# 1982 - The Founding of Haw River Assembly

In March of 1982, nearly 150 people jammed into the Agricultural Building in Pittsboro to launch a new a organization dedicated to protecting the Haw River watershed, including the newly created Jordan Lake. Founders Gerald Lynn Featherstone and Chuck Brady called on people to come together throughout the watershed to clean up and protect the river.





Brady sampling the Haw headwaters, 1982, and Featherstone on the Haw, 2013

Featherstone, a biochemical researcher, and Brady, a physician at UNC were both avid paddlers and had joined the fight to prevent the building of the Jordan Lake dam on the Haw River by the Army Corps of Engineers. Some of the best rapids were drowned beneath the Lake, as well as many farms and rural communities. Having lost the battle, the organizers said they wanted to now focus on cleaning up the river pollution. Gerald Featherstone has remained on the Board of Directors through all these years, providing wisdom and leadership. Dr. Chuck Brady went on to become Navy flight surgeon and NASA astronaut, and flew on the 1997 Space Shuttle. He passed away in 2006.

# HRA at the Opening of Jordan Lake 1982

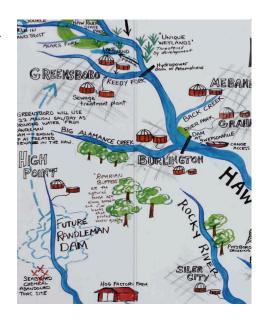


On May 1, 1982, HRA members gathered with signs and banners to demonstrate for clean water at the official opening of Jordan Lake to the public. Governor Hunt acknowledged the newly formed Haw River Assembly and accepted a "Clean Water" plaque to signify the state's commitment to protecting the Lake's waters. (We had high hopes!)



A flotilla of canoes, kayaks, rafts and even a washtub boat joined in to show their support

The newly formed HRA began work on current problems affecting the river, including the proposed Randelman Dam, which would transfer Deep River water and High Point pollution to the Haw River via Greensboro.



The all volunteer Board (no staff yet) organized paddle trips down the Haw, and hosted NC Natural Resources Secretary Joe Grimsley on one of them. The Board also began reaching out to local towns and farmers who are working for cleaner water. "The Great Haw River Race" was put on in the Town of Haw River.

# 1984 - 85

# **Stream Watch Begins!**

North Carolina began a new state wide "Stream Watch" program in 1984, and Haw River Assembly was quick to jump in. Led by our beloved Board member, the late Miles Agee, HRA organized teams to monitor sections of river or creek for pollution.

# The Pittsboro Drinking Water Study Industrial Contaminants From the Haw River



In 1984, the Haw River Assembly received funding from the Z. Smith Reynolds Foundation to conduct a study of industrial contaminants in the Haw River that were present in Pittsboro's drinking water - the only town in the Haw watershed that draws it's raw water from the Haw River. Total screening was done for synthetic organic compounds. The water samples were sent off to reputable labs for testing, and results came back identifying 38 named chemicals and 15 unnamed chemicals.

The final report was published in 1985, "The Pittsboro Drinking Water Study" It included a list of industries in upriver cities that had pretreatment programs in place, allowing the organization to narrow down the potential sources of the pollutants. The study confirmed that these industrial chemicals were in the river water, and conventional treatment plants couldn't remove them.

Preliminary work on this study had been underway since 1982 by the HRA Drinking Water Survey Committee. Endorsements for the study were received from the Town of Pittsboro, the Chatham Co. Board of Commissioners, and many local environmental organizations. The report and its recommendations were sent to the local governments and presented to the NC General Assembly. Sadly, no real action was taken by either the state or local governments at that time to address this serious problem

1986

A Win Against Pollution at Jordan Lake!



In February 1986, the NC Dept. of Environmental Management (DEM) denied a permit for a new package treatment wastewater plant to be built in the headwaters of the new Parkers Creek recreational area at Jordan Lake. HRA and other concerned citizens petitioned the state to hold a public hearing on what would be a new source of pollution to the lake. Over a hundred people attended the hearing on Dec. 19, 1985. Gerald Lynn Featherstone spoke for HRA. Opponents brought up the pollution problems that are typically seen with package treatment plants, which have much less regulation and oversight than municipal plants. State Parks had just spent \$4.5 million to build the newly opened Parkers Creek campgrounds and beach at Jordan Lake - evidently the DEM staff who approved the permit were unaware of this downstream use!

# 1987



# **Bynum Drinking Water Study**

HRA worked with the Bynum community and public health officials to investigate what appeared to be higher rates of cancer of residents who had lived in the Bynum mill village in previous years. A <u>study</u> by UNC School of Public Health tied higher cancer rates to the drinking water provided to Bynum mill home residents between the 1947 and 1976. After closing the contaminated community well, the mill owners had piped water from the Haw River from a settling pond, then up into a water tower (in photo above) which gravity fed water into the mill homes,. The raw river water was barely treated beyond chlorination. When the mill closed in the 1970's, Chatham County and the Town of Pittsboro worked to provide a drinking water line to Bynum from the town's municipal water treatment plant. Later, the county took over, and to this day provides drinking water to Bynum from its Jordan Lake treatment plant.



# Growing the organization

HRA continued to grow in membership during these years, with more frequent paddles and hikes offered along the river. Board members look into possible conservation or parklands that could be created along the river. Water quality issues remained a top priority. Funding by the state ensured continued research on the Bynum drinking water issue, and volunteers were recruited for a growing stream monitoring project. State level discussions of Jordan Lake as a drinking water source for the region neglected concerns about industrial pollutants.

# 1989



# **Envisioning the Haw River Festival Program** for Schools

Louise Omoto Kessel reached out to the HRA Board and shared a dream for a major HRA interactive river education program, inspired by her time on the Hudson River Clearwater sloop - a floating classroom, with science adventures, storytelling, puppets and more. By 1989 this vision became a real plan for a river education program on the Haw, to be launched in 1990! An amazing and talented group of volunteers and Board members came together to create the project, led by Louise.

# The Haw River Festival (The Learning Celebration) is Launched!

Louise Kessel's vision for an HRA river festival for schoolchildren becomes a reality in the spring of 1990! For three weeks a crew of volunteer educators, naturalists, performers and river lovers traveled the length of the Haw setting up camps, and welcoming 4th graders from 5 counties along the river.

About 2500 students came for a field trip at the 7 river sites in Willamsburg, Altamahaw, Burlington, Saxapahaw, Bynum, Jordan Lake, and Avents Ferry. They took part in hand-on activities- meeting animals and learning about the tiny aquatic organisms -



macroinvertebrates- recycling, and cultural history. They also enjoyed games, storytelling and music.

