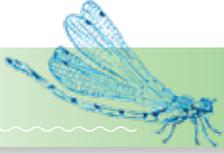




Huron River Report

Published by the Huron River Watershed Council

SUMMER 2021



feature story

Wait... Was that a Lobster!?

Michigan's native crayfish and threats of a new invader

If you spot a mini lobster crawling across your lawn, chances are you stumbled upon a crayfish. Like lobsters, crayfish are crustaceans that belong to the order Decapoda (a group that also includes crabs and shrimp). Both lobsters and crayfish have hard exoskeletons, ten legs, a pair of pincers, and are delectable when boiled and served with butter (although you will find a single crayfish is more of a morsel than a dinner). Unlike their marine cousins, however, crayfish are freshwater invertebrates, with over 700 species found around the world. While a crayfish might look out of place in your yard, eight native crayfish species call Michigan home—and you

can find most of them right here in the Huron River watershed!

Michigan's native crayfish

Crayfish are burrowers that dig tunnels in soft sediments in or near freshwater. While all of Michigan's native crayfish are in the *Cambaridae* family, species can be categorized as either primary, secondary, or tertiary burrowers. Primary burrowers dig complex networks of tunnels in ditches, wet meadows and prairies that extend as far down as the water table. While primary burrowers spend most of their life underground, you may see them trekking across

continued on page 4



Crayfish chimneys can be observed near waterways, creating a secure path of access between the land and water. credit: G. Tang

Updates from the Huron River Water Trail

Progress, upcoming improvements, and a new paddle-through registry

The Huron River Water Trail will see several improvement projects coming soon. And progress continues on the network of shared-use land trails that hug the river. Improving regional recreational connectivity is good for the river. These efforts provide access, making river recreation safer and reducing environmental damage in the long run.

Water Trail Projects

In 2019, communities and organizations along the Huron River

were awarded several grants totaling \$1.28 million from the Michigan Natural Resources Trust Fund. HRWC supported each project's application and, in a few cases, helped plan designs and renovations. These projects will build and improve infrastructure along the Water Trail, and many are breaking ground this season:

- a universal access launch and comprehensive redesign of the livery area at Argo Park in Ann Arbor;

- improvements of the Rapids View launch area of Hudson-Mills Metropark;
- improvements to Loonfeather Point Park on Ford Lake in Ypsilanti Township;
- improvements and universal access at the West Boat Launch of Kensington Metropark; and
- improvements and universal access at the Flat Rock Boat Launch.

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INSIDE: UPCOMING EVENTS AND WORKSHOPS *Keeping Stormwater Running Clean*
MiCorps ReBoot 2021 | Welcome Marisa | Mike Schultz's Vision for the Huron | New 'Shed Map Available!





Rebecca's Stream of Consciousness

As we move through a second year defined by the COVID-19 pandemic, we are all learning to do things differently. What once seemed like a temporary condition now seems more like a permanent shift in our hearts, minds, homes, and families, as well as in the way that we work. As a mission-driven organization, HRWC has learned a lot about ourselves this past year. One of the silver linings was the ingenuity and perseverance I saw in our team. We found new ways to get work done and to engage with you all. The solutions were ever-evolving as no two months of this pandemic have been the same. But we have landed on several new ways of implementing our work, and I think they will stick with us through the full arc of this story and beyond.

As many of you know, HRWC expands our impact by working with many of you. As valued volunteers that collect data from the river to guide restoration, investigators that report issues you see in the watershed, residents who change your behaviors in ways that lessen your impact, and advocates that push local and state leaders to enact policies and programs that keep our river healthy and drinking water clean—we appreciate you! Yet one of the most difficult things to accomplish during this pandemic was to engage with you. And in a zoom-weary society, we sought alternative ways to keep us all working for the river.

We have cooked up content and programs that allow our greatest

asset—our community—to continue working for the river because together we make a difference. With more people engaging in outdoor recreation, a downside is that there is more trash than ever. Do-it-yourself river cleanups can be done safely with your household or your pandemic pod—and help to lessen the impacts of river recreation. Visit the Volunteer section of our website for how-to information, but don't stop there. Let's take this viral. Share pictures of your adventure and tag it with #HuronRiverDIY encouraging your friends to do the same.

HRWC monitoring teams have found creative ways to continue our summer field work. This is the critical work that gets staff, volunteers, and interns to locations throughout the watershed to identify issues like erosion, invasive species, illicit discharges, high phosphorus, and harmful bacteria levels. While we have had to scale back these efforts to some degree, we continue to keep our eyes on the river. We want to show you what we do and answer some of your most commonly asked questions. All summer long, keep an eye on our social media channels (Facebook and Instagram) for a series of staff-produced short videos from the field. Our team will answer questions like "Is this an algal bloom, and is it toxic?", "Is that foam bad?" and "Can I eat the fish?" and share facts about our work and the river.

HRWC will host several Change Makers workshops this year. Change Makers gives you the information



you need to be a water advocate at the local level. Whether you are a concerned citizen who wants to promote river-friendly development in your community, considering running for office, or are a current elected official, Change Makers helps you learn to navigate local governments' decision-making processes to encourage river-friendly policies that protect clean water.

