



# **Friends of Deckers Creek** 2020 State of the Creek Report



**Our Mission:** To improve the natural qualities of, increase public concern for, and promote the enjoyment of the Deckers Creek Watershed.



## What We've Been Up To



This year seems to have flown by like the flick of a fly fishers cast. Oftentimes it is hard to see how far the flow of life has taken you from the streambank where you started and it seems 2020 feels particularly this way. Looking upstream, we have gotten our feet wet with a great deal of projects this year and have been so happy to work on them with our community members: even if the ways in which we work together looks quite a bit different than years prior. Although we may not be able to interact with each other as much physically, we have been quite active in other ways.

FODC continues to maintain seven Acid Mine Drainage treatment sites that remove thousands of pounds of pollutants from our watershed each year. Our active AMD treatment site off of Rt. 7 has had a vibrator installed to more uniformly disperse lime treatment and large scale maintenance upgrades have begun on both our passive and active AMD treatment sites. Recently we have been awarded a grant to begin remediation efforts in the Dillan Creek area, a tributary in the upper section of Deckers Creek. Additionally, FODC has been granted approval for a data logger that will help provide us with steady data of a stream site and we are currently collaborating with WVU engineering students to design a proposal for a second one. It is our hope to have one data logger in the upper part of the watershed and one in the lower portion to better visualize and understand the overall health of the watershed over time. The WVU Design students have created a kiosk explaining our AMD passive treatment site that will be installed along the Deckers Creek rail trail. We are ecstatic NRCS (Natural Resources Conservation Service)

and the DEP are finally making headway on the Richard Mine treatment plant which will be funded by the NRCS and operated and maintained by the DEP. This has been the largest polluter of our watershed and we are excited that remediation efforts are finally coming to light! The first stage of the project is scheduled to begin this year. Find out more at https://deckerscreek.org/richard/.

Anglers sent in photos of fish catches in the early spring and a few fish have even

been spotted in the lower part of the watershed - a great indication that water quality is improving! Our macrosampling results show plenty of water pennies, caddisfly larvae and some hellgrammites in the middle watershed. With many reaches of Deckers Creek now teeming with life, they've become hotspots for outdoor recreation, and we want to ensure that they meet recreational safety standards. Thanks to the EPA, we now have an in-house coliform and E Coli sampling lab. You can check out the safety levels each month at swimguide.org.

Our Outdoor Learning Park serves as an inclusive greenspace for all who wish to have a place to relax in nature, as well as a location for educational activities led by FODC and other partners. Flowers bloom in rotation, butterflies and birds migrate through, water babbles and fish have been seen by the bridge! We update a chalk board with environmental lessons as an alternative educational tool and a place for individuals to express themselves. A small Restoration Celebration Event was held in collaboration with the MHS WATER Club, a group of high school students who are passionate about environmental protection and advocacy. We removed invasive species, planted trees, installed biologs to mitigate erosion issues, and students presented on Action Items for those who want to help create a healthier environment.

Prior to the pandemic, we were ecstatic to interact with afterschool programs through STEAM activities and provide an artistic outlet for community members to learn and express themselves. As we are all adapting with the times, we are working on ways in which we can bring this resource to the community virtually. Looking to the future, please keep an eye out on FODCs online platforms for opportunities. While we continue to offer anonymous reporting of creek concerns on our CreekDog website we are in the midst of creating an angler citsci program too! This will allow anglers to send in photos and report their catches which will help us gather data on our fish populations. Reporting will have the option of being done anonymously and as always, we thank-you for practicing and advocating for catch and release protocols as we work toward a more sustainable fishery!



Interacting with our community members through environmental education, fundraisers, and clean ups has always been something that keeps us inspired and we miss seeing you all in person so very much! This summer you might have seen our dedicated essential volunteers working in the park or remotely cleaning up the watershed following COVID precautions. We are so grateful for all of our volunteers that have helped to maintain FODCs efforts as well as our remote and virtual volunteers for creating brochures and virtual education on our social media. Thank-you for your unwavering

### contributions to us and the community, we are truly humbled by you!

Background photo by Rachel Pell

# **Transitions: A Message From Our New Director**

I have been here before...writer's block. There is so much to talk about for 2020. How about COVID? That gets talked about aplenty. Election year and politics? - oy vey! So much has changed about the world in 2020...transitions, yes that is relatable, I can probably make it interesting, and I don't think it's overdone, at least not yet.