Events for the communities the crew passed through were also part of the fun, culminating in a "Festival Finale" in Bynum.

Throughout the Festival weeks, meals were provided by awesome volunteers who cooked for the crew. This was a huge undertaking made possible by so many people coming together to make it happen because, as Louise said, "They believed in it!" and they created magic, goodwill and community together. It was agreed that it should become an annual event!

(Cynthia Crossen singing with 4th graders)



(Note: the Haw River Festival eventually was renamed The Learning Celebration, and has continued to this day, evolving as these 32 years have gone by. Nearly 50,00 schoolchildren have attended this amazing program!)

# **Protecting Water Quality Upriver - Wins and Losses**

HRA joined with Greensboro citizens and environmental organizations to try and stop the rezoning/annexation of the land around Lake Jeannette, a secondary reservoir for drinking water. The lake and surrounding land were owned by a private company, Cornwallis Corp, and rezoning would increase development there. Lake Jeanette feeds into Greensboro's primary drinking water source, Lake Townsend, and concerns for water quality were raised. The Greensboro City Council approved the rezoning, so a petition drive was started to force a re-decision and a possible ballot referendum. 11,272 signatures were collected by the deadline, but the City Clerk deemed it invalid for technical reasons. Despite further legal efforts the land was rezoned and annexed, but at least a 50' buffer for the lake was won.

Today, Lake Jeannette is surrounded by housing developments.



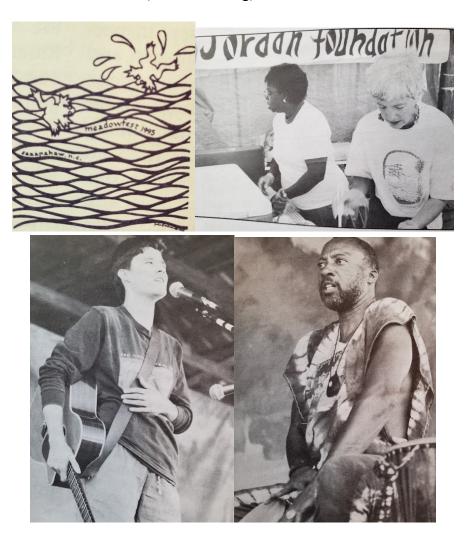
Oak Ridge Discharge Permit Denied

Further upriver, citizens led by Bill Parrish objected to a sewage discharge into the Haw (a very small headwater river there) for a private development, Haw River Plantation. HRA launched a letter writing campaign to the NC Dept. of Environmental Regulation and public hearing was held. The permit was revoked by the state.

# Our 10th Anniversary!

# Meadowfest in Saxapahaw

HRA teamed up with the Jordan Foundation to hold the first "Meadowfest" in Saxapahaw. It was a weekend of music and fun (and fundraising) on a beautiful hill over the Haw River.



# Fight to Stop Alamance Landfill on the River

Also in 1992, HRA joined in the struggle to stop Alamance County from building a landfill on Austin Quarter Rd, just 500' from the Haw River. Sadly, it was a losing battle.



The Haw River Festival had its 4th successful Learning Celebration (that's Larry Bohs singing with 4th graders above). and Festival Finale. An HRA committee begins to re-envision a new stream watch program, with help from UNC stream ecologist Dr. Seth Reice.

# HRA Gets an Office in Bynum

We finally have our own office - the last mill house owned by the the Bynum mill owner, and close to the Haw (fondly known to us as the River Shack). HRA is still a small organization, but now has part-time staff for the Haw River Festival.

# 1994

### **Haw River Watch Begins**

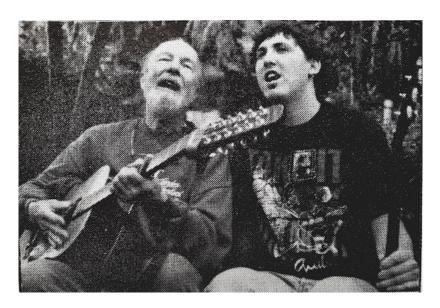
With funding from Z. Smith Reynolds and an EPA grant we launched the new Haw River Watch stream monitoring program with Chris Carter as staff. Volunteers will be trained and equip to do quarterly monitoring on the river and creeks.

# **Advocacy for the River**

Haw River Assembly opposed the building of a multi-state low level radioactive waste dump on the Wake-Chatham county line, citing dangers to surface waters and public health. We also spoke in support of new critical habitat guidelines for endangered species proposed by the NC Wildlife Resources Commission. We began investigating illegal discharges from industries into Reidsville's wastewater treatment plant on Troublesome Creek, and continued to work with Deep River folks to oppose the Randleman Dam, which could flood an old toxic landfill site.

### **Racial Diversity - Barriers and Bridges**

HRA's Board of Directors voted to participate in a state wide Barriers and Bridges program to explore barriers of race, class, gender and other issues to our work, and building bridges to increase diversity within our organization.



# **Pete Seeger Plays for the Haw!**

The biggest news of the year was the benefit concert for HRA at Memorial Hall, UNC-CH by Pete Seeger and his grandson, Tao Rodriguez on April 26!

They also came up to our Learning Celebration site at Haw River State Park and played for the schoolchildren attending our program (to the amazement of the teachers!) We were thankful to Louise Kessel for helping make it happen. Pete said "I'm happiest if I get a crowd singing so loud, they don't even hear me". We were all happy to

sing along to his wonderful songs!



# New Leadership at HRA

New HRA President Elaine Chiosso and Vice-Pres. Cynthia Crossen took on the leadership of HRA - with great thanks to Michael Chandler for his years as president. It's a big time at HRA, with the new River Watch project, a re-envisioned Learning Celebration and new outreach and advocacy work.

### Haw River Festival Reorganized as "Learning Celebration"

Thanks to the efforts of a dedicated steering committee, our annual program for schools (now in its 6th year) was transformed and made more sustainable by paring it down to 3 weeks (instead of 4), at 3 locations (instead of 7) and one larger program per day, instead of 2. We also added Community River Festivals to be held on Saturdays at the end of each week, to share the fun with the public in Guilford, Alamance and Chatham counties.

### **Speaking For the River**

Our river policy group submitted comments on the state's Cape Fear River Basin plan, NC Drinking Water Protection plan, and objections to a permit renewal that would allow polluted air and water releases from a brick plant near Moncure.

### **Listening to All Voices**

HRA's annual meeting in October featured speakers from organizations working for the environment and equity in our region with speakers representing that diversity, including NC WARN, the Land Loss Prevention Act, Occaneechi Band of Saponi Nation, Clean Water for NC, and the Chatham citizen's group working against industrial hog farms.