Finally, we are planning to meet again, on the banks of the Huron River, for our annual Suds on the River fundraiser. We will follow recommendations to keep us safe and compliant with the current health guidelines, and we are hopeful that we will see many of you under the big white tent (which might be even bigger), sharing a taste from our local breweries and a bite from our area restaurants, celebrating the river we love and all that we are able to accomplish together. I hope to see you there.

— Rebecca Esselman
HRWC Executive Director
@natureiswater



Make a Gift for Ages to Come

Contact Wendy Palms about your planned gift to HRWC: wpalms@hrwc.org, (734) 769-5123 x 605





Mike Schultz's Vision for the Huron

Avid fly-fisherman, entrepreneur, and ambassador of clean water

Mike Schultz, affectionately known as Schultzy, is a long-time supporter of HRWC and the Huron River. Schultzy Outfitters, his thriving fly-fishing shop and guide business in Ypsilanti, is now widening its net to include conventional fishing tackle to support the community's ever-growing desire to fish the river. Despite a demanding work schedule, Schultzy consistently makes time to organize river clean-ups, and contribute his expertise to HRWC programs that restore and revitalize the Huron River.

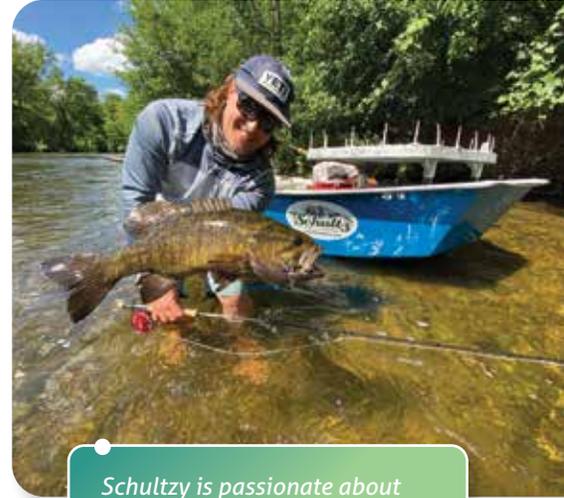
Schultzy and his team passionately teach beginner-to-Ph.D. level fly-fishing. They share their knowledge about weather patterns, water flow and temperature, and how such environmental factors influence the number and species of fish you'll likely encounter when casting a line. He's passionate about the stretch of river between Flook Dam at Portage Lake and Barton Pond, as it's the only body of water in the State of Michigan with a catch-and-release

bass regulation. Most of this section is in the Huron's Natural River District. "Smallmouth bass have a very slow growth rate. Catch-and-release practices minimize the negative effects on a species and help to ensure the quality and survival of the fish," says Schultzy.

In addition to angler ethics, he and his team are quietly imparting the values of river stewardship and clean water to each group they guide. They strive to be an environmental force for good every day.

Schultzy shares, "In today's high-tech world, I truly unplug when I'm on the river. I put away my phone and take in the healing qualities of the water. I want this natural treasure to be there for my kids and their kids. I'm honored to share my knowledge of the river and its inhabitants so that everyone gets to experience the bounty and the river, including future generations."

—Wendy Palms



Schultzy is passionate about all things fishing, including stewardship of the fish through proper practices, preservation of aquatic habitat, and protection of the river system.

credit: M. Schultz

DIY River Cleanups

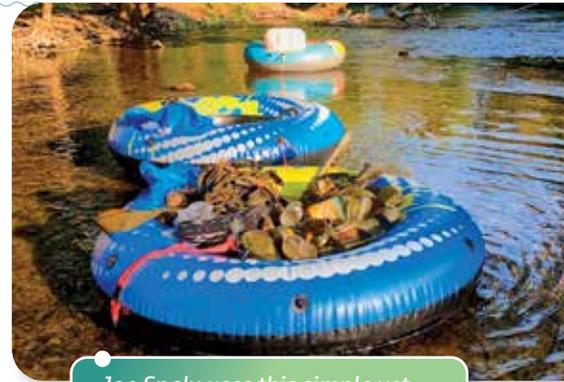
Keeping momentum up despite the pandemic

With the goal of having river cleanups along the entire extent of the Huron River, over the past ten years HRWC has led, collaborated on, nurtured, and inspired an ever-growing number of these events. Of course, these events were paused in 2020. This summer HRWC invites you to conduct cleanups with your household or pandemic pod.

Cleanups can be conducted on the water with either your own, a borrowed, or a rented canoe or kayak. For those who prefer to stay on solid ground, cleaning up trash along the river or a creek also helps keep the river clean and healthy. Even picking up trash along our streets and neighborhoods is helpful because storm drains deliver rainwater directly into creeks and the river, often carrying pollution and litter as well.

While most trash that ends up in the river is due to accidents or carelessness, some comes from littering. When an area is degraded and there is a lot of trash, some folks treat that location poorly in other ways. When parks, neighborhoods, and the river are clear of trash, people are more likely to treat them well. This is one reason we all need to do our part to keep the Huron clean. If we all pick up litter, others will be more likely to help clean up and be more careful about disposing trash.

So, head out to your favorite section of the Huron, your favorite park, or take a walk in your neighborhood. While enjoying the outdoors, pick up a bag (or three) of litter. Leading by example is an effective way to inspire stewardship! Please take a photo and tag your



Joe Spaly uses this simple yet effective system to collect debris.

credit: J. Spaly

cleanup on social media: #HuronRiver #HuronRiverDIY.

