

Vol. 18 | November 2021

THE RIPPLE EFFECT

The Annual Newsletter of WaterWays





Our mission is to empower kids and their communities to protect and restore their water where they live, work, and play.



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 [mywaterways](https://www.facebook.com/mywaterways)
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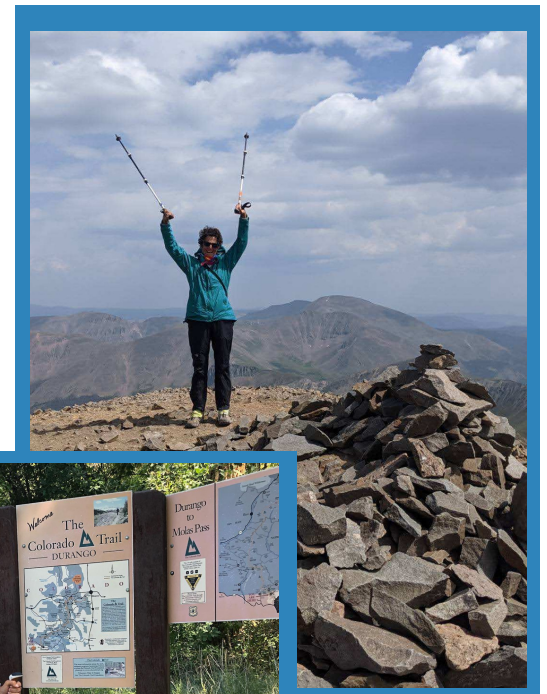
A note from our director | MARY BETH SUTTON

It's been quite a year negotiating the ups and downs of the pandemic! And yet, it's also been SO great to see people getting outside, appreciating nature. Likewise, as a staff, **we took a few days where WE just enjoyed nature**, from hiking at Stringers Ridge or Enterprise South to snorkeling in the Conasauga River with Casper Cox. That's actually where we first met our new **Community Outreach Coordinator, Carol Noon**, who joined our staff in June. Our long-time friend and supporter, **Candy Clark**, has also joined our little crew as **Development Director**. Along with our new **AmeriCorps Vista, Kristen Woodall** - These three are bringing such great experience and passion to our work, I am so grateful to have them as part of our team! You can read more about them on our website. The big news is that our **Program Coordinator, Brooke**, has been promoted to **Assistant Director!** She has been an incredible asset to WaterWays (Thanks to the Grandview Foundation!) ever since she came on board and it's because of her talent and abilities that I felt completely comfortable leaving for the mountains on a sabbatical.

This incredible gift from our Board and Staff allowed me to spend nearly 2 months outdoors in Colorado. **Backpacking the Colorado Trail was indescribable...** it was spectacularly beautiful and absolutely wonderful to be disconnected from electronics while living in the rhythm of nature. It was also so difficult to be pummeled by hail and sleet and driving rain while having trouble breathing over 12000 feet. I loved meeting so many amazing people!!

I am incredibly grateful to have had that experience. It provided a reset after the stress of the pandemic, a time to relax yet get WAYYYYYYYYYYYYYYYYYYYYY too much exercise (well, maybe it was just right)! But you know, kids need to get out in nature too.

Teachers deserve it. One of our initiatives, assisted by volunteers **Nick and Jenny Barsotti**, is to ensure every school has an outdoor space for learning. The final piece of our Conservation Fund initiative is working with Dr. Drew Bailey to further research if kids learn better when school goes outdoors. It's all part of our collaboration with **Hamilton County Parks**, in particular **Enterprise South Nature Park** and **Allison Harr**, the energetic, get things done park superintendent.



