

# Monitor & Protect Our Waters

#MillCreekWOM

**Get involved today!** 

The Mill Creek Watershed encompasses 166 square miles (106,000 acres) which includes 37 independent political jurisdictions in Butler and Hamilton Counties. 2023 marks the ten year anniversary of MCA's Water Quality Monitoring (WOM) program. Since 2013, we have grown in the numbers of volunteers we coordinate, sites we monitor, and tests we perform (10 tests per site). We are keeping a watchful eye on more of Mill Creek than ever before and we could certainly use more help both financially and physically with volunteer samplers and analysts.

The Butler County Upper Mill Creek Water Reclamation Facility in West Chester, Ohio serves as the official laboratory of the MCA WQM program. On the second Saturday of every month, from March to November, an army of volunteers collects water samples from every corner of the Mill Creek Watershed (57 unique sites in total) and delivers them into the hands of volunteer lab analysts. Our analysts then reveal the chemical truth about the health of the waterway ecosystem; the water quality in Mill Creek has improved dramatically! The sampling analysis reveals high phosphorus and increasing conductivity (readings indicating the presence of salts). MCA continues to monitor *E. coli*, especially in the lower watershed area impacted by the power failure at MSD which resulted in millions of gallons of untreated water entering Mill Creek and the West Fork Creek tributary.

In response to the influx of contaminants entering the waterway during the power outage, Mill Creek Alliance mobilized a team of staff and WOM volunteers to sample a dozen affected areas for contaminants. To mitigate the impact of effluent waste discharging in the aquatic ecosystem, MCA quickly filed a request to the U.S. Army Corps of Engineers to increase the amount of water released from the West Fork Mill Creek Dam at Winton Woods Lake.

The release from the lake kept streamflow levels higher than normal and transported waste material out of Mill Creek and into the larger Ohio River. MCA was the only organization that sampled Mill Creek during this critical period. Testing at these sites and analysis of data have continued through the present day and biological monitoring will be necessary going forward.



What is clear is that without MCA's swift action, the damage done to our local watershed would have been far worse. With power back on at MSD's Gest Street Wastewater Treatment Plant, the input of freshwater released from Winton Lake, and all the rainfall that has occurred through spring, there is much hope for Mill Creek rebounding once again. We continue to need your support. Consider donating today to help us continue our sampling and analysis, clean up our watershed, and plant native species to restore the ecosystem of our impacted Mill Creek Watershed communities.

#### **Upcoming Calendar of Events**

- July 29: Pre-Paddlefest Clean up of Mill Creek by canoe for Mill Creek Peek
- Register with Ohio River Paddlefest and paddle up our Mill Creek Peek Aug. 5:
- **Aug. 26:** MCYC Urban Stream and Biking Adventure
- Sept. 16: Volunteer Appreciation Picnic Party in the Park
- Sept. 23: Celebrate the Great Outdoor Weekend and Run the Riffles with MCA
- Sept. 1: Support MCA's effort to clean the watershed in our annual Trash-A-Thon fundraiser
- Oct. 21: Urban Stream Adventure from Salway to the Ohio River Barrier Dam
- **Oct. 28:** Join us for the 11th Annual Upper Mill Creek Clean Up

For event details, visit our website: themillcreekalliance.org/calendar-of-events

Volunteers are always needed for WOM on the 2nd Saturday of each month (March-Nov.) contact aroberts@themillcreekalliance.org Register for our next WorkPARTY in the Watershed (1st Sat. of the month) contact bkottler@themillcreekalliance.org Plan ahead for the 2023-24 School Year with our Environmental Education Programs contact jdwyer@themillcreekalliance.org

### Invest in Your Local Watershed

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Oh, the places you can go on the wondrous Mill Creek, an urban waterway that bisects Greater Cincinnati; it always has marvelous stories to share. Traveling this waterway is a grand adventure! You are at times encased by marvelous black walnuts (Juglans nigra), startled by the sounds and sights from bustling railyards and factories near I-75, or even impressed by the glistening array of colors from the smoothed glass-lined pebble banks. Along much of Mill Creek, it is easy to forget that you are in the heart of an urban landscape.

This river was once overlooked and historically mismanaged by our region's former inhabitants. In decades past, the common philosophy was "the solution to pollution is dilution" or "if I toss it in the river, I will never have to deal with [insert undesirable material] again." In the eyes of most experts, Mill Creek was thought to be irretrievable as recently as the 1990s. Objectively, to look at the state of Mill Creek in those days and think, "You know, I can do something about that," you had to be either very brave, a little crazy, or both. Whether Mill Creek Alliance's (MCA) founders were brave or crazy (or both), today we are a dynamic nonprofit with a successful 25+ year track record of making a difference for the stream, engaging thousands of volunteers and students, and restoring local watershed communities and habitats.