Details on put-in and take-out locations throughout the Huron can be found at the Huron River Water Trail website:

www.huronriverwatertrail.org.

For detailed instructions to prepare for your own cleanup, go to www.hrwc.org/cleanup.

—Jason Frenzel



Red swamp crayfish are invasive and recognizable by their bright red coloring with raised red bumps along their claws and backs.
credit: Adobe Stock

fields or lawns on a rainy day. Primary burrowers play an important role in Michigan's ecosystems, as their networks of tunnels aerate soils and provide habitat for other native species. Michigan's native primary burrowers include the painted mudbug (*Lacunicambarus polychromatus*), the devil crayfish (*Lacunicambarus diogenes*), and the digger crayfish (*Creaserinus fodiens*).

Secondary burrowers build tunnels that are generally connected to rivers, lakes, or wetlands. While these crayfish spend most of their time in the water in the warmer months, they use their burrows to hide from predators and escape cold temperatures or drought conditions. Michigan's secondary burrowers include the white river crayfish (*Procambarus acutus*) and the calico crayfish (*Faxonius immunis*).

In contrast to primary and secondary burrowers, tertiary burrowers live the entirety of their life in the water, rarely digging burrows unless they are hiding temporarily beneath rocks or other hard substrates. These crayfish prefer fast flowing riverine habitats, where they serve as both predators of fish eggs and macroinvertebrates, and as an important prey species for fish, birds, and mammals. The big water crayfish (*Cambarus robustus*), northern clearwater crayfish (*Faxonius propinquus*), and northern crayfish (*Faxonius virilis*) are Michigan's tertiary species.

Invasive crayfish

While native crayfish are vital to Michigan's natural communities, two additional crayfish species, the rusty crayfish (*Faxonius rusticus*) and the red swamp crayfish (*Procambarus clarkii*), are considered invasive in the state. Invasive species are plants or animals that have been introduced to a region where they did not evolve and lack natural competitors to keep populations in check. Invasive species can outcompete native species for resources, suppress native populations through predation, and degrade habitats.

Native to the Ohio River basin, rusty crayfish have proliferated across much of the US and are now abundant in the Great Lakes region. Rusty crayfish are tertiary burrowers, living their entire life in rivers and lakes. Larger than native crayfish species, they outcompete native species for food and territory, altering habitats and prey dynamics through consumption of aquatic plants and fish eggs. Rusty crayfish can be found in the Great Lakes as well as many inland lakes and rivers across Michigan's northern and lower peninsulas, including in the Huron River watershed.

Red swamp crayfish

While the rusty crayfish has been in Michigan for some time, the red swamp crayfish is a new invader to watch for in the watershed. Discovered in southern Michigan in 2017, efforts are currently underway to reduce red swamp populations and control further spread. Native to the Mississippi River drainage and the Gulf Coast, red swamp crayfish (or crawfish, as they are locally known) are an iconic southern species and a staple of bayou cuisine. From delectable crawfish étouffée to the famous crawfish boil, these crustaceans are both culturally significant and economically valuable.

Yet outside of their native range, the red swamp crayfish can be a destructive addition to freshwater ecosystems. Veracious predators, red swamp feed on fish and amphibian eggs and outcompete native crayfish for prey and territory. Due to the species' extensive burrowing, high densities of red swamp crayfish can

erode and destabilize banks, increase sedimentation, degrade water quality, and even cause the collapse of dams and levees. As secondary burrowers, red swamps are also highly adaptable to changing environmental conditions and can proliferate in a diverse range of habitats, surviving droughts and temperature shifts in their shallow burrows.

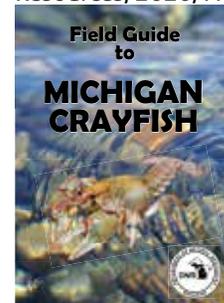
Currently, isolated populations of red swamp crayfish exist in several southeast Michigan water bodies. Numerous studies are being conducted to determine how red swamp were first introduced, the mechanisms with which they could spread, and the best ways to control or destroy existing populations. Due to the danger red swamp crayfish pose to Michigan's aquatic ecosystems, they have been listed as a prohibited Watch List Species, meaning it is illegal to possess, sell, or trade live red swamp in the state.

You can help

While there have been no verified sightings of red swamp crayfish in the Huron River watershed, it is crucial that community members keep their eyes out for this dangerous invader! If you think you may have sighted a red swamp crayfish, take a picture and contact the Michigan Department of Natural Resources Fisheries Division. Mature red swamp crayfish are bright red in color with raised red bumps along their claws and backs, truly looking like tiny lobsters. Visit Michigan.gov/invasives to learn more about how to identify and report red swamp crayfish sightings or contact klaramie@hrwc.org. Please do your part to keep the watershed healthy!