Why are we looking at outdoor learning for water nonprofits? If you can't get folks outdoors, how are they going to learn to love nature and want to take care of it? ALSO, each one of us lives in a watershed. What you do in your yard, along your street, at your school, in your neighborhood ALL impacts the stream or river down the hill from you. Each one of us makes an impact on our waterways, no matter where you live or work all the way to the Caribbean! While travel to the Caribbean hasn't been possible, Nadia and our new colleague, Colleen, have been building biogas digesters, completing an organic gardening project in schools, and energizing communities to take care of their environment. **We are ALL connected.** We are connected by air, yes, but also connected by water, from the mountains of Tennessee to the Caribbean Sea. It takes all of us working together to protect our water, wherever you live or work or play. I am so grateful that you care, that you work with us to protect our watersheds, our waterways, our oceans. **Thank YOU!**

With gratitude, *MaryBeth*



WATERWAYS, THE NEW HOME OF THE TENNESSEE RIVER RESCUE

River Rescue has a new home: WaterWays! For 33 years community volunteers have joined together the first Saturday in October to clean up trash from the Tennessee River and its tributaries and starting in 2022, River Rescue will be an outreach program of WaterWays in **coordination with community volunteers**. We're delighted that the founders of this grassroots organization have entrusted WaterWays with continuing their mission because it is right in line with ours!

The 2021 clean-up was held Saturday, October 2nd. Over 450 volunteers across three counties, Bradley, Hamilton, and Marion, **filled over 600 bags of garbage, removed 75 tires** along with appliances, car parts, furniture, a sink, a spool of dynamite fuse, and a teddy bear.



Christine Hunt and Nancy Brice, former coordinators and founders of the TN River Rescue celebrate 33 years of clean-ups.



Volunteers reported more styrofoam than ever before; we're speculating that this may be a result of the increase in carry-out food because of Covid. This year volunteers from one of our donor companies, **HEPACO**, freed a turtle that was completely caught in fish netting.



HUNDREDS OF VOLUNTEERS



OVER 1000 POUNDS OF TRASH COLLECTED



HEALTHIER COMMUNITY

WATERWAYS IS ALREADY PLANNING FOR NEXT YEAR! SEE YOU AT THE RIVER!

Get Involved with WaterWays' Community Programs!

Through partnerships with local government, businesses, and homeowners, WaterWays empowers community members to improve their local water quality. Programs like **My Tennessee** and **Adopt-A-Waterway** are geared toward individuals and groups who are passionate about making a difference in their watersheds!

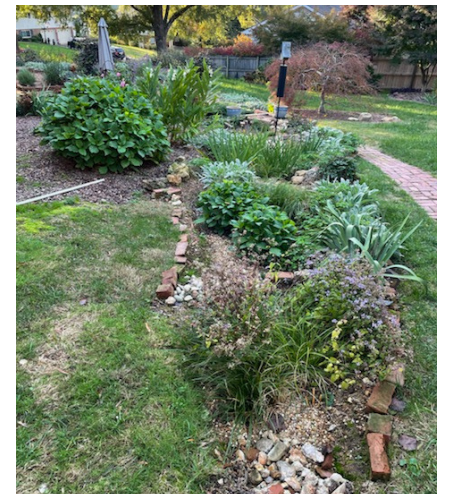
My Tennessee CLEAN WATER STARTS HERE



DID YOU KNOW?
My Tennessee award recipients who live in the City of Chattanooga are eligible for a reduction of the annual water quality fee.



Last fall, WaterWays staff installed a tiered rain garden at a East Brainerd residents home.



51 weeks later the rain garden is functioning and filled with beautiful blooms!

What's the stormwater/water quality fee? If you are a **City of Chattanooga resident**, take a look at your annual Chattanooga property tax statement (*you can also look at your tax statement online through the City website*). Part of your bill is your property tax amount. The other amount is the water quality fee. In 2021, this fee is \$167.16 for most residential homeowners. Money collected for these fees goes to improve and manage stormwater run-off in the city. Why? Because water running from roofs and properties is often full of silt and contaminants. When it runs into the street, the stormwater system takes it directly to the nearest stream where it flows, untreated, filling our streams with contaminants. But when it's captured on your property, that water can be used for rain gardens, pollinator and vegetable gardens and keeps our creeks and rivers clean!

Homeowners outside of the City of Chattanooga are also eligible for My Tennessee awards. So far this year we've certified 17 homes in our area with a **My Tennessee: Creek Friendly Yard award**. Things are picking up with My Tennessee - we have about 20 more surveys lined up! We can't wait to see what's next!



Take a quick survey to see if you qualify for a My Tennessee: Clean Water Starts Here award!



GARDEN CREW VOLUNTEER!