# **HRA** founder Chuck Brady - From Canoe to Space Shuttle



Dr. Chuck Brady, Navy flight surgeon flew on the Columbia Space Shuttle in 1996. An avid paddler and instrumental is getting the Haw River Assembly started with Gerald Lynn Featherstone, he went from canoe to spaceship! He came by to share stories of the trip with us and how seeing Earth from space only reinforced his belief of how important it is to protect this planet, and rivers like the Haw.

### **Haw River Issues**

Our advocacy work focused on challenging Reidsville's request to the state to move their wastewater treatment effluent pipe from Little Troublesome Creek to the Haw River. Better dilution does not solve pollution! We continued to fight a proposal for a low-level radioactive waste dump on the Chatham-Wake county line, and a new natural gas storage facility in Guilford Co. close to the Haw. We supported a new Haw River trails initiative and efforts in the state to have much stronger protections for people and communities from industrial agriculture.

### **Growing Programs**

The Haw River Festival Learning Celebration is still going strong, with continued Saturday events featuring river issue forums to hear concerns from local communities. The River Watch project with Chris Carter continued to gain new teams and data, and a special quick response "Water Dog" team was formed to investigate pollution events.

### **Hurricane Fran and Record Flooding**

The other big news of 1996 was HURRICANE FRAN, which roared through our watershed in September, toppling trees and bringing the river to a major flood level not seen in recent decades. The river topped the Saxapahaw bridge and changed the position of boulders and islands.



### Save the Lake flotilla

HRA paddlers protested new developments being built near Jordan Lake, with inadequate water quality protections. They lined up with signs in view of the Hwy 64 bridge at Jordan Lake spelling out "Save the Lake". Many new developments will have large spray irrigation systems for wastewater, with no guarantee that it will not increase pollution into Jordan Lake.

### River of Mud

In June of 1997, we were flooded with calls from people shocked at the bright orange clay color of the river - all the way up to Guilford Co. The Pittsboro water treatment plant had a turbidity (sediment) reading of 510 ntu - over 10 times the state standard. We chartered a small plane and Chris Carter flew up the river to find the exact source, following the orange muddy river up Reedy Fork where he saw the 100 acres of bare and heavily eroded land next to the creek, near Brown Summit. A newly planted field had lost its crops and soil in a heavy storm two days before. As farmland, it was exempt from sediment control and stream buffer rules that could have stopped this massive flow of mud into the river. We vowed to continue to push for better water protection regulations of land used for agriculture and forestry. Mud is mud, and it's destructive of aquatic life and our waters, no matter the source.

### **Stop Randleman Dam**

HRA joined with Deep River activists to challenge the building of Randleman Dam on the Deep River below High Point. We had many concerns about the water quality which would be used for drinking water for several Triad cities, including Greensboro. We were also concerned that this increase in Greensboro's drinking water would mean more wastewater in the Haw.

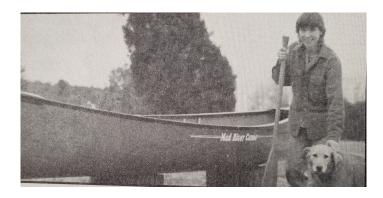
### **Chiosso Becomes Executive Director**

After 2 years as President of the HRA Board, Elaine Chiosso becomes HRA's first Executive Director, with funding support from a Z. Smith Reynolds grant. HRA is growing, with program staff and a bookkeeper, and now a paid leader to oversee the organization.

### **Development threatens the Haw**

A population boom in the Haw River watershed has meant a rapid increase in residential and commercial development, with a 60% increase underway. This new development brought a huge increase in impervious surfaces, wastewater, nutrients, sediment and other pollution that impacts the Haw River and Jordan Lake. HRA pushed for mandatory riparian buffers on streams, stronger sedimentation controls and other tools to protect water quality and biodiversity as more land is disturbed and developed.

### **River Watch Project Grows**



The Haw River Watch project, now led by Kim Calhoun (pictured above) and Kevin Meehan, adds 16 teams to this volunteer citizen water quality monitoring project, for a total of 51!

### **Saving Bynum Bridge**

HRA joins the Bynum community to advocate with DOT to save the historic one-lane Bynum Bridge. In a successful outcome, DOT maintains it as a pedestrian bridge.

### **Swepsonville Dam Removal?**

HRA partnered with US Fish and Wildlife to explore the possibility of removing or breaching the Swepsonville dam, a hindrance to fish movement and paddlers. The



Dam at Swepsonville

# **Speaking Up About Pollution**

HRA also voiced concerns about a low-level radioactive waste dump on the Chatham-Wake line, a new natural gas pipeline to be drilled under Jordan Lake, and a major sewage line expansion in Burlington that created sediment erosion into the river

# **Haw River Assembly Preserves Headwaters of the Haw River**



In a forest in Forsyth county, just west of the Guilford Co. line, 2 springs emerge from the ground and flow together, forming the very beginnings of the Haw River. We heard that the 4 acres of forest that includes the springs was up for sale. Our terrific land committee, spearheaded by Deborah Amaral and Lynn Featherstone and with help from Mike Holland, Mac Jordan and Mike Wicker of US Fish and Wildlife, grants were secured from state and federal funding to purchase the land for conservation. HRA put the land a permanent land trust with Piedmont Land Conservancy.

### 10th Haw River Learning Celebration

We celebrated a successful decade of our wonderful river field trip for schoolchildren. Our Coordinator Dorrit Geshuri kept us safe and in good spirits through some cold wet weather in Saxapahaw. We were glad to see the sun again for our week in Bynum and were joined for this 10th anniversary by some volunteers from the first years, including storyteller Bill Harley and songwriter Bill Reid along with the program founder, Louise Omoto Kessel

# **Puppets for the Festival!**

With a special grant from the Chatham Arts Council, a beautiful puppet show was created and performed for the school children (and at the Festival Finale for the public) by Donovan Zimmerman, Jan Burger and Emma Skurnick. A moving story of an old man and how he comes to cherish the river as a habitat for his wildlife friends and for clean water. The new River puppet was a show stopper!





# 2000-2001

# The Stream Steward Campaign Begins

"Saving the River One Backyard at a Time"





With a \$6000 319 grant from the EPA we hired a part-time coordinator, Catherine Deininger to help us educate folks about the importance of the creeks and even smaller streams right where they live.

We're starting with a pilot project on Robeson Creek in Pittsboro!

(New logo is by Jan Burger.)