Transitions for me, transitions for FODC. Transitions as to how the world and FODC will look after 2020. I am finally transitioning to an office job and after three years of fieldwork, I am learning that I do enjoy spending time in a climate-controlled office (though I will never admit it). This climate-controlled office (now a climate-controlled house) is a large improvement from a pickup truck to shelter me from occasional bitingly cold winter days, days when it's 35 degrees and rainy, days when it is miserably hot, and of course, ticks. It's true, there was no shortage of pleasant days in the field, but I am trying to sell myself on the narrative that shelters are a nice place to spend time.

am stepping into a sheltered office after spending years at Friends of the Cheat learning everything I could about mine reclamation, Acid Mine Drainage, working with professional partners and how to run a successful watershed organization. Today I am applying my de-

grees, my field knowledge and previous experience to lead Friends of Deckers Creek into the future. A future that looks much different after 2020 than what I imagined in 2019. These days, we have transitioned to working remotely, zoom meetings, catching up with old friends virtually, lingering smells from copious use of scented hand sanitizers, face masks as bona fide fashion accessories, and latex gloves that are no longer reserved just for the dentist's office. The world has transitioned to an unexpected, yet finite new normal (hopefully). Just like the world, Deckers Creek is transitioning to an unexpected future. Yes, I am talking about Richard Mine.

Richard mine has long been the single largest degrading factor in the Deckers Creek watershed, long thought to be an insurmountable polluter. Through years of back and forth, more "no"s than "yes"s, needed technology and funding has finally arrived, and this is no "short term" transition. Construction is beginning on a multi-million-dollar treatment system. This is the transition that will change Deckers Creek. This is the last Acid Mine Drainage puzzle piece for the main stem of the creek. Headwaters to mouth will, for the first time in decades, finally run clear. The WV Department of Environmental Protection has secured millions of dollars of funding from various sources to build an active Acid Mine Drainage treatment system similar to a municipal wastewater



treatment system. The completed construction is still a year or more off but will drastically change the health, and the landscape of Deckers Creek as it flows through downtown Morgantown. Of course, there is still plenty of remediation work to do upstream, yet the Richard Mine, which has long been the polluting leviathan of the watershed, will soon transition into a memory to be read about in the archives of the FODC website.

Now that I have broken through my writer's block, this year 2020 is without a doubt, a year of transitions. Transitions for me, transitions for Richard Mine, transitions for Deckers Creek and transitions for the FODC community. These transitions will continue to shape our community and the world for years to come. When looking at the progress FODC and its community has made through the many transitions of 2020, 2021 looks brighter than before.



### Leave It Healthier Than You Found It!

With the pandemic throwing everyone's schedule to the wind a large influx of people are rushing to the great outdoors. Although we are ecstatic at this in many ways, those in the outdoor industry feel overwhelmed when trying to provide education with limited staff and have been noticing an increase in litter and improper use of green spaces! Please help us teach and inspire others to follow the Leave No Trace principles when heading to the outdoors and spread the word by advocating why practicing LNT is important to you! Remember to properly dispose of your PPE (masks, gloves, and sanitizing wipes) to keep your environment healthy while keeping yourself healthy! Go to LNT.org to brush up on the 7 Principles.

Don't forget COVID-19 trail etiquette in addition to outdoor etiquette! Enjoy local green spaces, avoid busy times and crowds, and most importantly-mask up and allow a kayak sized



# **Citizen Scientist Spotlight**



While walking along the creek to reach her sampling site, Stella Carlson, Friends of Deckers Creek's most recently initiated citizen scientist, encountered two things of note; a bright white skeleton of one of the area's native animals, and a large, very much alive snake. After making the short walk to her site, Stella carefully took water quality measurements and uploaded them to FODC's CitSci website. While being part of a citizen scientist program may seem intimidating, Stella feels that "Anyone can learn if they take the time," and added that she enjoys participating in citizen science because in addition to presenting an opportunity to learn about our environment, it's just nice to get out into nature. What's most interesting about Stella though, is that at twelve years old, she is Friends of Deckers Creek's youngest citizen scientist. Before getting involved with FODC, Stella was already familiar with the environmental impact of Acid Mine Drainage, she had after all won a WVU Engineering essay contest and used AMD as her topic of choice. But it wasn't until she learned about FODC in her 4th grade gifted class and as part of the SOAR summer camp, that Stella decided that she wanted to become involved.

After Chuck Karnak's wife read a short newspaper column about FODC's CitSci program, she immediately thought of him. Chuck, a retired pharmacist and clinical pharmacy professor, quickly became taken with the idea. He had noticed that Deckers Creek often looked unhealthy as he regularly bicycled up and down the Deckers Creek Rail Trail, but Chuck had also grown up in a heavily polluted city and he realized the true costs of pollution, "I don't want the same for my children and grandchildren ... think about the outcome, public health, skin issues, asthma and the list goes on" he added. "In our age group, you have to be a role model," Chuck continued, stressing the importance of instilling a sense of environmental stewardship in young people.