—Kate Laramie

Source: Michigan Department of Natural Resources, 2020, *Field Guide to Michigan*



Crayfish. www.michigan.gov/documents/dnr/MI-Crayfish-ID-Guide-8-2020_699856_7.pdf



Huron River Water Trail Update *continued from cover*

Additionally, the Huron Clinton Metropolitan Authority will tackle a new restoration project along the Huron River at Big Bend in Willow Metropark with funding from the National Fish and Wildlife Foundation, as well as support from partners including HRWC. The project will increase habitat complexity and biodiversity, create a wildlife corridor along the river, benefit native pollinators, capture and infiltrate stormwater runoff, relocate and improve a river launch site, reduce sedimentation and nutrients in the river, and decrease flood potential. Specific plans include restoring a severely eroded riverbank with natural materials, installing in-stream habitat features, creating a habitat corridor between two high quality floodplain forests, replacing pavement and turfgrass fields with prairie, and creating four native plant bio-swales to trap runoff from parking lots and roadways.

Progress on the B2B

2020 was a year of substantial progress on the Border-To-Border Trail in Washtenaw County. From Dexter to Ypsilanti to Lyndon Township, trail users have seen over five miles of new trail, the creation of new trail features, and the groundwork started for an equally productive 2021. Expansion of the Border-to-Border

Trail system along the Huron River included several projects:

- A 1.1 mile trail segment from Dexter-Huron Metropark to Zeeb Road, which includes two new bridges over the Huron River and provides new access to 18 acres of parkland that was previously inaccessible.
- Installation of an 0.8 mile trail segment traversing the Delhi Metropark along the Huron River, allowing for more parking and better access to Skip's Huron River Canoe Livery. The work further readies the B2B for future Dexter-Ann Arbor connectivity.
- Reconstruction of a 0.25 mile segment of the 30+ year-old trail along the Huron River at Frog Island Park in Ypsilanti. Improved connections from nearby paths to the river access point helps prevent erosion and improve boating access to the river.
- The Grove Road/Water Street Trail segment in Ypsilanti has also had 0.45 miles of an old narrow sidewalk replaced with an 8-10' wide concrete pathway, making it safer for shared use.
- A total of 0.36 miles in two construction segments connecting North Hydro Park on the Water Trail in Ypsilanti Township to neighborhoods, Grove Road and Rawsonville Elementary School.

The Huron Waterloo Pathways Initiative (HWPI) and Washtenaw County Parks have also made significant progress improving land trails along the M-52 corridor, including boardwalks, new trail, and a tunnel under M-52. A dedicated B2B Trailhead was completed in Lyndon Township near the intersection of North Territorial Road and M-52. While these projects are well away from the Huron River Water Trail, they do substantially improve regional recreational connectivity, making it much easier for people to pedal to their favorite fishing spot or scenic location along the river.

Huron 104

With the goal of engaging Water Trail users and creating a ready cadre of river protection influencers, HRWC is launching a new registry for paddlers completing the entire length of the Huron River Water Trail in one season. Huron104 will serve as a chronicle of river adventures where paddlers can log their trip from the Water Trail start at the Proud Lake State Recreation Area (mile 104), to the mouth of the river in Pointe Mouillée State Game Area, Lake Erie (mile 0). To be included in the registry, paddlers must paddle at least 100 of the 104-mile designated trail route in a single year, either in sections or continuously, in either direction.

Creating, improving, and maintaining recreational access to the river and the river corridor—the Huron River Water Trail and the shared use trails along it—make for healthy and vibrant watershed communities.

—Daniel Brown and Pam Labadie

LEARN MORE!

www.huronriverwatertrail.org



One of two new bridges over the Huron River on the recently completed B2B Trail segment from Dexter Huron Metropark to Zeeb Road. And construction to install the trail segment at Delhi-Metropark.

credit: Huron Waterloo Pathways Initiative

The Huron River Watershed

MISSION

The Huron River Watershed Council protects and restores the river for healthy and vibrant communities.

