & Scenic Film Festival in person again – and this time we're giving you two screenings! Join us for an evening of environmental and adventure films that depict the beauty of the natural world; the challenges facing our planet, especially climate change; and the work communities are doing to protect people and the environment. The films inspire activism and call us all to protect the places we love.

Doors at both showings will open at 6 pm so that you can indulge in popcorn, beer, wine and other snacks all night. Tickets will be available online soon! Check out our website, www.hawriver.org, for our list of films and for our sponsors that have made it all possible!

HRA Board of Directors

Chris Carter, President, *Alamance County*
John Wagner, Vice-President, *Chatham County*
Iris Seaton, Secretary, *Chapel Hill*
Jo Sanders, Treasurer, *Chatham County*

Jeanne Ambrose, *Chatham County*
Crystal Cavalier, *Alamance County*
Gerald Lynn Featherstone, *Chatham County*
Dianne Ford, *Alamance County*
Kate Fulbright, *Durham*
Sharon Garbutt, *Chatham County*
David Jester, *Chatham County*
Rufus King, *Alamance County*
Dr. Janet MacFall, *Alamance County (Elon University)*

Nicole Spivey, *Brown Summit, Guilford County*
Ayo Wilson, *Durham*

Mac Jordan, Emeritus Member, *Saxapahaw*
Omega Wilson, *Environmental Justice Advisor, Mebane*

HRA Staff

Elaine Chiosso, *Executive Director*
Kyleene Rooks, *Event & Outreach Coordinator*
Emily Sutton, *HAW RIVERKEEPER®*
Carolyn Paden, *Office Manager*
Cynthia Crossen, *Newsletter Editor*

Thanks to **Jan Burger** for art throughout this newsletter: Climate Action Logo, Plastics Campaign Logo, ACP/MVP graphic, and River Watch Heron.

To join the Haw River Assembly or renew your membership, send a check to **HRA, P.O. Box 187, Bynum, NC 27228**; or go online at <http://hawriver.org/join-hra/>.

All contributions are tax-deductible.

Thanks for your support!

Individual: \$30 Family: \$45

Sustaining: \$60 Heron Circle: \$100 & above

Low Income: \$10

The Haw River Assembly is a nonprofit grassroots organization founded in 1982. Our mission is to protect and restore the Haw River, its tributaries, and Jordan Lake; and to build a community that shares this vision.

(919) 542-5790 www.hawriver.org

Notes from the Haw

The BIG PICTURE

This is the summer that may wake the world up to the climate emergency. Terrible wildfires, flooding, and extreme heat in many parts of the US and around the globe, have been in the news almost every day, along with the melting polar caps and glaciers. These events announce that we are now paying the price for the greenhouse gases we have added to the atmosphere. Although it has been a hot and humid summer here in the Piedmont, and nights are a little warmer, we are not suffering the worst of climate change consequences. But for how long? We have to stop doing business as usual – cutting down forests (that sequester carbon) for new development, building new roads as if fossil fuel is still king, and replacing coal-fired power plants with ones fueled by fracked gas, along with the wreckage caused by their pipelines. This is insanity and it's past time to take action!

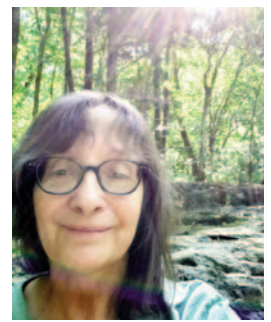
The Rights of Nature movement is a way that can help us shift how we think about the natural world. It is the recognition that our ecosystems – including trees, oceans, animals, mountains and rivers – have rights just as human beings do, to exist, persist, maintain and regenerate. It believes that we have the legal authority to enforce these rights on behalf of ecosystems, giving them legal standing. There are a growing number of communities, and even countries, that have given nature legal rights, including Ecuador and New Zealand. Read more at www.rightsofnature.org. We are looking into doing a virtual screening this fall of the award winning “Invisible Hand” film about this, co-produced by Mark Ruffalo.