While we often talk about installing green stormwater infrastructure, very little is said about the maintenance of these systems after installation. **WaterWays Volunteer Garden Crew is aimed at just that! Join us for 2022 growing season.**

Contact Rosy@mywaterways.org

Adopt-A-Waterway

Zoom into a Google Map of our region and you will see the amazing amount of waterways that weave and meander through communities as the water makes its way toward the Tennessee River. Covid-19 got many people out of their houses and into their neighborhoods. It's not unusual to hear folks comment that they had no idea that a stream or creek was within walking distance of their homes. *Too often these urban waterways are filled with silt and floating islands of plastic bottles, cans, tires, styrofoam, and garbage bags...all of it heading into the Tennessee River.*

Anyone can adopt a waterway. It's a two-year commitment to do at least one event a year such as a trash clean-up, bank restoration, or beautification project. Individuals, neighborhoods, churches, schools, youth groups joining together to have clean water and healthy communities.

REACH OUT TO CAROL@MYWATERWAYS.ORG AND WE CAN GET YOU STARTED.



Randy Whorton of Wild Trails and his crew after a clean-up on Chattanooga Creek!



The Girl Scouts of the Southern Appalachian at their adopted section on North Chickamuaga.



*Three cheers for the **Gear Closet leader** and the man behind the Facebook, **Randy Hale!***

Keep an eye out for our monthly newsletter and follow us on Facebook and Instagram for store updates and antics!



The Gear Closet is WaterWays' used outdoor gear store, located right across from The Boathouse restaurant on Riverside Drive. It is a part of **WaterWays**, which means that it operates to serve the community and ultimately has a positive impact on the environment!



The Gear Closet had a great year! In spite of the loss of our usual revenue from festival clean-ups, The Gear Closet managed to take in great consigned pieces. We also received a huge donation of new sleeping bags, tents, and mattresses from the canceled Bonnaroo festival.

COME GET THEM BEFORE THEY ARE GONE!

WEDNESDAY - FRIDAY 12 -6

SATURDAY 10-5

SUNDAY 1-5

  **@TheGearCloset**

Stream Restoration

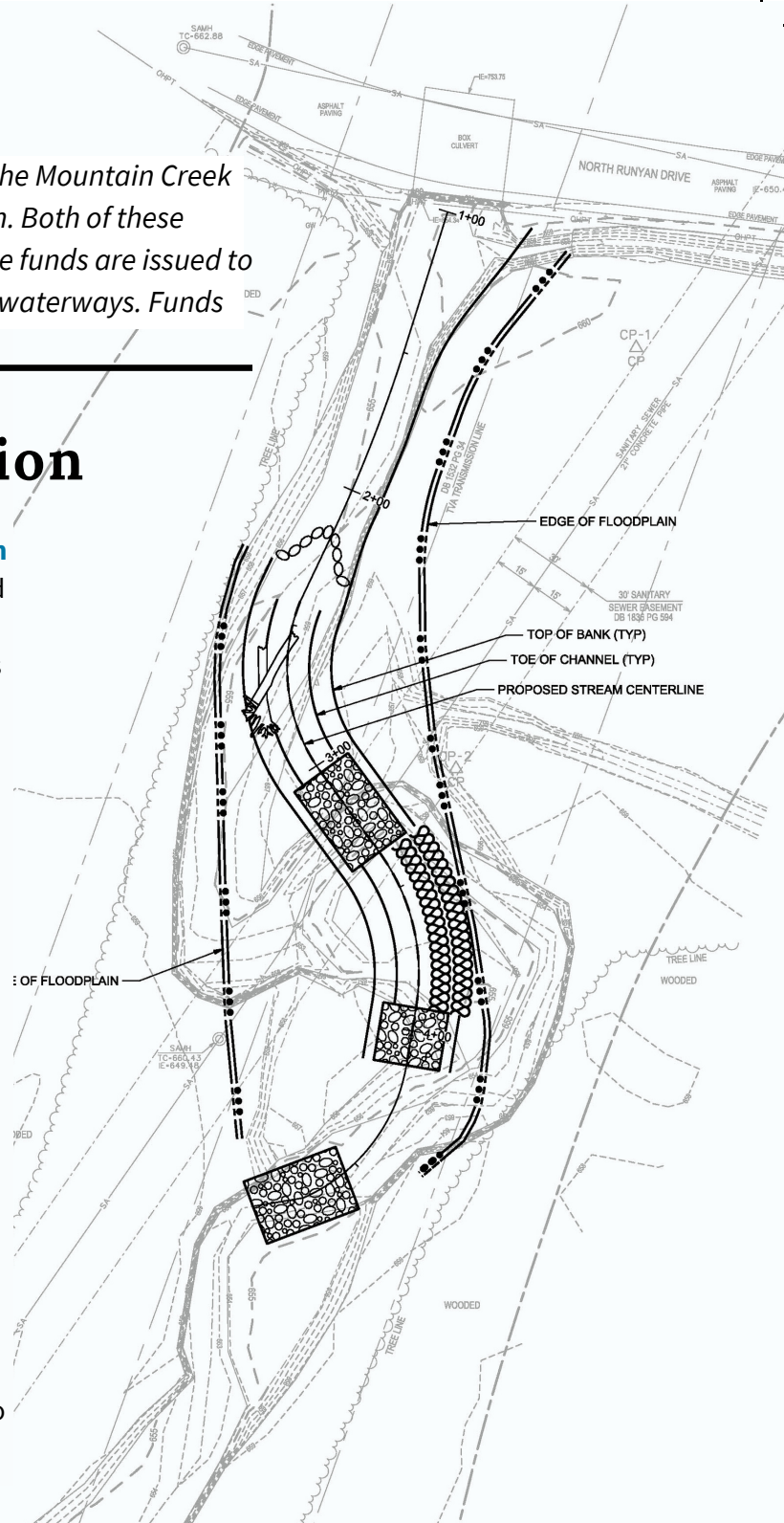
WaterWays currently has two areas of restoration in progress, the Mountain Creek Watershed and the Middle Creek Watershed on Signal Mountain. Both of these projects are funded through the EPA's 319 grant program. These funds are issued to agencies and non-profits that are actively working in impaired waterways. Funds go towards major restoration efforts.

