

Joe Hildreth Photography

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# **Friends of Deckers Creek** 2019 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.

#### A Letter from our Board President, Krista Kent:

I have driven over the Decker's Creek bridge at Marilla Park around 12,000 times, if my math holds up! All of these trips over the years span the four seasons, different times of day, and weather, from the picturesque, crisp, clear, sunny days; to the dark, windy, snowy days. During each of these trips, I wonder... Why do we not play in this creek? Why don't I see people fishing? Why isn't the creek part of Marilla Park's regular activities? What is wrong with the creek? How can we fix it? Who is responsible? Although, this wonderment was fleeting and before I know it, the interest in the creek has passed, until I cross the bridge again and the notions and curiosities repeat. Over and over, year after year!

One afternoon, in July of 2016, I found myself actually remembering this notion. So I googled "Deckers Creek," and to my surprise, I discovered a beautiful website. It's revealed to me that Friends of Deckers Creek is a well organized nonprofit, with lofty goals and tremendous successes! I dug deeper and found a Board of Directors, education and fundraising events, and a functioning budget, thanks to private donors, state, local, and federal agencies. As the wheels began to turn, I thought, maybe I could get involved. So I reached out before the thoughts and ideas were interrupted again by the real world! The Executive Director replied immediately, scheduled lunch, and before you know it, I was invited to a Board meeting, became a Board member, and later became a Board officer. It turned out that my fundraising and management experience was valuable, and my lack of scientific, environmental, and geologi-

cal expertise was of no concern. What I've been a part of in the last three years, ranks as one of my most significantly rewarding, educational, challenging, and successful endeavors!

Deckers' future is so bright we all gotta wear shades! The creek, in the Marilla area, will soon become just what I wondered about in the beginning. It will be a place to fish, swim, and be incorporated into Marilla Park's activities. With planning, support, and collaborative remediation goals, our objective will be met! We are very excited about the future of the creek and community and I'm proud to be a key part of that team. So, as your mind wanders on your way to work, make a note, reach out, get involved, make a phone call, send an email, because you never know how this will impact your life, and your community! My experience has triggered passion, pride and enthusiasm!



-Board President, Krista Kent

### **Upcoming Events**

#### **Drafts on Deckers**

October 25th at Morgantown Brewing Company Our 5th annual beer tasting proceeds night is back!



Looking to do more for your community? FODC is recruiting volunteers for our Citizen Science Program. Check out deckerscreek.org/citizen-scientist to learn more and get involved!

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This craft beer tasting event features local brews and musical talents, including The High Street Jazz Band.

Go to FODC's website or Facebook for more details and to purchase tickets for this event.

For more information on any of FODC's events, go to www.deckerscreek.org/events or contact us at (304)292-3970.

### Where is the "OLP"?

Our Outdoor Learning Park is located directly behind the Kroger in Sabraton along the Rail Trail. For parking, you can park toward the back of Kroger on the side with the gas pumps. There is a small trail that will lead you right to the Rail Trail and Outdoor Learning Park.

# FODC Tracks Fecal Coliform Levels

While remediation of acid mine drainage has improved conditions for creek critters, it has also exposed the issue of fecal coliform bacteria in Deckers Creek. Fecal coliform bacteria derives from the intestines of warm-blooded animals, and can potentially contain *E. coli*. Not all fecal coliform or *E. coli* strains are dangerous, but high levels do indicate the potential presence of other harmful pathogens.

Deckers Creek and six of its tributaries have been determined to be impaired by fecal coliform bacteria by the WVDEP. Sources of fecal coliform include combined sewage overflows (CSOs), outdated wastewater treatment facilities, and illegal straight pipes.

This is not only a health risk for the public, but also for aquatic life



*E. coli* bacteria fluoresces under UV light after we added a special compound to the water sample to reveal the bacteria levels.

because fecal coliform bacteria depletes oxygen in water needed by fish and macroinvertebrates.

In September 2018, FODC was **1 of 10 in the nation** (and the first ever WV organization) to receive the EPA's Environmental Justice Collaborative Problem-Solving grant for a project aimed at reducing fecal coliform pollution in the Deckers Creek Watershed. FODC has collected over 250 samples and analyzed each one for *E. coli* levels. Results have shown that *E. coli* concentrations are affected by precipitation and seasonal changes. Several problem areas have been identified, but other sites, such as the popular Deckers Creek "Gorge," have passed as safe for recreation.