HRA Office News

After 15 years keeping us on track at HRA, our office manager Kathy Buck has retired. She saw us through the crazy days at our old river shack office, and through two more moves to our current and great location on Bynum Church Road. We can't thank her enough for all her steady work keeping our books and database in order, and doing the many other jobs that kept our organization flowing smoothly. We wish her, and her husband, Ken Moore, all the best in their new life in Abingdon VA. We will miss her, and are grateful for all she and Ken have done to help protect our environment and community over the years. We welcome our new office manager, Carolyn Paden, who starts in August. She has much experience working with non-profits, including a similar part-time position with Hispanic Liaison. We look forward to many good years together at HRA!

HRA Annual Meeting

With Covid precautions still needed, we have not yet decided if our Annual Membership Meeting in December will be in-person (maybe outdoors) or online as we did last year. Stay tuned via our weekly E-newsletters or check our website for an update.



For the river,
Elaine Chiosso,
Executive Director

This black rat snake does not seem to be bothered by poison ivy...

Photo by Cynthia Crossen





HAW RIVERKEEPER®

Issues in the Watershed

from Emily Sutton, HAW RIVERKEEPER®

Mountain Valley Pipeline

The MVP Southgate project continues to be delayed. There has been no re-application of the necessary stream crossing permits after NC Division of Environmental Quality denied the permits outright in August of 2020. The Southgate pipeline extension which would cross through Rockingham and Alamance counties relies on the main Mountain Valley Pipeline being built. However, construction on the mainline MVP has been delayed because of successful legal challenges to its permits that would allow the route to cross sensitive waterways and forests, some of it federal park land. Contractors for the mainline in Virginia have also been cited with hundreds of environmental violations related to the construction. In June of 2020, the EPA recommended that US Army Corps of Engineers deny the water crossing permit for the MVP mainline entirely. This was a huge blow to the mainline, and will continue to delay the construction.

A “No MVP” walk took place along the Southgate route on May 2 from Virginia down to Graham NC. The walk was organized by “Seven Directions of Service”, an Indigenous led organization, with river ceremonies and events at the Bannister, Dan, and Haw Rivers.



HRA members walked the final segment of the Southgate pipeline proposed route.



Sun Sing Collective performed at the Dan River during the day of “No MVP” events.

HRA helped organize the event at Red Slide Park on the Haw, and several HRA members took part in the final leg of the walk, ending at the fence overlooking the Cardinal pipeline gas terminus on Hwy 54.

Industrial Contaminants in the River

1,4-Dioxane: Southern Environmental Law Center has filed a suit on our behalf to challenge the Special Order by Consent for Greensboro, which would allow their TZ Osborne Wastewater treatment plant to continue to discharge 1,4-dioxane at levels 120 times above the health advisory limit of 0.35 ug/L. As we continue discussions with Greensboro and the Environmental Management Commission to push for meaningful regulatory limits to prevent downstream contamination, more discharges of 1,4-dioxane have been released from Greensboro. On June 30, Greensboro officials said they detected a release of 1,4-dioxane at the TZ Osborne treatment plant that measured as much as 687 parts per billion, which is nearly 2,000 times higher than the amount the U.S. Environmental Protection Agency considers safe for drinking water. Pittsboro (whose drinking water is drawn from the Haw) was forced to shut down their raw water intake temporarily, and has been doing intensive monitoring since then. The amount of 1,4-dioxane has dropped to safer levels. Fayetteville Public Works Commission, which pulls drinking water from the Cape Fear river downstream, has entered into litigation with us to push for stronger limits on Greensboro. Pittsboro has not entered the litigation.

PFAS: Detectable levels of PFAS have decreased in the Haw from discharges in Burlington’s effluent, but we continue to work with Burlington staff and our team at Duke University to monitor levels within the system to pinpoint sources. This monitoring is ongoing and we will continue to investigate all potential sources within Burlington’s wastewater system. In the meantime, Pittsboro is moving towards advanced treatment of Haw River water that will remove a much higher amount of these industrial chemicals from their drinking water.