Mountain Creek Restoration

Lots of things are happening along Mountain Creek! **Barge Design Solutions** adopted the section of the creek behind the new Oxford Subdivision and held a clean-up and planted trees in the riparian zone (with Zoo Teens!). One of the neighbors got involved and has planted even more trees as has the Red Bank Elementary Stream Team.

The Board of **North Chickamauga Creek Conservancy** adopted over a mile of the headwaters of Mountain Creek from the top of Walden's Ridge to Mountain Creek Road and removed trash, privet, and other invasive species, especially around Read Spring. They are actively building the trails for the new **Walden's Ridge Park** which will extend from the top of Signal Mountain down to Mountain Creek Road. It will be a Hamilton County Park when it opens in the summer of 2022!

The restoration at **Mountain Creek Church of Christ** is moving forward!! As of November 1, the permits are applied for and the design is nearly complete. The design includes reconnecting the stream to its floodplain and restoring some streamside areas utilizing natural channel design techniques *as shown in the adjacent design*. Mountain Creek Church of Christ has been losing so much streambank, it really needs to happen soon! We also are working with the **City of Chattanooga** to help creek sections in Spring Valley and Quail Hollow/ Red Bank High School. We plan to include the students at Red Bank to assist with the project!



Become a Friend of Red Bank Streams!

Friends of Red Bank Streams (FORBS) are taking action in Stringers Branch and Mountain Creek! Through litter clean-ups, stream restorations, and community action, our waterways are getting cleaner and healthier every day. If your home or business would like to get involved in stewardship efforts, check out the FORBS group on Facebook and get notified about upcoming events.



These critters were found in **Mountain Creek** during a community creek day. The diversity of species indicates healthy water!