VISION

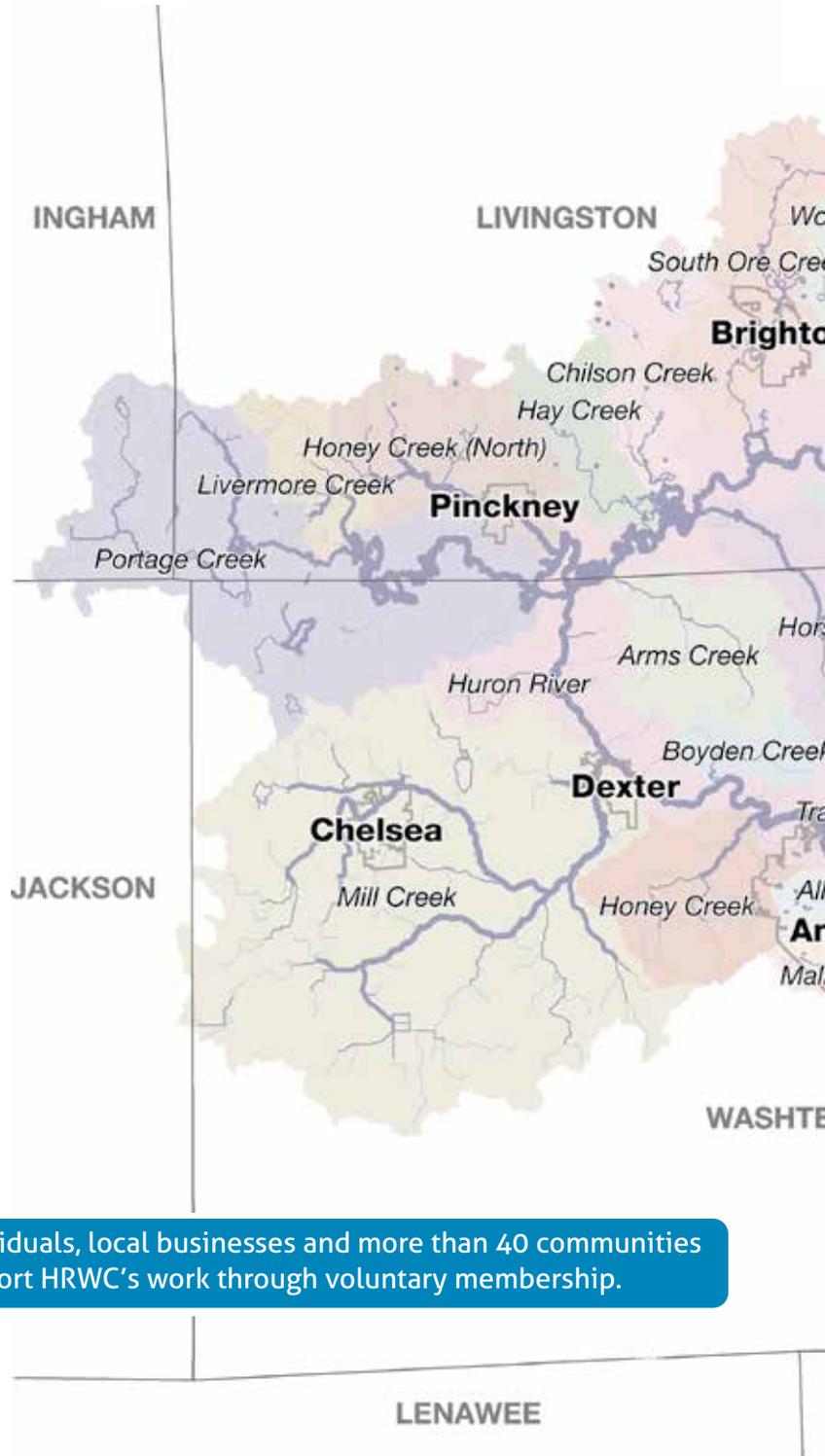
We envision a future of clean and plentiful water for people and nature where citizens and government are effective and courageous champions for the Huron River and its watershed.

CORE VALUES

We work with a collaborative and inclusive spirit to give all partners the opportunity to become stewards.

We generate science-based, trustworthy information for decision makers to ensure reliable supplies of clean water and resilient natural systems.

We passionately advocate for the health of the river and the lands around it.



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Individuals, local businesses and more than 40 communities support HRWC's work through voluntary membership.

Visit www.hrwc.org for detailed maps, monitoring data and creekshed status updates.





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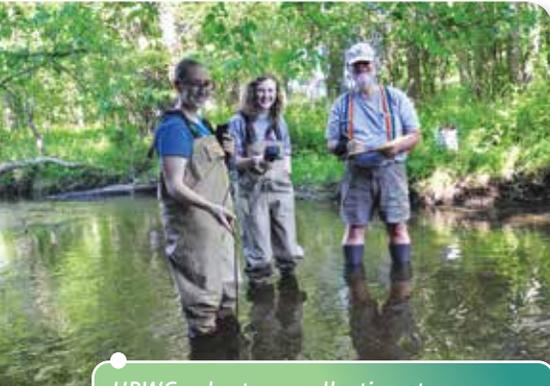
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Keeping Stormwater Running Clean

HRWC supports collaborative stormwater management



HRWC volunteers collecting stream samples to help determine if stormwater management is improving conditions. credit: HRWC

As human populations grew and settled within the watershed, they began to alter the way that water flows across the landscape. The addition of impervious surfaces such as roads, sidewalks, and parking lots influence the flow of rainwater and snow-melt from the surrounding landscape to waterways. What people do with and to this stormwater ultimately has an impact on the quality of the Huron River and its tributaries. HRWC staff help local governments and residents in the watershed improve stormwater management and be good stewards of water resources.

The importance of stormwater management

Stormwater runoff collects and transports pollutants from the landscape; because these pollutants cannot be attributed to a specific source, they are known as nonpoint source pollutants, and they can be difficult to track and regulate. Stormwater runoff can contain a wide range of pollutants like solvents, automotive fluids, pet waste, lawn fertilizers, and household products. In the Huron River watershed, storm drains lead directly to streams and rivers without going through any treatment process. HRWC estimates that over 50% of many of the most prevalent river pollutants come from

non-point sources. In addition, as stormwater runs over impervious surfaces, it is not able to infiltrate, cool, or filter through the ground. This runoff concentrates in large, warm, often polluted volumes during and following storms, resulting in faster flows that erode streambanks and carry soil and additional pollutants. Without stormwater infrastructure controls, this fast-flowing contaminated runoff results in surface water that is hotter, toxic to life, and damaging to habitat.