Though little meaningful PFAS policy has moved at the state level, the PFAS Action Act of 2021 has passed on the federal level. This bill, among other things, requires the EPA to place discharge limits on industrial releases of PFAS and provide \$200 million annually to upgrade water infrastructure; prohibits unsafe incineration of PFAS wastes and places a moratorium on the introduction of new PFAS into commerce; requires comprehensive PFAS health testing; and creates a voluntary label for PFAS in cookware and other products. The rollout of this bill will likely be lengthy, but this is a huge win for PFAS advocacy.

Issues in the Watershed, Chatham Park, continued on p. 4

***Health of the Haw*, continued from page 1**

degradation from sediment, and a poor score for macro invertebrates. This site is downstream from new construction for Chatham Park.

Another source of information for the Haw River is the state's bi-annual 303(d) report to the EPA of "Impaired Waters", for those not meeting water quality standards. Reasons for the impairment can be specific, such as too much of a heavy metal or too little dissolved oxygen, but in most cases in our river basin, the listing is because of poor health of the aquatic organisms (water insects, crustaceans, fish etc.) that live in those waters. We are not given the cause, but only the impact. Thirty-three sections of streams or the Haw River covering 265 miles were on the 2020 NC 303(d) list. Most of the creeks are in urban areas, where polluted stormwater running off paved and built surfaces is greatest. Jordan Lake continues to suffer from too much algae, which is the result of excess nutrients from the Haw River and creeks that feed it.

The Haw Riverkeeper monitors for nutrients from concentrated animal feeding operations (CAFO), which are primarily poultry in our watershed. In 2021 alone, 75% of samples collected near poultry operations have exceeded the EPA recommendations for E-Coli for recreational waters. Poultry litter piles are contaminating our streams through runoff and wind deposition. We also monitor for sediment violations when muddy waters are seen or reported to us. Turbidity and sediment deposits harm aquatic life, and degrade waters for recreational use. These violations are happening too frequently, usually from construction for new development, which is again booming in our region.

How healthy is the river for recreational use, fishing and drinking water?

Is it safe to swim? (Not always)

For swimmers the most important safety indicator of river health is the amount of E-coli in the water. Since 2019 we have been monitoring for E-Coli each summer and post the results on our Swim Guide App and on social media each Friday. A total of 119 samples were collected at 8 popular swimming sites along the Haw River and Jordan Lake during 2020. Twenty-three samples (19.3%) exceeded the EPA recommendation of 190 MPN. During each of the 15 weeks during the sampling period, samples were collected weekly, and bacteria levels suggested it was safe to swim at all sampled locations only 6 times during the sampling period. In general, E-coli levels rose after big storms sent polluted runoff into the river. This year we added more beaches at Jordan Lake – you can get Friday updates on all 11 sites we monitor on the Swim Guide app on your smart phone, <https://www.theswimguide.org/get-the-app/> – or on our website (and FB, Instagram and E-newsletter).

Can you eat the fish? (Not everyone)

Fish consumption should be limited for fish caught in the Haw, especially for pregnant women, and children. Unfortunately, all surface waters in North Carolina contain too much mercury, mostly from air borne emissions from coal-fired power plants, some far to the west of us. In addition, studies have shown that industrial contaminants in the river accumulate in some species of fish in the Haw. For the state's Fish Consumption Advisory go to:

<https://epi.dph.ncdhs.gov/oeefish/advisories.html>.

How about drinking water? (Not in Pittsboro)

Fortunately, almost all municipalities in the Haw watershed have drinking water reservoirs built on creeks that have increased protections, and many rural people have private wells. Only the Town of Pittsboro draws water from the Haw River to treat for drinking water – a huge problem as the Haw River has a long history of being contaminated by upstream industry, including the 1,4-dioxane and PFAS chemicals that are much in the news. Pittsboro is working to install upgraded treatment to remove most of these chemicals by next year, and HRA has brought legal action to challenge the sources of pollution upriver. At the current time, we would advise not drinking the water in Pittsboro (or nearby developments where it is also used) without an in-house filter.