Signal Mountain Streams Update

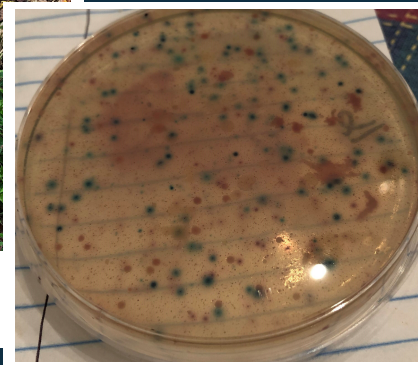
We had a visit from our grant administrator, **Sam Marshall**, to look at the abandoned mine lands in the **Middle Creek** watershed on **Signal Mountain**. Two of the tributaries to Middle Creek are on the polluted streams list due to drainage from abandoned mines. Thanks to one of the former miners, we could give Sam some history of the mining and why we are finding collapsed tunnels around some of the mines. Sam could not believe how many abandoned mines are in this watershed! **The Tennessee Department of Environment and Conservation (TDEC)** has completed their reclamation project and reseeded the areas with native plants and grasses.

WaterWays is planning a community tree-planting project to give the regrowth of the forest a jumpstart. Our watershed coordinator, Scott, is working with the project engineer to design natural treatment systems to improve the water quality in the mined areas. Our watershed project also includes working with homeowners to reduce stormwater runoff and improve the functioning of septic systems that are polluting our creeks with *E. coli* and other sewage-borne bacteria. Sampling along **Bee Branch** showed very high levels of bacteria in some of the smallest tributaries making us believe that the areas around smaller branches might be a good place to start working on septic system remediation. ***We still would not recommend playing in Signal Mountain streams after a big rainstorm!***



Kristen Woodall, our new AmeriCorps Vista samples water in Bee Branch.

E. coli growth on this plate shows this creek is contaminated with sewage. Ewww.



Meet Scott Ruth - WaterWays Watershed Coordinator



Join the Young Professionals

Make a difference for WaterWays

Our **Young Professionals**, led by **President Meghan Ploch**, have been actively involved in many projects this year - from adopting a section of **Mountain Creek** to volunteering with the **Tennessee River Rescue!** They also connected WaterWays with Chattanooga Football Club for a giveback night!

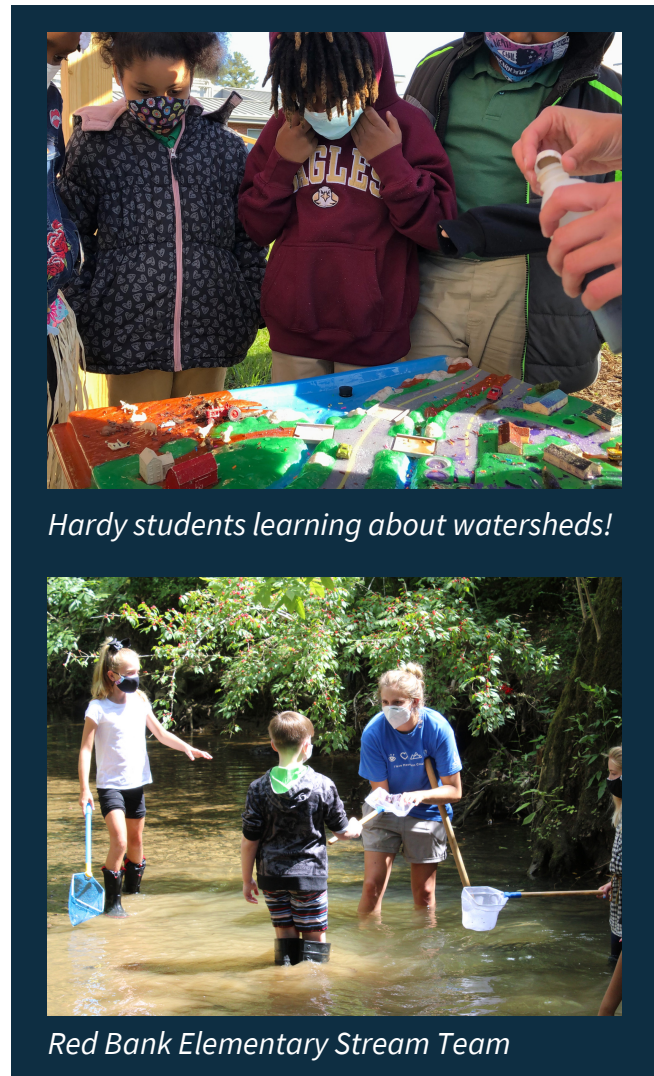
If you know anyone who might be interested, please contact marybeth@mywaterways.org

School Programs

WHAT A YEAR FOR PROGRAMMING!