Regulations and local governments

Beginning with the passage of the Clean Water Act (CWA) in 1972, lawmakers have been refining attempts to address stormwater runoff. Initially, the CWA only addressed direct discharge of pollutants from industrial facilities. Municipal stormwater was exempt. After a series of lawsuits and much congressional debate, the CWA was amended in 1987 to include regulations on stormwater discharge quality. At first, only industrial stormwater, large construction sites, combined sewers (systems transporting both sewage and stormwater runoff), and separate storm sewers in municipalities with populations greater than 100,000 were included (Phase I). However, in 1999 small construction sites and smaller municipal stormwater systems were brought under regulatory control as well (Phase II).

In general, municipalities are required to reduce pollutants in stormwater "to the maximum extent practicable." This vague requirement is implemented through more

specific requirements contained in stormwater management plans reviewed by state agencies (in Michigan, the Department of Environment, Great Lakes, and Energy). Rather than setting numeric pollutant limits, stormwater permits require six control measures: public participation, public education, illicit discharge detection and elimination, construction site controls, post-construction controls, and pollution prevention. To date, however, these regulations only cover storm systems in urbanized areas that are municipally owned. Private storm systems (e.g. private residential developments), rural, and some suburban systems are not currently regulated.

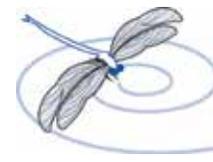
How HRWC is helping

HRWC staff began working with local municipalities in the early 2000's by developing watershed-wide stormwater plans and forming collaborative municipal working groups. HRWC currently works with collaborative groups in three counties: Livingston (the Livingston Watershed Advisory Group),

continued on next page

HRWC volunteers measure conductivity in water samples to monitor creek health and stormwater management best practices. credit: HRWC





MiCorps ReBoot 2021

Statewide stream and lake monitoring is back with a splash

Though temporarily interrupted for two years by a funding drought, Michigan’s Clean Water Corps (MiCorps) is back again! It is fully funded through 2025, allowing volunteers to monitor lakes and streams across Michigan for water quality parameters, macroinvertebrates, aquatic plants, and habitat. MiCorps is a program of the Department of Environment, Great Lakes, and Energy (EGLE) and is run through a creative partnership of several organizations, including HRWC. HRWC has helped manage MiCorps since the program’s inception in 2005—during that time, HRWC has spread environmental values and expertise across the state, educating and enabling citizens, teaching monitoring procedures, and overseeing the disbursement of funds to organizations so they can start their own monitoring programs.

MiCorps has two primary monitoring programs: the Cooperative

Lakes Monitoring Program (CLMP); and the Volunteer Stream Monitoring Program (VSMP).

Through the CLMP, lake residents in Michigan make water transparency measurements with Secchi Disks, take water samples for phosphorus and chlorophyll, measure dissolved oxygen and temperature, and conduct surveys of their lakes for aquatic plants and lakeshore habitat. Residents receive training and get assistance from biologists, especially as they get started. All of the data collected through the program goes into a publicly accessible, online database, available for use by homeowners, researchers, educators, and realtors, to name a few.

The VSMP is a grant program funded by EGLE and administered through HRWC and Michigan State University, another MiCorps partner. In 2021, the VSMP awarded 26 grants to local governments and non-profit organizations, ranging

from \$500 to \$20,000, enabling these organizations to conduct river cleanups, start and run macroinvertebrate programs (similar to HRWC’s River Roundup program), and conduct stream habitat studies. HRWC provides technical support to these groups and trains them in macroinvertebrate monitoring procedures and identification.

The MiCorps Program allows HRWC to make a big splash around the state by working beyond watershed boundaries. Interested in learning more? Check out the program at <https://micorps.net>. Lake residents are always needed as volunteers. If you are interested in volunteering on the stream side of things, HRWC has plenty opportunities! Check out hrwc.org/volunteer. Due to COVID, volunteer programs are limited, but please stay tuned for updates.

—Paul Steen

Keeping Stormwater Running Clean *continued from previous page*

Washtenaw (the Middle Huron Partners), and Wayne (the Alliance of Downriver Watersheds). HRWC assists these groups with public participation and education, technical advice and compliance, progress evaluation monitoring, and project or program development to help satisfy stormwater permit compliance. Each group meets on a quarterly basis to plan and share information, and the member municipalities provide funding for HRWC work each year.

Partner accomplishments

Over the years, HRWC has worked with municipal partners to improve stormwater management in a number of important ways.

- Public Education Plans include a variety of strategies for increasing public awareness about the watershed and actions that prevent pollution. The thousands of educational

watershed community calendars that the groups produce and distribute annually represent one example. Surveys show that residents are more knowledgeable and willing to take steps at home to help reduce the impact of stormwater runoff on the watershed.

- Watershed Management Plans have led to dozens of municipal projects that directly address a range of pollutant sources including homes, streets, parking areas and even the drainage systems themselves.
- Chemistry and flow monitoring results have helped to identify target areas for pollutant reduction and have reported significant reductions in pollutants such as phosphorus and bacteria.

Stormwater regulations and controls have led to measurably higher-quality urban waterways, but there is still work to do. HRWC is encouraging more municipalities to develop stormwater utilities to pay for maintenance and improvements, and to install more green stormwater infrastructure (e.g. rain gardens encouraging infiltration and filtration by plants). More is needed to capture and filter stormwater through the ground to continue to improve the quality of stormwater runoff and, in turn, the Huron River.

—Ric Lawson

Andrea Paine, Pam Labadie, and Marisa Salice contributed to this article



Welcome, Marisa!