Everyone has the right to clean drinking water, and our state and federal agencies need to put protective standards in place to prevent pollution. It is an outrage that our waters are not safe for us to use. The 1972 federal Clean Water Act promised us swimmable and fishable waters in all the USA by 1984, a goal that has not been met. Join us in continuing to advocate for our right to clean water.

***Issues in the Watershed*, continued from p. 3**

Chatham Park - What Next?

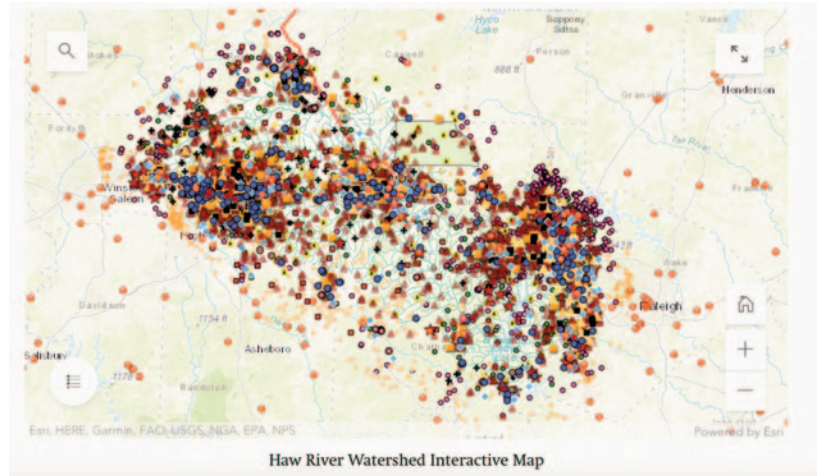
We continue to be the main watchdog on this massive development near the Haw River in Chatham Co., all within Pittsboro's planning district. We reported new sediment erosion problems as muddy waters pollute the streams, as trees are cut down and land bulldozed. We're providing information to our members and the public concerning the latest plans and agreements that Chatham Park is seeking approval of from the Town of Pittsboro. These include the plan for their 2,225 acre North Village development, which we believe will *not* adequately protect the Haw River, and a 40 year Development Agreement with the Town, that would benefit the developers to the detriment of the town and its residents. Read more about the current status of these issues at: <https://hawriver.org/river-issues/chatham-park/>.



Mud flowed from this Chatham Park construction site into a nearby stream.

Updates to our Environmental Justice Mapping Tool

Last fall we released a new interactive mapping tool to show the location of polluting industries and infrastructure in the Haw Watershed. Thanks to some terrific work this summer by our DukeEngage intern, Quinn Beckham, our Mapping Tool now has a new “Interactive Legend” that allows you to filter in the various mapped layers of pollution. It also contains new demographic information, showing minority populations and their proximity to pollution sources. We believe this tool will be invaluable to us as we focus on environmental justice, and to all communities in our watershed fighting against pollution.



Thanks to our DukeEngage Summer Intern

This year's Duke University summer program, DukeEngage stayed close to home due to Covid concerns, and focused on working with organizations on environmental justice issues in NC with environmental. We hosted Quinn Beckham, an incoming senior at Duke, who was interested to learn more about past and current environmental justice issues in the Haw River watershed, and to contribute to our work through updating the environmental justice mapping project tool. She worked with our Environmental Justice Committee to gather new pollution and demographic information to use for the mapping tool and the ArcGIS Story Map. She also took part in meetings with the staff and Board and helped us find educational resources for our new Environmental Justice resource list. Thanks Quinn, and have a great senior year!