In spite of Covid, **WaterWays** was able to get back to work in virtual and outdoor classrooms. Schools such as **Red Bank Elementary, Hardy Elementary,** and **Silverdale Baptist Academy** participated in our Stream Team program! Our Stream Teams are environmentally-minded students who meet regularly during the school year to explore their local waterways. Our groups focus on asking questions and creating solutions for improving the health of their stream. At Stream Teams, kids get to dip their toes in real-world science. Our staff teaches the students about the basics of water quality testing, flow measurement, macro-invertebrate sampling, common creek restoration methods, and the ecosystem as a whole.

We were lucky to work with many more students teaching about our local water quality issues, brainstorming unique solutions, and spreading awareness!



Hardy students learning about watersheds!

Red Bank Elementary Stream Team

GREEN INFRASTRUCTURE INSTALLATIONS!

Last spring, WaterWays installed SEVEN new on-campus rain gardens at Ooltewah Middle School, Harrison Elementary School, East Lake Elementary, and Hunter Middle School. Students from each of the schools helped design and install rain gardens and pollinator patches to help reduce harmful stormwater run-off and improve infiltration. We can't wait to expand on these installations this coming Spring!



East Lake Elementary



Hardy Elementary



Ooltewah Middle School

Mueller Sponsors Hardy Elementary School Programs



A big thanks are due to one of our first education sponsors, **Mueller**, for sponsoring programs at **Hardy Elementary**! This Spring semester we programmed with all of Hardy's 3rd and 5th-grade students teaching about watersheds, stormwater, and green infrastructure. In the fall of 2020, WaterWays in partnership with **Wild Ones**, helped students install a rain garden near their newly constructed outdoor classroom on **Hardy's** campus. The students were able to add more plants in the space as well as plant over 20 trees this spring! There is nothing more encouraging than hearing kids express their joy and empowering them to take care of their community. We can't wait to see these young stewards again in the Fall. **Thank you MUELLER Company for your sponsorship and support!**



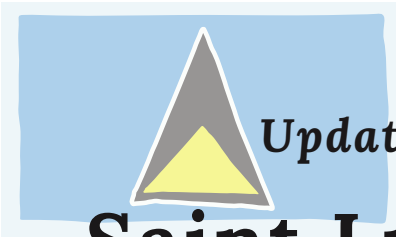
Sea turtle spotted on Sapelo night hikes

OPPORTUNITIES FOR EDUCATORS

Ten Hamilton County teachers ventured this summer to the secluded island of Sapelo in the Golden Isles of South Georgia. The annual Sapelo Environmental Education Professional Development course is all about exploration, collaboration, and expanding their teaching tool box! The immersive, five day experience equips Hamilton County teachers with the tools they need to implement hands-on scientific learning in their own classrooms. If you or someone you know is an educator in the Hamilton County area you can apply for this Professional Development course! The next trip will be sometime this coming June. Contact us if interested! Thanks to our fiscal sponsor Volkswagen for supporting this trip year after year!



Sapelo teacher excursion vehicle



Update from Saint Lucia

Caribbean SEA (Student Environmental Alliance) was originally founded in 2004, and subsequently expanded to address water quality issues in the **Southeastern United States**. In the spring of 2019, the US branch rebranded to **WaterWays**, and soon the **Caribbean** division will follow as **WaterWays Caribbean!**

On the Caribbean island of Saint Lucia, WaterWays Caribbean recently completed a project that was funded by the **UN Global Environment Facility Small Grants Program (UNGEF SGP)**. The goal of this project was to improve water quality in Ravine Claire, a micro watershed in Soufriere, a small town located on the west coast of the island. We raised awareness of the residents of Ravine Claire and the wider population of Saint Lucia about the quality of water in our rivers and sea.