HRWC adds to the outreach team

Marisa Salice joined HRWC in April as a Marketing and Outreach Associate. Marisa is primarily responsible for the planning and implementation of environmental education and outreach programming for projects across the organization. For the next two years, she will support the public education programs for the stormwater groups including the Alliance of Downriver Watersheds (ADW), the Middle Huron Partners, and the Livingston Watershed Advisory Group.

Starting a new job during a pandemic is no small feat, but Marisa has shown herself ready for the challenge. She has already begun working on the ADW's digital

newsletter for community leaders and is wrangling production of the group's 2022 Watershed Community Calendar, due out in October of this year.

Marisa holds a Bachelor of Science in Journalism and Political Science with a minor in Sustainability from Eastern Michigan University, and is currently pursuing a Master of Science in Integrated Marketing Communications at EMU. As an undergrad, Marisa worked in the Office of Admissions as Guest Relations Coordinator, helping to develop the school's transition to virtual prospective student engagement. She was also a field manager at EMU's Center for Digital



Engagement and Ann Arbor SPARK, producing live social media content while leading marketing and promotion efforts.

Marisa grew up in Commerce Township and has lived near the Huron River her entire life. HRWC is glad to have her on board!

—Pam Labadie



calendar
of events

HRWC Events and Workshops

JUNE • JULY • AUGUST • 2021

HRWC Board Meeting

Thursday, July 22, 5:30pm
Contact: resselman@hrwc.org

DIY River Cleanups

Through 2021 and beyond, HRWC invites our supporters to conduct river cleanups with their household or pandemic pod. Use your own canoe or kayak, borrow one, or rent one and hit a section of the river to pick up trash while having a leisurely paddle. Details on put-in and take-out locations throughout the Huron River can be found at the Water Trail website: www.huronriverwatertrail.org. For detailed instructions to prepare for your own cleanup see: www.hrwc.org/cleanup.

Organized River Cleanup Events

Partner organizations are reducing their public volunteer events through 2021 for pandemic safety. As events are planned they'll be posted on HRWC's river cleanup page and the calendar at www.hrwc.org, and announced in the monthly e-news.

Paddle with HRWC for National Canoe Day in June!

Tuesday, June 22 at Huron Meadows Metropark
Thursday, June 24 at Bandemer Park in Ann Arbor
More information coming soon to www.hrwc.org/calendar.

Save the Date for Suds on the River

Thursday, September 9

Fall Volunteer Event Dates (by invitation for pandemic safety):

- Leader & Collector Training, Sunday, September 19
- River Roundup, Saturday, October 2
- Insect ID Day, Sunday, October 10

Updated Watershed Map Poster

For ordering information, head over to www.hrwc.org/mapposter today!

DISCOVER

Located in Southeast Michigan, the Huron River watershed is made up of all the land, creeks, and streams that drain into the Huron River. The watershed and river system support a tremendous variety of wildlife and provide inviting places to swim, fish, picnic or simply enjoy nature for the 650,000 people living within its boundaries. The river supplies drinking water directly to Ann Arbor and connects to Lake Erie—the source of drinking water for more than 11 million people.

CONNECT

The watershed is home to over 100 species of native fish and 54 species of reptiles and amphibians. Groundhogs live three in the river and in the warmer tributaries, an 80-foot-long Common noddie includes beaver, deer, musk, moose, and raccoon. In addition to resident bird species such as the Great Blue Heron, the Trumpeter Swan and many varieties of wild ducks and songbirds. The watershed is an important stopover for migrating Bald Eagles, Peregrine Falcons, Canada Geese, Osprey, warblers, and Sandhill Cranes.

PROTECT

Today, most of the pollution entering our rivers is carried by rainwater that runs off hard surfaces such as roads, parking lots and rooftops. Pollutants include dirt, motor oil and toxic auto fluids, fertilizers, pesticides, and bacteria from pet waste and failing septic systems. Our built infrastructure—sewerlines, storm drains and catchments—directs this polluted and untreated rainwater straight into our waterways at quantities and velocities that erode stream banks and habitat.

START TODAY!

Fortunately, there are simple daily actions you can take to help protect the Huron River. They include capturing runoff with trees, native plants and rain gardens, limiting use of pesticides and herbicides, properly disposing of unused prescription meds and home toxins, and parking on grass. You can also make a positive difference by adopting a stormwater or volunteering with the Huron River Watershed Council.

For more Huron River watershed maps and information on how you can protect, click below. Scan this QR code.

The Huron River Watershed

The Watershed and Creeksheds

The Huron River Watershed
The Huron River watershed covers just over 900 square miles (1,448 km²) and the river and its tributaries drain into the Huron River, which then flows into Lake Erie.

The Creeksheds of the Huron River Watershed
Identifying the unique character of a watershed, creeksheds divide up all the land that drains into a tributary creek. Creeksheds are the land directly to the Huron River appear in different shades of light.