New Environmental Justice Resource List on our Website

We have begun compiling a list of articles, books, podcasts, and other media that we recommend on the overarching issues of environmental justice and equity, as well as diversity and inclusion. Go to our new Environmental Justice webpage at: <https://hawriver.org/environmental-justice/>.

Proposed Asphalt and Concrete Plants in Caswell County - An Environmental Justice Issue

Carolina Sunrock has proposed three asphalt plants, a concrete batch mix plant, and a quarry for Caswell County. The asphalt and concrete plants proposed for the southwest part of the county in Anderson Township are in the Haw River watershed, and threaten a predominantly Black community. (The other proposed projects are near Prospect Hill, in the Dan River watershed.) Sunrock's "North Burlington" project in Anderson is adjacent to Hughes Mill Creek, which flows to Jordan Creek, and then to Burlington's Stoney Creek drinking water reservoir. HRA reached out to the leaders of Anderson Community Environmental Justice Group to offer our assistance in their fight against these new polluting industries. Asphalt plants emit toxic air pollution, and concrete requires huge amounts of water – groundwater extraction that could threaten the capacity of neighbor's wells. Both kinds of operations can result in polluted stormwater runoff into nearby streams. We sent a letter with our concerns to the Caswell Board of Commissioners and provided information to the ACE Justice group on important water issues. Haw Riverkeeper is working with the community to sample water quality in Hughes Mill Creek to determine baseline conditions.





HRA Outreach and Watershed Education

from Kyleene Rooks (at left),
Outreach & Event Coordinator
(919) 542-5790;
krooks@hawriver.org

Eliminating Plastic Along the Haw

The Haw River Assembly continues to partner with local businesses to eliminate single-use plastics in their operations. Look out for our campaign window decal (at right), and support these local businesses working to eliminate the consumption of plastics one straw and cup at a time!

Right now, we're working with local businesses like Meantime Coffee at UNC-CH and Freehand Market in Saxapahaw to eliminate single-use plastics in their business models. Other retail establishments like Elon University's Student Made Store and Chatham Marketplace are making

great strides in signing our pledge as well. Let them know you appreciate their efforts!

We are also starting to get preliminary data from our microplastics monitoring across the state with Waterkeepers Carolina. These are the very small particles found in the water, as plastics break down in the environment. As expected, microplastics are present in every surface water sample collected in all fifteen watersheds across the state. As we continue to analyze and understand the sample data, we will be shifting our focus to understanding which types of plastics are contributing the most to the microplastics issue. This will likely vary from basin to basin, but will help us to focus and prioritize the most effective types of local level advocacy strategies to keep plastics from entering our waterways.



Join in *climate action* at the local level, while staying up to date with state and national campaigns and news. Check out our webpage for information on how climate change is impacting our local watershed, and actions you can take to stop fossil fuel, and to protect our waters and forests:
<https://hawriver.org/home/climate-action-campaign/>.

Learning Celebration Update

As we go to press, the Haw River Assembly is still gathering information to decide if we can go ahead with the 2021 Haw River Learning Celebration for schools. We had planned for it to take place Saturday, September 25th through Friday, October 15th at our three sites in Bynum, Saxapahaw, and Camp Guilrock. But with Covid cases rising due to the Delta variant, and children under 13 not being eligible for the vaccine yet, we are back in caution mode. We are now waiting to see if schools will be allowed to bring their fourth-graders on our field trip, or if we have enough volunteers willing to be our guides for the program. For the most up-to-date information, please visit our website at <https://hawriver.org/projects/learning-celebration/>.



Paperhand Puppet Intervention's

21st annual show will be happening August 27 - September 26 outdoors at the Forest Theater at UNC-Chapel Hill, and October 1 - 3 at the NC Museum of Art in Raleigh. Tickets and Information to this "don't miss" experience are at <http://paperhand.org/summer-show/>.

NOTE: Tickets must be purchased beforehand, and will not be available at the door, so order your tickets now!



Standing in the Stream

Project News from Emily Sutton, **HAW RIVERKEEPER®**

(919) 542-5790; emily@hawriver.org

Welcome New RiverWatch Teams!