One motivation that Stella and Chuck both held in common was the satisfaction they felt in helping to build the scientific knowledge base, and ultimately, clean up our waterways. "You gotta start somewhere. Look at the outcome of what you are doing, you're improving possible drinking water, and water for recreation," Chuck said.

When asked what she'd tell people who are interested in participating in citizen science, Stella said, "it's something anyone can do, it's not exclusive, and I know that I'm helping the environment." Chuck also stressed that while the contributions made by citizen scientists can lead to real improvements in the environment, it's all hypothetical until you've actually recruited them, adding "you can't always depend on other people to do it," as a final call to action.



If you're interested in FODC's CitSci program, visit <u>www.deckerscreek.org/citizen-scientist/</u> for more info.

Remember, after heavy rains there can be higher levels of coliform levels in the watershed due to CSO overflow. Please be aware that coronavirus can be active in fecal matter and lives longer on cold wet surfaces. See if your favorite Deckers Creek recreational location passed at swimguide.org.





Our watershed is now on iNaturalist—the app that helps you identify plants and animals around you, while participating in citizen science! Snap a pic with your geolocation turned on and upload! Species identifications that you upload will automatically get added to the our watershed sightings. Simply search for the Friends of Deckers Creek Watershed drainage in the "Places" section to take a look at what others are finding!

CreekDog is an easy-to-use tool for watershed watchdogs. Report watershed pollutants such as trash, untreated sewage, suspicious drilling activity, or stream or wetland dredge and fill. Locate and report on pollution in the Deckers Creek watershed using CreekDog and we'll help you get the word out to the ap-



### propriate agencies in the Monongalia and Preston Counties, WV. Find out more at creekdog.org.

# **Celebrating 25 Years**



If you've taken a good look at the materials we've been using lately, you may have noticed that FODC has adopted a new logo for 2020 that acknowledges our organization's 25th year! We're incredibly happy to be celebrating 25 years, and while most of our stakeholders have had a firsthand view of the positive changes in Deckers Creek during that time, many are not aware of how FODC began so long ago. To celebrate our quarter century milestone, we took the opportunity to speak with some folks who played a big part in FODC's early success.

While the Acid Mine Drainage impaired streams within the Deckers Creek watershed have been an issue for decades, AMD wasn't FODC's main concern in the early days. "Our biggest focus was illegal dump cleanups," said Adam Polinski, one of FODC's founding board members and second board president, "because that's easier to work on than polluted water." When Scott Fogarty founded FODC in 1994, Deckers Creek was thought of as more of an open sewer than a natural waterway. After observing the beginnings of Friends of the Cheat and the positive changes that they were able to make in such a short time, Scott realized that the creek he and his friends kayaked in and rock climbed near was also a worthy candidate for restoration. "We were boaters and climbers who shared the same pull-offs along Rt. 7 and were sick of garbage and polluted water and could envision the Deck-





ers gorge trash-free with clean water," said Adam. The founders of FODC felt that there was no reason that the restoration projects that were underway somewhere else, couldn't also take place locally, so they decided to do something themselves.



While the concept of a watershed group is somewhat common and well known today, in the mid 90's they were few and far between. It wasn't until after FDOC achieved 501(c)3 nonprofit status in the year 2000, that more funding opportunities opened up and the scope of our organization pivoted. "It wasn't terribly difficult to get the WVDEP's [West Virginia Department of Environmental Protection] attention," said Martin Christ, former FODC Executive Director. Today Martin is the Northern Basin Coordinator at the WVDEP, as well as the 'go to guy' for all of FODC's remediation related quandaries. By the time that Martin took over leadership at FODC in 2007, the organization had already made some pretty big changes, going from a small but dedicated group of volunteers, to an organization with full-time staff that had taken on more complex remediation efforts.

Since 1994, FODC has changed in so many ways, but Martin isn't surprised to see where FODC is today, adding that "Friends of Deckers Creek is exactly where I expected it to be" with regard to the remediation projects that we continue to work on, and the benefits that FODC continues to impart on Deckers Creek and its tributaries. In the years since, FODC has accomplished more than we have room to list here, but for a short summary, check out our "What are We Up to Now" article.

Though change and transformation are inevitable over the course of 25 years, our core mission has never changed: To improve the natural qualities of, increase the public concern for, and promote the enjoyment of the Deckers Creek Watershed. And of course, none of this would have been possible without our dedicated volunteers, citizen scientists, granting agencies, OLP gardening group, board members, and donors. FODC thanks you all for making the last 25 years possible.





# The Kanes Creek Study

### WV-SCI Scores Observed in the Kanes Creek Subwatershed

#### What is a WV-SCI Score?

The macroinvertebrate Stream Condition Index (SCI) for West Virginia Streams is a repeatable set of criteria that is used to assess the biological health of streams in West Virginia. By looking at the diversity of aquatic macroinvertebrates sampled from each site, it's possible to evaluate the stream health at that location point in comparison to a healthy, unimpaired stream.