Alma Creek	Honey Creek	Shaw and South Creek
Bayton Creek	Huron Creek	South Old Creek
Chillicothe Creek	Multiple Creek	South Run Creek
Dave Creek	Mill Creek	Three Creek
Fleming Creek	Mill Creek	Wood and Mill Creek
Hay Creek	North Creek	West Creek
Albany Creek	Parkway Creek	
Cambridge County		

Map Key

- Watershed Boundary—The watershed boundary is more than 1.5 miles (2.4 km). The 100-mile (161 km) watershed that runs on the Huron River and into Lake Erie is known as the Huron River Watershed. The watershed boundary is recognized in both State and National State Maps.
- Watershed Council Logo—The Huron River Watershed Council is a 501(c)(3) non-profit organization. For more information, visit www.huronriverwatershed.org.
- Lake Erie—The Huron River watershed discharges into the Huron River. Residents can volunteer off the Watershed to enjoy each municipality's scenic recreation, history and heritage.
- Blue, Green, Lake, Road—In all, the watershed contains 1,000 miles (1,610 km) of creeks and streams, 4 major tributaries, and 542 lakes.
- Nature River Districts—The "Nature River Districts" which include 21 miles (34 km) of the Huron River main stem, are designated for preservation by local governments, citizens and the Michigan Department of Natural Resources.
- Urban Area—Our watershed is home to 63 municipalities.
- State Park, Metropark or Local Park—There are 10 State Parks, 20 State Metroparks and 2 State Game Areas and 10 Metroparks located within the watershed.
- Dam—The watershed includes 94 dams and 1,000 levees. The Huron River is the only river in Michigan that has 20 dams on its main stem and about 100 on its tributaries. The 24 State that are on the main stem are shown as follows:
- Watershed High and Low Points—The watershed high point is 2,127 feet (648 m) in the West Branch of the Huron River near the town of Hudson. The lowest elevation through the watershed is 110 feet. The elevation change from 1,918 feet (584 m) to 212 feet (64 m) above sea level.

About HRWC

Huron River Watershed Council

The Huron River Watershed Council (HRWC) coordinates programs and volunteer efforts aimed at protecting and restoring the Huron River. Our work includes water quality monitoring, local education, and more than 100 community events throughout Michigan. Learn how you can get involved at hrwc.org.

For more Huron River watershed maps and information on how you can protect, click below. Scan this QR code or visit www.huronriverwatershed.org.

©2020 Huron River Watershed Council

DISPLAY
24" x 36"
Ready to frame
or use as-is

INSPIRE
Use this beautiful
map as a teaching
guide to learn
more about the
watershed.

EXPLORE
Includes creeksheds,
Natural River
Districts, parks,
mainstem features,
and much, much
more!

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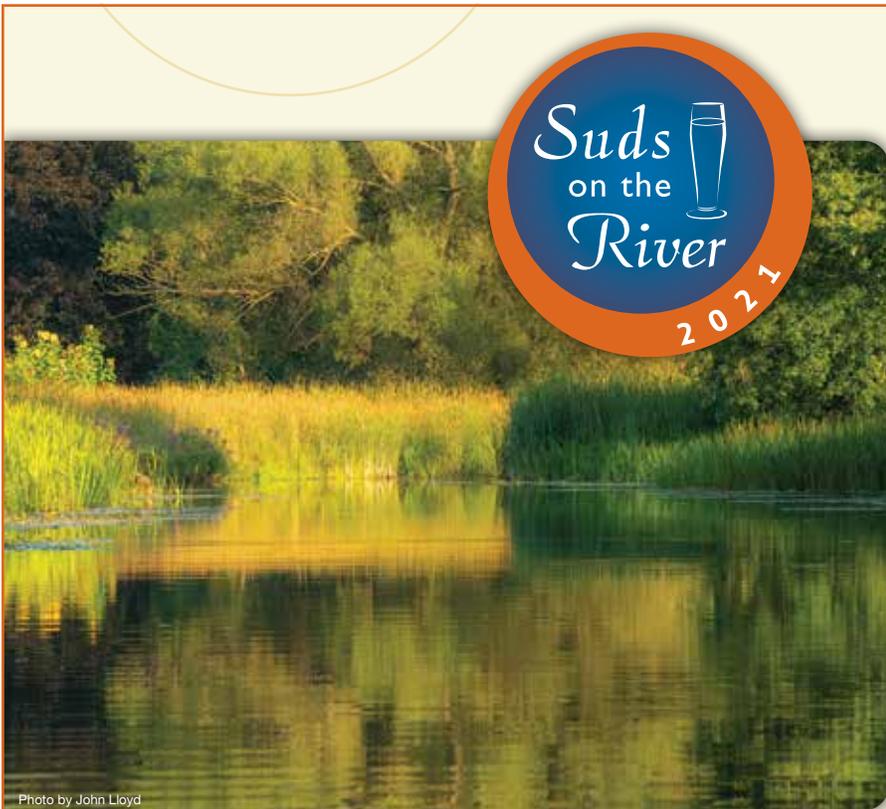
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Ann Arbor, MI

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You Are Invited!

*Celebrate with us
as we return to our home river,
the Huron.*

**Thursday, September 9
6-9pm**

Enjoy locally brewed artisanal beer
and gourmet fare from your favorite
local chefs. Demo a kayak or canoe.
Learn to cast a fly rod. Enjoy live
acoustic music and friends around a
campfire. **Covid-safe precautions in
an open-air environment!**

Tickets available at [HRWC.org](https://hrwc.org)

Proceeds support HRWC



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Photo by John Lloyd