### **Greensboro Pipeline Company Caught Violating Erosion Control Law**

River Watch volunteers discovered a major sediment violation on the Haw River in February by a construction crew installing a new pipeline from Reidsville to Greensboro. Backhoes were trying to free themselves from the waist-deep mud they'd created on the riverbanks. We immediately contacted the state's Land Resources division who took quick action to stop this muddy mess.

### HRA Urges State to Protect River Buffers in Cape Fear Watershed

We joined other Cape Fear groups to lobby the Environmental Management Commission to enact mandatory stream buffers on creeks and rivers in the Cape Fear Basin, including the Haw River. These buffers are already in place in the Neuse and Tar-Pamlico basins. We spoke at meetings held by DWQ in Greensboro and Pittsboro and presented a petition to the state signed by Upper Cape Fear residents.

### **New Native Plant List for Watershed**

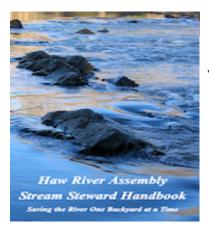
Our Stream Steward Project Coordinator, Catherine Deininger, created a new brochure "Native Plant Recommendations for Stream Banks in the Haw River Watershed" to encourage landowners, landscapers and developers to plant and protect the incredible variety of native trees, shrubs, wildflowers and vines that live in our watershed. The list was developed with help from local botanists and native plant growers. It is still available on our website under "Resources" page



### From Drought to Flood

A 3 year drought became extreme by summer of 2002, leaving many creeks dried up, and private wells and municipal reservoirs running low. Some cities were buying water from more fortunate neighbors. Greensboro was approved to run a 13 mile pipe to the Haw River to fill its rapidly shrinking reservoirs. Jordan Lake was running 12 ft below normal pool capacity.

Then in the fall, a series of big storms began - the river reached flood level quickly, and Jordan Lake was suddenly full again. Both drought and floodwaters are greatly influenced by the huge growth in population in our region. More people put more demand on water resources, and more development creates more impervious surfaces that lead to flooding.



In other news, the <u>Stream Steward Handbook</u> (how to be a clean water protector in your own yard and community) was created by the Stream Steward Campaign, led by Catherine Deininger. (It's still available online on our website)

# Cynthia Crossen Becomes New Haw River Watch Coordinator



Cynthia Crossen takes over the Haw River
Watch project as the new Coordinator. She
chaired our River Watch committee for many
years and now stepped into the staff position.
Much thanks to Kim Colvin and Kevin Meehan for being great
coordinators of the project!

# Haw River State Park Becomes a Reality!



The 2003 Session of the NC General Assembly passed a bill to authorize the future Haw River State Park. This land on the border of Guilford and Rockingham counties was home of the Episcopal Diocese Summit Camp and Conference Center, who sold it to the state. Major kudos to the Guilford Open Space Committee for their hard work making this a reality. HRA was proud to help lobby for this much needed access to our river in the headwater region.

# **Stream Steward Project in Summerfield**

Also upriver, we launched a new stream steward project, with the Summerfield Conservation Council and Town, in Guilford County to encourage stream-healthy practices and conservation.

# Stakeholders Convened to Develop Strategies to Reduce Pollution in Jordan Lake



Elaine Chiosso is representing HRA in meetings convened by NC Dept. of Environment and Natural Resources (now called DEQ), along with representatives from local city and county governments, DOT, agriculture, builders, utilities and any others who will have a stake in developing new rules to reduce nutrient pollution in the Lake. The entire New Hope arm of the lake (draining northeast Chatham, Chapel Hill-Carrboro, southern Durham and western Wake Co.) was put on the 2002 Impaired Water list because of excess algae due to nutrient pollution.

# NC State Parks Buys Duke Forest Land on the Haw River in Chatham

Federal and state agencies (including ArmyCorps of Engineers and NC DENR Secretary Bill Ross) visit Clyde Jones in Bynum after walking the new state park purchase led by Elaine Chiosso and Deborah Amaral.



We now have a second parkland on the Haw! NC State Parks bought 900 plus acres that had been Duke University forest research land on the Haw, running both sides of the river from Bynum to the Hwy 64 bridge, about 4 miles long. The Triangle Land Conservacy, with support from HRA, worked with the state and federal agencies to use new EEP funds for this purchase. The land will become a state natural area, focusing on conservation for this special river corridor

### **New River Park in Swepsonville!**

The HRA Land Conservation Committee (with Lynn Featherstone, Deborah Amaral, Gail Galbraith, Janet MacFall and Mike Holland) worked with the Town of Swepsonville, and others to secure a state grant for a new park on the river in Swepsonville, with 2/3 mile of river frontage.

Congratulations to Mayor Raymond Herring for his vision for this!

# HRA partners with West End Revitalization Association on EPA Environmental Justice Grant



HRA will assist WERA in studying ground and surface water pollution in the community as part of their environmental health assessment. WERA is one of only 5 communities in the SE to receive this \$100,000 three year grant, culminating many years of work led by their Exec. Director, Omega Wilson.

# **Streams Degraded as Growth in Chatham County Explodes**

20 developments have been approved in the county in three years, with local streams showing the impacts of sediment and stormwater pollution. HRA urges Chatham and Pittsboro to require greater environmental protections and scrutiny. The county does not have its own sedimentation erosion control program, lacks county wide zoning and is allowing major development to use spray irrigation systems for wastewater disposal.

# Haw River Learning Celebration Goes to South Korea!



Our Learning Celebration Coordinator JJ Richardson (third from left above) represented HRA at an international conference focused on river festivals at the 5th Annual Korean River Day. The organizers were interested in hearing more about our program that connects children and volunteers to the Haw River. JJ's presentation was considered a highlight of the conference!

### **Clean Lakes Bill Passes**

HRA joined with environmental groups to successfully push passage of the Clean Lakes Bill, which includes capping nutrient loads from waste water treatment plants into Jordan Lake until the new Jordan Lake rules are finalized.

# **Two Threatened Streams Project Begins**



2005 Photo by Jerry Markatos of very

muddy Dry Creek waters entering the Haw River from upstream clearing for Chapel Ridge development

HRA was awarded an EPA 319 grant of \$121,370 for a three year study "Two Threatened Creeks" to investigate current conditions and threats to Dry Creek and Pokeberry Creek in Chatham County. Both creeks face major impacts and degradation from new development projects, particularly Chapel Ridge and Briar Chapel. The study will be headed up by Stream Steward Coordinator Catherine Deininger, with Cynthia Crossen and River Watch volunteers.