Any score over 78 is within the top 25th percentile of sampled sites and is highly comparable to unimpaired reference sites. Scores between 68 and 78 are comparable to below-average, but still unimpaired streams. Sites that score below 68 begin to appear increasingly different from unimpaired reference streams and can be considered less than healthy.







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The presence of total coliform and *E. coli* are measured in our lab and are compared to recommended limits. *E. coli* glow under UV light while total coliform do not.

### Average *E-Coli* Levels Observed in the Kanes Creek Subwatershed

FODC collected over 400 samples at over 75 unique locations in just over one year. This map shows the sites that passed or failed *E. coli* tests within the Kanes Creek subwatershed, according to the EPA's current recommended limit of 410CFU/100mL.

Coliform bacteria are present in the feces of warmblooded animals, including humans. The level of coliform bacteria in water is used as an indicator of fecal contamination.

One type of coliform bacteria is *E. coli*. There are many different strains of *E. coli*; while many are harmless, others can make you sick. The higher the level of *E. coli* in water, the more likely the water contains other harmful pathogens from fecal contamination.

Problems associated with high levels of coliform bacteria:

- Puts people at risk of getting sick.
- Depletes oxygen needed by fish and other aquatic animals.
- Interferes with recreation.
- Creates unpleasant smell.



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# **A Letter from The WATER Club**

Over the past year, we collaborated on a citizen science project with Friends of Decker's Creek and West Virginia University to monitor the water quality of, and establish a restoration project to improve the health of the Decker's Creek watershed. We formed the West Virginia Action Towards Environmental Restoration Club, or WATER Club, to learn about water quality, help create a creek restoration project, and educate through outreach events. We learned about techniques of evaluating stream health such as macroinvertebrate monitoring, measuring water composition, and quantitative observations through working in the creek near Morgantown High School and field trips to the Outdoor Learning Park and the West Virginia Botanic Garden. We then explained our findings to the Preston County TRIO program to expand those involved in the restoration project. Additionally, we participated in Morgantown High School's Earth Week to further educate students on the importance of caring for the environment. For the restoration project, we planned work in the area surrounding the Outdoor Learning Park to incorporate coir logs, which stabilize the stream bank, and live stakes, which grow into trees that also stabilize the stream break and help to promote wildlife. Overall, we hope to inspire more citizen science to help to restore Decker's Creek and other creeks affected by acid mine drainage.



Authors: Teagan Kuzniar, Asritha Sure, and the MHS WATER Club



Follow the WATER Club on their Instagram to check some Action Items you can use to help your environment or ask to join! @mhsWATERclub

### I'm a Friend of Deckers Creek!

### Thank YOU for Making Our Mission Possible!

Adam Polinski, Aldona Bird, AmeriCorps, Annette Tanner, Arthur Weldon, Bill Pennington, Blaine Turner Advertising, BlissBlissBliss and Elizabeth Halliday Reyn-

Your contributions keep us afloat!

Renew your membership online at www.deckerscreek.org and click on "Donate". Or feel free to send this ticket back with your contribution to:

_\$10	Student Individual
_\$25	Individual
_\$50	Family .
_\$75	Business Banafaatar
_\$100	Benefactor
_\$300	Clean Creek Program (CCP
_\$500	Major Donor
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Spriggs, Susan and Don Sauter, Terra Café, The Darren Tanner Charitable Fund, The Shack, The Source, The WATER Club, Tim Warner and Paula Hunt, Vicky

Shears, William F. Weiss, WV Land Trust, WV Rivers Coalition, WVNET, WVU Design team and Raegan Ricer, WVU Engineering team, WVU Fisheries team, printing services sponsored by Morgantown Printing and Binding.



kroger

And of course, to all of our amazing citizen scientists, gracious donors, all of our community members connecting with us by sharing their watershed adventures and advocating for a healthy, safe, and inclusive watershed for all - thank-you for reminding us that all of our hard work is worth it, you truly warm our hearts!

FODC staff alumni Rachel Pell, Maddie Ferrell, and Sarah Cayton; we wish you all the best on your career paths-may the world be a little greener because of you! You'll always have a home at FODC.

# **Other Ways to Support FODC**

GIVINGTUESDAY is a global day of generosity that takes place on December 1st following Black Friday but can really be celebrated any time of year! The global generosity movement was created to unleash the power of people and organizations to transform their local communities and the world acts of generosity. Please consider donating to our mission, volunteering, or advocating for a healthier watershed!

You can also link your Amazon Smile or Kroger Community Rewards to support FODC, sharing our re- Support us with



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