MCA has been the consensus-building engine for the 37 independent political jurisdictions and other watershed stakeholders to plan and take action on a regional, versus purely local, scale. It has enabled communities in the Mill Creek Watershed to access financial aid and implementation-support for environmental education, flood and stormwater management, stream restoration, water quality improvement, and enhanced access for recreation.

The dark days of Mill Creek's past have imprinted lasting effects on the watershed and surrounding communities. MCA is striving and succeeding at reconnecting communities to this once-again flourishing ecosystem. Nature enthusiasts who explore the watershed regularly speak of their sightings, such as a bald eagle (Haliaeetus leucocephalus) fighting a Canada goose (Branta canadensis) in the sky above, colorful wood ducks (Aix sponsa) dabbling for food on the river bottom, and the white striped hybrid bass (Morone chrysops X M. saxitilis) that seem to get bigger every season as local anglers catch and release their trophies. In fact, one angler of Mill Creek caught 18 different species of fish in 2022 alone (we have the photos to prove this is no fisherman's legend). There was a time when the world thought we were crazy to attempt to restore our Mill Creek; we are glad we persevered.





**DONATE TODAY** 

themillcreekalliance.org/donate





## We Embark On

#### #MillCreekRecreation



The first time someone adventures in the mighty creek, we highly encourage them to join our American Canoe Association-certified canoe instructors and guides of the Mill Creek Yacht Club (MCYC), a group of intrepid explorers who are the originators of paddling with a purpose and getting 'hands dirty and feet wet' to make an impact on the watershed. The MCYC has propelled the transformation of the Mill Creek Watershed and has initiated hundreds of new paddlers including local, state and federal officials,

residents, and college students to further promote this natural, community asset.

Unfortunately, the watershed is is also home to a number of aggressively invasive species e.g. Porcelain Berry (Ampelopsis brevipedunculata), Amur honeysuckle (Lonicera maackii), and Johnson grass (Sorghum halepense). Countless hours of laborious love are required to reclaim an area from these species. Thankfully, the Alliance includes 327+ volunteers who advocate and assist in this restoration. This urban landscape is now hosting a thriving display of biodiversity which makes for a rather tantalizing experience for all paddlers. Mill Creek meets Ohio EPA's secondary contact standards most days, meaning the water quality is usually just fine for fishing, paddling, and wading!

MCA and MCYC have expanded our network with ORSANCO, Cincinnati State, University of Cincinnati and Xavier University to engage collegiate-level students with our watershed by leading water quality sampling events by boat. MCYC has also enhanced the access points along Mill Creek, most notably the access point at Salway Park where we take folks paddling during the Great Outdoor Weekend (Join us 9/23/23!). Few guality access points exist on Mill Creek, but with support and funding from donors such as you, MCA is planning the installment of more ramps and public landings.

For now, one of the best available routes to put in would be at Haffey Field in Reading, Ohio and take out at Salway Park in Northside. If you're up for a grander adventure, Salway Park to the Ohio River can be a breathtaking stretch, especially when paddling amongst the autumnal leaves and glistening waters during the golden hours of day. You will have to portage (get out of the boat and walk) at a few riffles, and potential foot entrapments exist along with other urban side effects. Because of these hazards, if you venture Mill Creek without MCYC, please wear closed toe shoes and always wear a life jacket. Even when paddling through an urban area, you may easily forget you are in the city when you become engulfed by overarching canopies, fluttering birds, schools of fish, and architectural wonders. It becomes rather apparent why the Great Blue Heron (Ardea herodias) is frequently spotted wading and using its spear-like beak to catch its fishy prey. Join us for our next Urban Stream Adventure!







message of hope has inspired 327+ volunteers to come out to help restore the Mill Creek Watershed and more than 567 students to come out to explore the stream's ecology. Volunteer restoration work (Work PARTIES) continue to grow in size. On every first Saturday of the month, the groups focus on removing invasive species and replacing those with native species such as live stakes of black willows (Salix nigra), saplings of bald cypress (*Taxodium distichum*) and red oaks (Quercus rubra), as well as an abundant assortment of native wildflowers. Much of the work has been done in cold winter weather and has set the stage for foliage growth in the warming temperatures; be on the lookout for native plants in the riparian zones of Mill Creek. Though thousands of new trees and hundreds of thousands of new seeds have been introduced to Mill Creek, we need your help to continue this restoration. Join us for a WorkPARTY in the Watershed or coordinate with your school for service learning opportunities with MCA.