### 122 More Acres Added to Lower Haw River State Natural Area



HRA worked with the Triangle Land Conservancy and the state to negotiate the purchase of 82 acres of Haw River land above the 15-501 bridge and Bynum dam that had been gifted to the NC Botanical Gardens. Funding for the purchase came from the NC Clean Water Management Fund and the NC Parks and Recreation Trust Fund. We also negotiated the purchase by the state of 40 acres of river frontage on the opposite (Pittsboro) side of the river from Charles Stevens (owner of the Bynum mill lands). These lands will be preserved for conservation and public easement as part of the larger Lower Haw River State Natural Area, stretching from above the 15-501 bridge down to the Hwy 64 bridge.

### **Haw River Trails Partnership Begins**



Guilford, Rockingham, Alamance, Orange and Chatham counties, Burlington, Town of Haw River, Graham, and Swepsonville - along with NC DENR - came together to sign a Memorandum of Agreement to protect and conserve riparian lands within 500 feet of the Haw River, and to improve and increase paddling and access areas.



NC State Trails Coordinator Darrell McBane presents HRA Board with a Haw River Trails

Partner thank you plaque

# **Executive Director Elaine Chiosso Appointed to NC Sedimentation Control Commission**





Chiosso was appointed by Gov. Easley to serve on the state commission that adopts rules, sets standards, and reviews local sediment control programs under the NC Sedimentation Control Program. She will represent environmental interests on the Commission (as well as being the only woman commissioner). Sediment pollution from land disturbance during construction is a major issue for the Haw River as well as other rivers in NC. (Photo at right shows sediment from Amberly development in Cary flowing towards Jordan Lake.)

# HRA celebrates 25 years!



Matt Steible and Nolan Wildfire paddled the length of the Haw River down to Mermaid Point in honor of the 1982 "Canoeathon" and Chuck Brady. They met with school kids, and were feasted with community potlucks. They met up at the end with paddlers from the Deep River at the meeting of the two rivers - Mermaid Point - where the Cape Fear River begins.

HRA was awarded the Independent Weekly's 2007 Citizenship Award

for our 25 years of work for clean water. Some HRA Board members, staff and volunteers gathered for a photo for the INDY.



# **Pushing Strong Rules for Jordan Lake**

HRA was joined with statewide environmental allies to advocate strong rules to stop nutrient pollution in Jordan Lake as the draft rules went out for public comment The draft rules were the result of a 5 year stakeholder process. HRA played a large role urging stronger protections.



## **Development Threatens New Haw River State Park**



HRSP Superintendent Sue Bean showing off the Park to HRA Board members

The new Haw River State Park north of Greensboro was threatened by a proposal to build a large golf course development on adjacent land that the state had hoped to purchase to expand the park. HRA joined the fight to have the proposal denied.

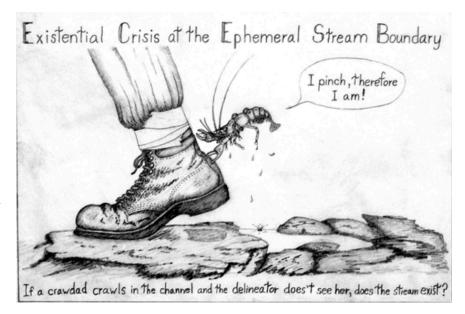
# **Muddy Water Watch**

We joined this new program of the NC Riverkeepers to teach citizens how to be watchdogs on construction sediment and how to report pollution and suspected violations to groups like HRA and state and local officials. Volunteers at right are inspecting a site in Orange Co. during a training session.



# Official Definitions of Streams Leaves Some Waters Without Protection

Haw River Watch Coordinator
Cynthia Crossen spoke out
about how the state and Army
Corps delineate smaller intermittent and ephemeral streams
that deprives them from protection during development. Board
member Chris Carter created
this great cartoon to illustrate
the problem. "If a crawdad
crawls in the channel and the
delineator doesn't see her, does
the stream exist?



# Haw River Assembly Joins the Waterkeeper Alliance



In 2008,we became licensed as the Haw Riverkeeper program and Executive Director Elaine Chiosso has also become our first Riverkeeper. We join 13 other NC Waterkeeper organizations as well as 177 througout the US and world. Waterkeepers use laws and enforcement to protect our waters, along with grassroots action and education - and we beleive HRA will be stronger by by being part of this alliance.

Haw River Corridor Project Wraps Up in 2008



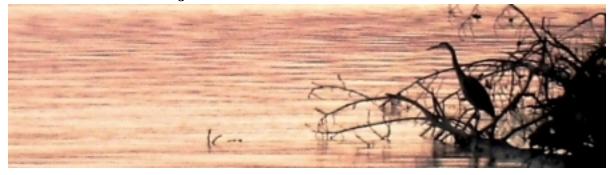
Our 2 year project with Elon University was funded by the NC Clean Water Management Trust Fund to assess lands along 27 miles of the Haw River, from I-85/40, Graham to the 15-501Bridge near Bynum. The assessment will help conservation planning and completes work done earlier on the upper Haw. One finding was that land within 500 feet of the river averages 80% forest cover.

# The New Jordan Lake Clean-up Project



Headed up by Tom Colson (at far left in photo), and with support from HRA, Chatham Co. and NC State Parks, about 70 volunteers worked in October, 2008 to clean up some of the massive amount of stormwater driven trash hidden in coves and along shorelines. Volunteers with power boats ferried volunteers to hard to reach areas, and brought trash back - filling up a dumpsters and a 2 dump trucks. This is just the beginning of the work left to do!

### Jordan Lake Rules Become Law



The NC Legislature approved the new state rules to clean up Jordan Lake. Although the rules lost some strength from the original version passed by the Environmental Management Commission, the protection gained for Jordan Lake is still very significant. Haw River Assembly fought hard to make sure vital parts of the rules made it through, especially the important precedent to reduce stormwater pollution from new and existing sources.



# 8th grade Program Launched

With NC/EPA funding we launched a new stream education program for 8th graders in our watershed - with one day of classroom activities and one day at a nearby creek or the river.

(Donna Myers, our Watershed Education

Coordinator at right)





In August 2009, the Haw River Assembly bought the remainder of the forest that protects the source headwater springs of the Haw River. This two acres is part of a larger six acre forest we put under permanent conservation.

# HRA's Efforts to Stop Developer's Land Grab near Jordan Lake in Durham

150 donors helped us pay for a new survey and hydrology report of the Jordan Lake boundary in Durham. Our new survey of the Jordan Lake boundary found the point for the normal pool elevation of the lake on New Hope Creek to be approximately 6500' farther up New Hope creek from Durham's current boundary point. Our survey, using the creek bed elevation method, is a more accurate method than the developer's survey which used surface water elevation and brought the point almost equally as far downstream towards the lake. At stake was whether the "751 South" developers of a large project can build within the critical protected area of Jordan Lake. Durham County sent the decision back to review, and was sued by the developers. HRA, represented by SELC, filed a motion to intervene on the side of Durham County. In December. Judge Howard Manning ruled in favor of the developers and against the protection of Jordan Lake

# Our Patron, Clyde Jones!



Clyde Jones, beloved folk artist of Bynum showing off one of the designs he paints for our annul T-shirts we make each year. Clyde is a great supporter of HRA, and is himself a long time advocate of protecting the Haw River.