Scott Wilson has always admired the work of the Haw River Assembly and the various Stream Watch programs across the state. After receiving a new Grumman white-water canoe for Christmas in the late 60's Scott discovered the Haw River rapids and became an avid paddler. He most remembers how polluted the Haw was back then and appreciates the much cleaner river of today. Now retired, he wanted to contribute to the preservation of the Haw River by joining the Stream Watch program on Folkner Branch.

Olivia Percoco works for a conservation non-profit and **Rocco Percoco** is a middle school science teacher. They felt a citizen science project was the perfect way to plug into their new community, and have begun monitoring Morgan Creek!



Leah Purvis, Vik Agabekov, and Julia Maron are all three graduates of UNC-Chapel Hill and studied Environmental Sciences or Studies with a strong interest in ecology and natural resources management, especially in riparian and coastal ecosystems. They are passionate about conservation and the power of citizen science, and are glad to be able to lend their skills in identifying fish and macroinvertebrate species for the River Watch Program at multiple sites on the Haw River near Bynum!

Haw Riverkeeper Emily Sutton Has Two New Ways to Monitor Pollution!

HACH Turbidity Meter: Thanks to everyone who contributed to our crowd funder to purchase this important new piece of monitoring equipment. It allows us to take rapid measurement of the amount of sediment in a stream, and send information immediately to local and state sediment erosion control officers. Emily has already used it successfully to report a sediment violation at Chatham Park construction.

We Have a New Boat! Also, with help from our donors, we were able to purchase a new 14' jon boat and trailer with a 15 hp 4-stroke motor. This will enable Emily to do much more water quality sampling on Jordan Lake, including for PFAS and 1,4-dioxane, as well as being able to take more samples up the Haw River arm of the lake, near Chatham Park, and on the many other reservoirs on the Haw River and its tributaries.



Upcoming 2021 HRA Events

TO BE DECIDED: September 25 - October 15, Haw River Learning Celebration, in Bynum, Saxapahaw, and Camp Guilrock.

September 18-19, Haw River Watch Monitoring weekend. Our volunteers monitor water quality on creeks or sections of the river, recording changes over time and notifying us of pollution incidents. Find out more on our website at Programs/River Watch, or contact Emily Sutton, Haw Riverkeeper emily@hawriver.org.

Wild and Scenic Film Festival - TWO Showings: (see page 1)

❖ **Tuesday, November 2, 7 pm**, Carolina Theater in Downtown Greensboro (doors open at 6 pm) **AND**

❖ **Thursday, November 4, 7 pm**, at the Varsity Theater on Franklin Street, Chapel Hill (doors open at 6 pm)

For **paddle trips on the Haw River** contact our partners Haw River Canoe and Kayak Company, hawrivercanoe.com, and Frog Hollow Outdoors, froghollowoutdoors.com.



Photo by Elaine Chiosso

Updates and details can be found at www.hawriver.org, on our Haw River Assembly Facebook page, and from our weekly E-newsletters which you can sign up for at info@hawriver.org.

Our 2021 T-Shirt — Crawdad!

The "crayfish", by Clyde Jones, is on a light blue organic cotton T-shirt, produced by T.S. Designs of Burlington, using their environmentally friendly process. Shirts are available online from HRA. Check our website to order: www.hawriver.org.



\$25 (adult) S, M, L, XL, XXL
\$25 (women's style) S, M, L, XL
\$20 (youth) S, M, XL (sorry, no youth Large)

Add \$5 per shirt for postage and transaction fee. To order from HRA, send check to HRA, P.O. Box 187, Bynum NC, 27228.

**Wild & Scenic Film
Fest Nov. 2 & Nov. 4**

Address Service Requested

Bynum, NC 27228

P. O. Box 187

Haw River Assembly

Non-Profit
U.S. Postage
PAID
Chapel Hill 27514
Permit No. 490