This past year, some of the places our restoration activities have taken us to:

- Westchester Wetland Restoration, located adjacent to Ellis Lake Wetlands and Gilmore Ponds Metropark, which have some of the highest bird counts in five Southwest Ohio counties. Davey Resources Group is both designing and building the project, which will be substantially completed by the start of 2024.
- Twin Creek Wetland Enhancement in Sharonville revisits one of the largest stream restoration projects in Southwest Ohio. This 5-acre wetland was originally designed to have flowing



#MillCreekRestoration

have already been, or are scheduled

to be mitigated or removed including

two located in the mainstem at River

Miles 12.2 (Reading) & 12.0 (Arlington

projects in Salway Park and Haffey Field

in Reading, Ohio. The LHD's in Arlington

mitigated with installations of riffles, will

Heights and Reading, which are to be

provide another hands-on field science

opportunity. These riffles are basically

biodiverse aquatic habitat, oxygenate

the water, and impact water velocity

which helps reduce erosion. Students

are able to wade these riffles in search

of macroinvertebrate species amongst

the rocks and complete environmental

engineering calculations; this provides

experience for future environmental

engineers and ecologists to solve

dillemmas our watershed faces.

underwater fish ramps that provide

Heights).





great outdoors! The most recent State of Ohio

Discovering a black rat snake (Pantherophis obsoletus) eating a field mouse (Mus muscus), watching a beaver (*Castor canadensis*) build a dam, or viewing a great blue heron (Ardea *herodias*) fishing for prey, are no longer rare anomalies, but common rewards for the curious explorers of the Mill Creek Watershed It is thanks to those who saw a future for our Mill Creek. MCA wants your students to be empowered in the sciences and become familiar with their local watershed. Sign up for one of our many education opportunities and let's get our hands dirty and feet wet while exploring the wonders of Mill Creek!

In the past 6 months, MILL Creek's water from the Mill Creek and East Fork Mill Creek feed into a constructed wetland; however, only a portion of this habitat exhibits the hydrology, soils, and vegetation characteristics of a true wetland. This project will lower the elevation of the input pipes to keep the site wetter and improve ecological functions and services. West Fork Mill Creek Low-Head Dam (LHD) in Lockland mitigated one of the 6 remaining LHD's in West Fork Mill Creek below Winton Woods. The project is part of the ongoing effort to mitigate all 29 LHD's formerly found in the watershed. A total of 17 dams

MCA has also started coupling its restoration sites with student education programs. This includes completed



We Discover Together #MillCreekEducation

MCA conducts the most comprehensive yearround outdoor environmental educational (EE) programming in the region for nearly 1000 youth each year. To date, MCA has engaged over 41,000 students and worked with over 1000 teachers and volunteers. Not only does the programming serve as a classroom enrichment opportunity, but also is a gateway introducing urban youth to the natural world, often for the first time. This award-winning program provides hands-on science, service learning, and career exploration experiences for youth of all ages. The program has been recognized as the most Outstanding Outdoor Environmental Education program in our region by Cincinnati Magazine in 2020, '21, and '22.

The EE program is working in collaboration with several economically distressed and historically underserved Mill Creek neighborhoods in the City of Cincinnati. Historically, the Mill Creek corridor has suffered from economic disinvestment, blighted conditions, brownfields (contaminated soil), poor environmental design that discourages walking

and biking, a lack of full service grocery stores, and damaged natural resources. Field trips to Salway Park, White Oak, and Twin Creek Preserve (a birding hotspot) along with Service Learning in Finneytown, Camp Washington, and Woodlawn have focused on restoring some of these neighborhoods and connecting students with the



scorecard indicates that only 34.7% of 8th grade students scored as Proficient or better in Science; only 44% of CPS high school students scored as Proficient or better in Biology and students show a relatively small increase in passing percentage from 8th grade science to freshman biology. Enabling students to succeed requires an alternative education strategy, one being getting the students outside. Dozens of peer reviewed journals support the benefits of students learning outside and this irreplicable outdoor setting provides kinesthetic field study opportunities; the sunshine and plantlife provide a space for curiosity; the live construction sites provide an in-depth, realistic view of habitat restoration and mitigation strategies.