**Two Threatened Streams Project Completed** 



Project committee, Sharon Garbutt, Betsy Klaus, Catherine Deininger, Jeannie Ambrose, Cynthia Crossen and Neville Handel

The three year study of Pokeberry and Dry creeks in Chatham was funded by an NC EPA 319 grant, and led by Catherine Deininger with help from other HRA staff, volunteers and Dave Penrose, NCSU. These 2 creeks both will be impacted by large housing development projects in the pipeline, and the study showed existing water quality and aquatic life in these creeks, land use, and current pollution.

# **Haw River Festival Moves to Saxapahaw**





After 21 years in Bynum, we moved our annual spring river festival up to Saxapahaw, welcomed by the hosts of Saturdays in Saxapaha, and re-organized under HRA's event coordinator, Germane James.

### Stericycle Medical Incinerator in Graham - protesting a "permit to pollute"

We joined downwind residents and local governments in demanding that the state force early adoption of new much stricter EPA limits on pollution.



Alamance residents petition against Stericyle pollution presented to "Mr. Big" (Chris Carter).

# **Opposition continues on 751 South Development in Durham**

HRA supports adjacent landowners who challenged in their petition for their lawful concerns about the project.

## Water Quality violations in Collins Creek by UNC-CH

NC DENR fined and revoked the "deemed permitted" status of UNC-Chapel Hill's wastewater system at their animal research facility in rural Orange County after concerns were raised about spills into Collins Creek from Preserve Rural Orange and the Haw River Assembly.

# Greensboro wastewater spill causes fish kill

HRA notified NC DENR and the public of fish kills in the Haw, discovered by paddlers after a 1.45 million gallon wastewater spill from Greensboro in July. The state should issue alerts.

# Fracking poses new threat to Haw River watershed

The Triassic Basin, including the southeast Haw River watershed was identified as possible shale gas fracking site. NC law prohibited types of drilling that fracking requires. We began organizing to keep fracking out of NC.



Haw Riverkeeper, Elaine Chiosso speaks to Pittsboro crowd at "Gasland" showing

# HRA Speaks Out on Pittsboro's new wastewater permit to discharge to Haw River



HRA Board member Gerald Lynn Featherstone at public hearing

River lovers, paddlers, HRA staff and members, and concerned citizens turned out for the NC DWQ Public Hearing in March, 2011 for Pittsboro's NPDES permit that would allow discharge of treated sewage effluent into the Haw River at Hwy 64 bridge - at the Lower Haw River State Natural Area. Speakers discussed the harm that could happen to this popular paddler and river area, - and Jordan Lake - just one mile downstream. The final permit issued included some conditions we had advocated for, but we hope the discharge pipe will never be built.

# Fracking opposition grows in NC



HRA members and others opposed to fracking rallied in Raleigh in July to urge the legislature NOT to pass a bill that would allow fracking in the state. It passed and was vetoed by Governor Perdue, but the legislature overrode her veto. We vowed to keep fighting.

# HRA staff showcase Learning Celebration at national River Rally in Charleston



Donna Myers, Kathy Buck, Elaine Chiosso, Germane White, and Cynthia Crossen pictured above (with Kathy Buck office manager) presented a hands-on workshop for participants "Let the River Teach our Children." We also showed the wonderful short video about the Learning Celebration made by Mark Barroso.

### **Greensboro's White Street Landfill - Environmental Injustice**

HRA joined in the battle over re-opening the White Street Landfill in a predominantly Black neighborhood in the North Buffalo Creek watershed, with degraded water quality. The city council wanted to re-open the closed landfill, despite protests from the community, joined by a student group from NC A&T, "Ignite Greensboro". (The landfill remains closed - a win for the community)

# HRA joins Omega Wilson as co-Chair of the N.C. Environmental Inequities/ Environmental Justice Workgroup

A project initiated by the Research Triangle Environmental Health Collaborative, Omega Wilson of West End Revitalization Association and Haw Riverkeeper Elaine Chiosso served as co-chairs during six-months of meetings to measurable indicators of environmental justice and ways to help communities with advocacy, linking environmental and health data, and funding local improvements.



Omega Wilson accepting an Environmental Justice Award from EPA in 2009

# State Holds Hearings on Draft Shale Gas Report Legislature Supports Fracking Despite Public Opposition





Over 1500 people attended hearings in Sanford, Chapel Hill and Pittsboro in March 2012. The vast majority of speakers, including HRA members, were against allowing fracking in NC and contested the reports claim that it could be done without harm to people and water. Later in the year the NC Legislature were able enact a pro-fracking bill despite Gov. Perdue's veto. The bill's two year moratorium will be used by HRA and our allies continue their opposition.

## HRA Suspects Municipal Sludge May Be Source of PFAS in Haw River

HRA begins investigations with UNC-CH epidemiologist Steve Wing and community activists as to whether PFAS contamination in Haw is linked to wastewater sludge applied to fields. A 2007 RTP/EPA study of PFAS in the Cape Fear River basin showed the highest levels were in the Haw River. The highest levels appeared to be at the confluences with some streams that drain fields where sludge is applied.



# NC Legislature passes NC 515 "Keep Jordan Lake Dirty" bill

This action delayed the cleanup of Jordan Lake pollution for 3 more years *and* funded a pilot project of solar powered (Solar Bees at right) to try and "aerate" away the algae problem at the Lake - a method that's extremely likely to fail on this huge 14,000 acre reservoir. (They were later removed after showing no reduction in algae, and battered by storms.)



# Fracking

# **Fracking Opposition Continues**

HRA and allies with FrackFreeNC cosponsored a screening of the "Gasland" documentary in Durham with director Josh Fox. We lobbied against new pro-fracking laws proposed by NC legislators, and hosted a packed meeting with 2 dairy farmers from Pennsylvania (above) who told us how fracking has ruined their farms and health.

# New Mega-development in Pittsboro?

Slow Down!
Re-Think
Chatham Park!
PittsboroMatters.org

Preston Development asked the Town of Pittsboro to rezone 7,120 acres within Pittsboro's planning jurisdiction (ETJ) in order to build a massive planned development. This would create a new city of over 55,000 people and commercial districts on sensitive land near the Haw River and Jordan Lake that is primarily now in forest. HRA joins with community members to try to get Pittsboro to slow down decision making, while seriously considering environmental, community and infrastructure impacts.