Activities included:

- Exhibitions for World Oceans Day and World Water Day
- Participating in the first UN GEF SGP Knowledge Fair
- International Coastal Cleanups in Soufriere and Canaries
- School programs and lectures at most of the schools in the region



As part of the United Nations regional program Integrating Water Land and Ecosystems Management (UN IWEco), we established a Citizen Science program with residents from Fond St. Jacques to conduct monthly assessments of the river bank and the quality of water in the Soufriere River. Mrs. Sharla Cadette, one of the Citizen Science volunteers said **“we need to get more people trained so that more people from the community will be aware of the quality of water in the river.”**

We installed three biogas digesters at pig farms in Fond St. Jacques, Zenon, and Belfond. These farms are now demonstration sites for other farmers and agriculture students to learn about using biogas digesters to treat animal waste, using methane gas for cooking, and the methane gas nutrient-rich effluent as fertilizer. In conjunction with the Agriculture Ministry, pig farmers and agriculture officers were trained in digester design and maintenance and best practices in small ruminant husbandry. Mr. John Bannister, one of the recipients of the biogas digester stated, **“I would encourage other pig farmers to get a biogas digester because we need to clean up the river. Thanks to you, I now know how dirty the water was and it is impacting people lower down.”**

We hosted an organic farming workshop which was jointly funded by a **Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)** project. Fourteen farmers were trained in organic farming principles, making organic fertilizers and pesticides, seed storage, and composting. One farmer converted over two acres of his farm to organic farming due to this project to support a farm-to-table tour he started at Grand Eden Estate in Fond St. Jacques.

Other activities this year included:

- Mapped six springs in the Ravine Claire hillside, used by Water Resources Management Agency to identify new spring sources for drinking water
- Trained over 60 Caribbean Youth Environment Network members from across the Caribbean in water testing for Citizen Science projects
- Provided numerous environmental training programs for youth
- Restarted the Marigot community environmental youth group

Meet Colleen!

Colleen is a former Peace Corps Volunteer to St. Lucia and is now our Program Assistant! She has a background in education, worked at La Croix Maingot Combined school while a PCV. She is coordinating the Marigot Community group and assisting the Young Professionals.



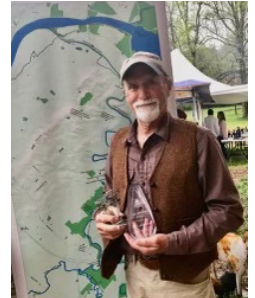
Community Events

Calling for nominations for 2022! Last year was our first **Big Splash Awards** at Save Water Drink Wine. We are looking for nominations for a Community Citizen and Businesses of the Year for their service to our local watersheds and waterways!

SEND YOUR NOMINATION TO MARYBETH@MYWATERWAYS.ORG

BIG SPLASH 2021 AWARD RECIPIENTS

Sometimes we fail to acknowledge the great work done behind the scenes for our watersheds. Last year, WaterWays decided to rectify that and developed the first-ever **Big Splash awards!** We gave out two awards for community members, one to a company or business and the other to a community citizen who are unsung **heroes** of our waterways. At Save Water, Drink Wine last year, we awarded our first Business award to **Barge Design Solutions**, who not only restore our streams in their work, but also steward streams as volunteers. Our community citizen of the year, **Bill Raines**, has become a true tree hugger, protecting Mountain Creek through actions at his business and through his personal work. We are seeking nominations for these two awards for 2022! WaterWays also awarded two volunteers of the year for their many hours of volunteering and exceptional help to our mission. **Jim Ledbetter** and **Corinne Giagnorio** were our first two volunteer award recipients. *We can't accomplish what we do without our wonderful volunteers!*



NATURE BY THE PINT!

3RD THURSDAYS
OF THE MONTH
NOVEMBER-MARCH
6:00 -7:00 pm

This fall and winter WaterWays is brewing up some lively lectures about all things nature. Please join us on the 3rd Thursday of the month, November thru March.

MEET AT TANASI
BREWING COMPANY!
ADDRESS: 1510 RIVERSIDE DR,
CHATTANOOGA, TN 37406



MARCH 26, 2022
SAVE THE DATE!

Save Water,
Drink Wine!



food • beer • wine • community

Our largest annual fundraiser is BACK-- it just looks a little different this year!
Join us outside on the farm to celebrate and support our local watersheds.

WaterWays annual Save Water, Drink Wine fundraising party is back! Join us for an evening celebrating our area watersheds, all while enjoying local food, entertainment, and of course, wine! All proceeds will benefit our ongoing projects, including Stream Teams, educational outreach, and restoration. Can't wait to see you there!



WATERWAYS

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