FODC is in the process of pinpointing the sources of these *E. coli* "hot spots." FODC is working with Morgantown Utility Board (MUB), a project partner, to develop a plan to reduce the discharge of combined sewage overflows. FODC intends to monitor *E. coli* levels for years to come, and share results with the public. It's time to solve the sewage problem in Deckers Creek so that recreation and enjoyment of the creek can prosper.

## **Outdoor Learning Park**









The OLP serves as a venue for outdoor education, demonstrations, and recreation. Thanks to a contingent of dedicated volunteers and master gardeners, the OLP features gardens of native West Virginian flowering and aromatic plants.

The diversity of native plants makes the OLP a great place to catch a glimpse of interesting wildlife. The Milkweed in our butterfly garden ensures that Monarch butterflies can be seen during the right time of year, and due to the relative lack of disturbances, many nesting birds can be found in the OLP.

If you'd like more information on Friends of Deckers Creek, or would like to help out at the OLP, please visit our Facebook page or website for more information.



# Remediation

FODC operates 7 acid mine drainage (AMD) remediation sites in the watershed. There are 5 passive treatment sites and 2 active treatment sites. Active treatment sites are easily distinguishable, as they have large silos filled with limestone powder, typically referred to as hydrated lime (see picture on right).

KCS1 actively distributes hydrated lime into a tributary to Kanes Creek and Deckers Creek. The hydrated lime mixes with the acidic mine water, causing a reaction that pulls metals (especially iron) out of the water and collects them before they can enter the stream.

Recently, upgrades have been done to one of the active treatment sites, Kanes Creek South Site #1 (KCS1), pictured on the right. The treatment site received the addition of a low pH iron oxidation terrace, aeration and mixing wells powered by solar panels, and a settling pond. These additions will help improve the removal of iron and other toxic metals that come from acid mine drainage.





The map to the left displays the results of iron testing at our 13 Clean Creek Program (CCP) sample sites in relation to the location of underground mines. These CCP sites are analyzed quarterly for the levels of various metals.

The map outlines the Deckers Creek Watershed, with Deckers Creek highlighted in dark blue. As you follow the creek's flow from Preston County to Morgantown, you can see how the presence of underground mines affects the iron level at each site. This is apparent downstream of the Richard Mine, where you can see the sites with the highest concentrations of iron. There are many underground mines in Preston County, which is why FODC's 7 treatment sites are all located in Preston.

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# Life in Deckers

Trout populations in Deckers Creek are a significant indication of water quality. Trout thrive in cold temperature streams with low levels of pollutants, especially metals. Populations of trout have been flourishing in the upper portion of the watershed, which indicates the water has low pollution levels. In the past several years, brown trout have been stocked in Deckers through Trout Unlimited. Increasing numbers of trout in our watershed is a good indication that FODC's efforts to remove acid mine drainage through our remediation projects is working.

The presence of benthic macroinvertebrates or "water insects" is another indication of water quality. Mayflies, stoneflies, and caddisflies are all sensitive to pollution and are called indicator species. When we find them in the creek, we know there must be low levels of pollution in that area. We find these indicator species throughout the watershed, depending on the water quality. FODC also instructs several community macroinvertebrate sampling tutorials, which are always fun!





## Fish Species of Deckers









Bluegill







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

_\$10	Student Sof Deckers
_\$25	Student Individual Family
_\$50	Family
_\$75	Establishing
_\$100	Benefactor Benefactor
_\$300	Clean Creek
	Program (CCP) Sponsor
_\$500	Major Donor
NAME	
ADDRESS	2
PHONE	

### Thankyou for Making this **Program** Possible

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#### E-MAIL

\$60

Renew membership online at www.deckerscreek.org and click on "Donate" **Friends of Deckers Creek** PO Box 877 Dellslow, WV 26531 **Business Member** \$150 **Event Sponsor** Clean Creek Program (CCP) Sponsor \$300

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### **Other Ways to Support FODC**

Mountain People's Co-op Register Roundup

From now through September, you will have the option to round up your bill at Mountain People's Co-op, with all proceeds benefiting FODC!

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