# **Our Investigations into Sludge Continue**

We continued to work with scientists from UNC-CH on what impact wastewater sludge applied to fields has on streams in our watershed. Do chemicals present in the sludge from industrial and household waste end up in our waters from stormwater runoff?

# Massive 3.5 million Raw Sewage Spill by Burlington into the Haw River

An aging broken main at the Burlington Wastewater Treatment plant sent millions of gallons of raw sewage into the Haw in January - with public notification delayed 3 days. In April we filed a Clean Water Act Notice of Intent to Sue Burlington if they did not act within 60 days to prevent future sewage spills (there had been 20 previous ones since 2013 totalling 225,000 gallons) Negotiations resulted in an agreement tha Burlington would assess and fix broken and aging sewer pipes and give much faster public notification. We were represented by SELC.

# Haw River Named one of America's Most Endangered Rivers



Ranked #9 in the USA by American Rivers after the huge Burlington sewage spill as well as stormwater pollution from rapid development

# Over 1500 People at State Fracking Hearings



HRA worked with Frack Free NC to turn out a huge number of people to 4 public hearings by the NC Mining and Energy Commission on rules to allow fracking in NC, with speakers protesting the harm that fracking could bring to people, land and water. 59,000 people signed a petition to the Governor calling for a ban on fracking.

# The 25th Learning Celebration!



Over 40,000 schoolchildren have now attended our amazing outdoor river education program. We couldn't do it without these talented and mighty volunteers!

# **HRA Fracking Lawsuit Stops Permits**

The Haw River Assembly, represented by SouthernEnvironmental Law Center (SELC), filed a lawsuit in January against the Mining and Energy Commission (MEC), on the grounds that the Commission is unconstitutional. In May, we won a temporary injunction that stopped any fracking permits from being issued in the state.

"Sludge In Our Waters" Report Released



This in-depth report and mapping tool was released in fall by Elaine Chiosso, Haw Riverkeeper, and Sam Perkins, Catawba Riverkeeper. It examined how industrial chemicals in sewage sludge applied to agricultural fields are contaminating surface waters in North Carolina. Case studies and data from scientists in our region were used for the report.

On September 28, Dr. Detlef Knappe gave a presentation to the Pittsboro Town Board concerning the presence of 1,4-Dioxane, an industrial solvent, in the Haw River and in Pittsboro's drinking water.

# 25th Haw River Cleanup!





Despite rainy weather, many teams of volunteers were out cleaning trash from the river in March, Since 1991, 4390 volunteers have removed 8,171 bags of trash, 1623 tires, and tons of other junk including appliances and parts of old cars, from the river and lake

**Coal Ash Dumps** 



State Public Hearings were held in April on permits that Duke Energy needs in order to bury coal ash in Chatham and Lee counties. Their contractor, Charah plans to move 13 mil. tons of coal ash from across the state to old clay mines in Chatham and Lee. These will be coal ash landfills, and should be regulated as such, to protect our waters, not as "mine reclamation." Chatham Citizens Against Coal Ash brought a legal challenge against the landfills.

**Building Racial Justice** 



The Haw River Assembly was chosen to be one of the organizations to participate in the Z. Smith Reynolds Foundation Racial Equity Initiative 2015 Labs. The 3 workshops will help us build racial diversity and equity in our organization and work. Board members Jo Sanders and Melvin DuBose were selected to attend, along with Haw Riverkeeper Elaine Chiosso.



# **Haw River Geology**

Dr. Phil Bradley, NC Geological Survey led a hike on the Haw River with HRA members, sharing the amazing geologic history of our river.

The large outcrops and boulders we see exposed along the Haw River, especially in Alamance and Chatham counties, were once part of a volcanic island arc formed off the coast of the ancient continent Gondwana, around 630 million years ago.

# 1,4- Dioxane in Drinking Water

A June 10, 2016 article in the Washington Post, 'Emerging Contaminants' Unchecked" discussed the problem of unregulated emerging chemicals that are not being adequately monitored in drinking water. The Pittsboro byline for the story was due to studies underway by NCSU Professor Detlef Knappe (below) that document 1,4-Dioxane in the Haw River, and in Pittsboro's drinking water.HRA has repeatedly expressed concerns and calls for action about Pittsboro's drinking water, beginning as far back as 1985 when we produced a study of industrial contaminants in the finished drinking water.

# Fracking Moratorium Continues, Pipelines are the New Threat



The injunction against fracking permits in NC that we won is still in place, but our new concern is the building of pipelines to bring fracked gas from Appalachia. The proposed Atlantic Coast Pipeline would run from WVA down through eastern NC and we are joining with those in opposition to it.

### Friends of the Lower Haw River State Natural Area is Formed

HRA organized a successful meeting for those interested in forming a new Friends of State Parks chapter. Presentations were made by Haw Riverkeeper Elaine Chiosso, State Parks Regional Superintendent Jay Greenwood and Jim Richardson, President of Friends of State Parks. Trail advocate Gretchen Smith accepted nomination for heading up this new chapter. HRA also published a brochure and map of the LHRSNAfor the public with funding from Triangle Community Foundation.



### Latest Bad Idea for Jordan Lake

In June 2017, the NC Legislature overruled Gov. Cooper's veto and passed a state budget which included a \$1.3 million pilot project in Jordan Lake *using chemically based algaecides to mitigate nutrient pollution*. Like the failed Solar Bee experiment, algaecides have never been conducted in a water body as large as Jordan Lake, and never in a drinking water reservoir. We are urging the Army Corps of Engineers to block it.

### Judge Rules it's a Coal Ash Landfill, not mine reclamation

Superior Court Judge Carl Fox told Charah, the coal ash contractor for Duke Energy, in May, 2017, that they could not continue excavation of their land at Brickhaven in Chatham County in order to landfill coal ash from other parts of the state. after ruling that the "mine reclamation" permits wereinvalid. Charah is now banned from any further excavation.

### HRA Receives New Grant from NCSU for Industrial Contaminant Work Our

previous work has shown that industrial contaminants are present in the Haw, and in finished public drinking water. By partnering with the scientific community, this continued research will allow us to trace where these contaminants are coming from in order to stop them at the source.

### **HRA Gets a New Office**

Our new digs across from the river in Bynum, thanks to our fantastic supporters, Ken and Debbie Tunnel who bought and renovated this house for us to rent. It's perfect for us!



### ....and, we celebrate 35 Years!

A wonderful celebration of our 35 years was held at the Haw River Ballroom in Saxapahaw, including music by Cynthia Crossen and Lea Clayton.

# HRA's Emily Sutton becomes new Haw Riverkeeper!

Emily (on rt.) has been our River Watch Coordinator since 2016, and now steps up as our lead advocate for clean water. Elaine Chiosso (on left), our Haw Riverkeeper since 2008, will continue on as Executive Director, a position she's held since 1997.



# **HRA Fights Mountain Valley Pipeline Southgate**



HRA jumped into action as soon as we learned that Mountain Valley Pipeline was applying for a permit to build an extension of their big fracked("natural") gas pipeline in WVA and VA down into Rockingham and Alamance. The pipeline would cut a 100' swath through lands in the Dan and Haw River watersheds, drilling through creeks, destroying forest and farms, and posing very real threats to public health. Haw Riverkeeper Sutton mobilized quickly, holding meetings for landowners and concerned residents in Alamance and Rockingham counties, and filed to intervene in the Federal Energy Regulatory Commission (FERC) permit that MVP will need.

# HRA Legal Action over Pittsboro and Chatham Park's Water Protection

On November 15, 2018, Southern Environmental Law Center filed a motion on behalf of HRA to intervene with the Office of Administrative Hearings in proceedings over whether the Town of Pittsboro will honor its commitments to protect the Haw River and Jordan Lake from the impacts of the massive new Chatham Park development.

# People Protest "We Want More Trees in Chatham Park"!



We partnered with Paperhand Puppet and local citizens to hold two big "Procession of the Trees" rallies in 2019 in Pittsboro to protest the inadequate plans put forward by Chatham Park to preserve more of the huge 7000 acre forest where they are building a massive development.

# **HRA** files Notice of Intent to Sue Burlington

In late 2019, Southern Environmental Law Center filed this notification on behalf of Haw River Assembly, giving the City of Burlington 60 days to reach an agreement with us on how they will ensure that industrial sources that are contaminating its wastewater discharge are held accountable for their pollution (or we will file suit in federal court).

**Actions Grow Against MVP Southgate** 



We ramped up our efforts in 2019 to stop this fracked gas pipeline coming from VA into Rockingham and Alamance. We held a "Paddle Against the Pipeline" action in Alamance County, more outreach to landowners and town and county boards, and getting folks to send comments to FERC and NC DEQ to deny permits needed.

# The 30th Year of the Haw River Learning Celebration!

We had a wonderful time with 4th graders and volunteers at our 3 week long river education program and welcomed Kyleene Rooks as our new Coordinator for this and other event and educational programs. 48,000 students have now taken part in our Learning Celebration!





### **PFAS News in our Watershed**



### Actor Mark Ruffalo visited the HRA office in Bynum on February 19, 2020

to discuss PFAS in the Haw River and in Pittsboro's drinking water, with Haw Riverkeeper Emily Sutton, Pittsboro Commissioner John Bonitz, and Clean Haw River leader, Katie Bryant. Ruffalo is the star (and producer) of the new movie "Dark Waters", about a West Virginia community poisoned by the industrial chemical PFAS in their drinking water. He was on a tour of NC, talking with impacted residents and elected officials in the Cape Fear Basin, and the NC Legislature about the health impacts of PFAS, and laws to keep it out of our waters.

### In late 2020 Burlington signed a memorandum of agreement with HRA

to investigate the industrial sources of per- and polyfluoroalkyl (PFAS) chemicals and 1,4-dioxane in the city's wastewater discharges, after HRA notified them of our intent to sue if such an agreement was not made.

# Covid Virus Cancels In-person Programs-- HRA goes virtual!

We had to cancel our big in-person programs beginning in March of 2020, but we created online versions of our Haw River Festival, the Wild and Scenic Film Festival and Earth Day. We also created a part video version of our beloved Learning Celebration, which we had to cancel for the first time in 30 years! We worked with Paperhand Puppet and other talented folks for this production, starring our own Chris Carter, staff members, videographer Fred Tutman and many volunteers.



# The Work Goes On...Pollution Doesn't stop for Covid

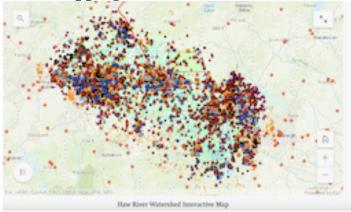
Although Covid restricted in-person gatherings, it did not stop pollution, and we continued work on stopping industrial contaminants, MVP Southgate, and watch-dogging Chatham Park and other developments. We also created new projects remotely.



# **HRA** launches Climate Action Campaign

We started this new campaign in 2020 to look at ways to reduce greenhouse gases and research predictions on impacts in our watershed. We shared these findings with the public and legislature, and sent out a candidate questionnaire with climate questions to all people running for local, state and national office in our watershed. We created a new webpage for this campaign on our website under the "Programs" tab.

Mapping Environmental Justice



Lucy Gray, a UNC-CH intern, worked with our HRA Environmental Justice committee in late 2020 to build an interactive map to display environmental justice issues within the watershed on our website. The map overlays pollution problems and polluting infrastructure with demographic information, giving us the ability to see where inequities and burdens of pollution are located within the Haw River watershed.

# **Fight to Stop MVP Southgate Continues**

We continued to fight MVP Southgate's state and federal permits and their threats of eminent domain against landowners in the pipelines path. HRA members took part in a "No MVP" walk along the Southgate route on May 2, 2021 from Virginia down to Graham NC, organized by "Seven Directions of Service", an Indigenous led organization, with river



ceremonies and events at the Bannister, Dan, and Haw Rivers.

### Our Challenge to Greensboro's 1,4-Dioxane Discharge Is Successful!

Southern Environmental Law Center filed a suit on our behalf to challenge the Special Order by Consent for Greensboro in late 2020 that allowed 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. In Nov. 2021, the Environmental Management Commission agreed to a settlement with Haw River Assembly, Greensboro, and the City of Fayetteville that will reduce pollution; increase monitoring, and enforcement of 1,4-dioxane pollution.

# Fighting For Environmental justice

HRA reached out to Anderson Community Environmental Justice Group in Caswell County to offer our assistance in their fight against an asphalt and a concrete batch mixing plant in this predominantly black community. The proposed site is on land that flows to Jordan Creek, and then to Burlington's Stoney Creek drinking water reservoir.

### The George Pauly Memorial Lending Library

We mourned the death in 2021 of George Pauly, a member of our Board of Directors, and a passionate environmentalist. He left us his house (which we have now sold) and his collection of over 150 books on nature writing, climate. We created a lending library of these wonderful books to share with our members and community.

