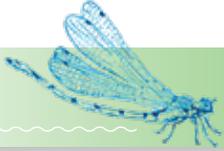




# Huron River Report

Published by the Huron River Watershed Council

SPRING 2020



feature story

## Waterlogged

### High water tables, high flows, and climate change

Water tables remain well above normal, and the Huron River is flowing higher season-for-season compared to any period in recent memory. Since May of 2019, the flow of the river is consistently higher than average. Many creeks repeatedly overflow their banks, and many normally seasonal wetlands hold standing water through late summer. In Hamburg Township, the river has remained near or above flood stage for months. Parts of Milford have seen their highest water levels in a generation. Downriver communities have seen both the effects of high river flows and coastal flooding from record high Lake Erie water levels—conditions magnified when winds blow on shore out of the east. The challenges are widespread.

High water levels are more than a nuisance. They create public health risks. Water in basements can lead to mold and lasting structural damage. Farm fields remain wet well

into the planting season, interfering with growers' ability to earn a living. Flooding in contaminated sites can result in pollution spreading to surrounding areas. High flows on the river can be dangerous for anglers and paddlers—several canoe and kayak rental businesses along the Huron River, including Skip's near Dexter and the Ann Arbor liveries, have had to delay or limit their services due to unsafe, high flows.

#### More than a passing trend

The high water levels and water tables in the watershed are part of a larger pattern. The 2010s were the wettest decade in Michigan's recorded history, and 2019 was the 2<sup>nd</sup> wettest year on record for the U.S., the wettest ever for Michigan, and the 2<sup>nd</sup> wettest in Southeast Michigan. These circumstances have all coincided with severe flooding across much of central



Spring flooding at Hudson Mills Metropark. credit: HRWC

*continued on page 3*

## Plan Your Summer Paddling!

### Outfitters of the Huron River

Planning a paddle trip on the Huron River this summer? Consider the convenience of a pre-planned trip with transportation between points. There are six excellent Huron River outfitters staging trips from ten locations that offer a wide variety of experiences, watercraft, and float

times for paddling fun. Each is listed here in upstream to downstream order.

These outfitters are as unique as the area of river they service. Always check websites before you go! Dig in and look at the information provided. From what to bring, to trip length, to

parking instructions, they offer rock-solid advice on how to stay safe and get the most from your experience.

Some outfitters require reservations, while some are walk-up only. Most offer group rates. Operating hours can be different

*continued on page 4*

INSIDE: UPCOMING EVENTS AND WORKSHOPS TMDL policy changes for Ford and Belleville lakes | Staff changes | Volunteer spotlight on Paul Cousins | The Bill and Mary Kinley Innovators Fund





# Rebecca's Stream of Consciousness

When I decided to join the HRWC staff eight years ago, it was born from a desire to consider the implications of climate change for river protection. The organization recognized then that natural resources were being uniquely impacted by this growing threat, and that this required new data, new strategies and a new definition of success. At the time, there was growing recognition of climate change impacts among professional networks that managed water, forests, and fields. In the social discourse, the politicization of climate change had already begun but did not have as strong a hold as it has now. But even just eight years ago, most of us were in the "climate change is coming" camp. As the events of the past years have played out, it's hard not to be in the "climate change is here" camp.

In fact, the five warmest years on record have occurred since 2015. Natural disasters such as fires, hurricanes, drought and floods are shattering records time after time. 2019 was the fifth year in row that the U.S. saw 10 or more natural disasters where economic losses exceeded 1 billion dollars. Beyond economic impacts, these disasters result in countless tragic stories of people displaced, lives and homes lost, and crops failed. In our region we have seen annual rainfall increases and major storm events grow larger. Read Dan Brown's cover piece in this newsletter—*Waterlogged: High Water Tables, High Flows, and Climate Change*—to learn how a changing climate is impacting the Huron.

This year is the fiftieth anniversary of Earth Day. Earth Day 1970 is considered the event from which the modern environmental movement was born. It led to the formation of the Environmental Protection Agency and the passing of the Clean Water Act, the Clean Air Act and the Endangered Species Act (as well as "Ann Arbor's own" Ecology Center!). A part of the story you may not know is that the University of Michigan hosted

an Environmental Teach-In in March of that year that served as a model for the teach-ins that happened nationwide on April 22<sup>nd</sup> as part of the first Earth Day. Many around the world are rallying around this significant anniversary, demanding that climate change be addressed at the scale and speed necessary to avoid catastrophic loss and irreversible change.

There is evidence that the growing din of voices is finally being heard, and that the weight of evidence is leading to more significant action. While federal agencies have been backsliding under this administration, sweeping legislation, such as the Green New Deal and the Energy Innovation and Carbon Dividend Act (H.R. 763), is being proposed and gaining support. We are seeing key financial institutions like BlackRock acknowledge the weight of climate risk and changing investment strategies to account for this risk. We saw a presidential candidate Jay Inslee run on a climate change platform. TIME's 2019 Person of the Year was young climate activist, Greta Thunberg.

Some of the evidence is right here in our backyard. Last year, Ann Arbor and Ypsilanti declared a climate emergency, as did Washtenaw County. Each followed this with commitments to reaching ambitious carbon neutrality goals. Ypsilanti committed to be carbon neutral by 2035. Ann Arbor aims to be climate neutral by 2030. HRWC is one of the many community partners involved in developing the plan to achieve this goal; I am part of an advisory committee moving forward the adaptation and resilience portion of the plan. Check out [A2Zero.org](http://A2Zero.org) to learn more about the process and add your input.

At HRWC, we are investing in strategies that prepare the river for new climatic conditions. A resilient river system is one that is strong to begin with. Habitat restoration, dam removal and riparian and wetland protection will lead to a Huron that can recover from periodic



K. Paine

large floods, drought or high water temperatures. At the same time, we are emphasizing solutions that both improve water quality and capture carbon or reduce greenhouse gas emissions. For example, protecting natural lands in the watershed is a win for both water quality and climate change mitigation. Trees capture and store carbon, reducing greenhouse gases in the atmosphere that cause climate change. This "natural solution" to climate change is one of the most powerful we have in our toolbox of options and it needs to be given the weight it deserves, alongside energy and technology solutions.

As we approach the fiftieth anniversary of Earth Day, join us at one of the many events around southeast Michigan to commemorate the occasion and generate the energy and action needed to tackle our greatest environmental challenge yet. You can find some events listed on page 8.

You are part of the solution and the time is now.

— Rebecca Essleman  
HRWC Executive Director  
[@natureiswater](https://twitter.com/natureiswater)

#### Sources:

Five warmest years on record: NOAA National Centers for Environmental Information, State of the Climate: Global Climate Report for Annual 2019, published online January 2020, retrieved on January 21, 2020 from [www.ncdc.noaa.gov/sotc/global/201913](http://www.ncdc.noaa.gov/sotc/global/201913).

Economic losses: NOAA National Centers for Environmental Information (NCEI) U.S. Billion-Dollar Weather and Climate Disasters (2020). [www.ncdc.noaa.gov/billions/](http://www.ncdc.noaa.gov/billions/)



North America, resulting in widespread damage.

Beyond natural water level variation, the Great Lakes have been at or near record levels over the past year. From Lake Superior to Lake Ontario, the effects on coastal communities and ecosystems has been dramatic. Beaches have been claimed by the lakes. Sensitive, rare wildlife habitats have been swept away or inundated.

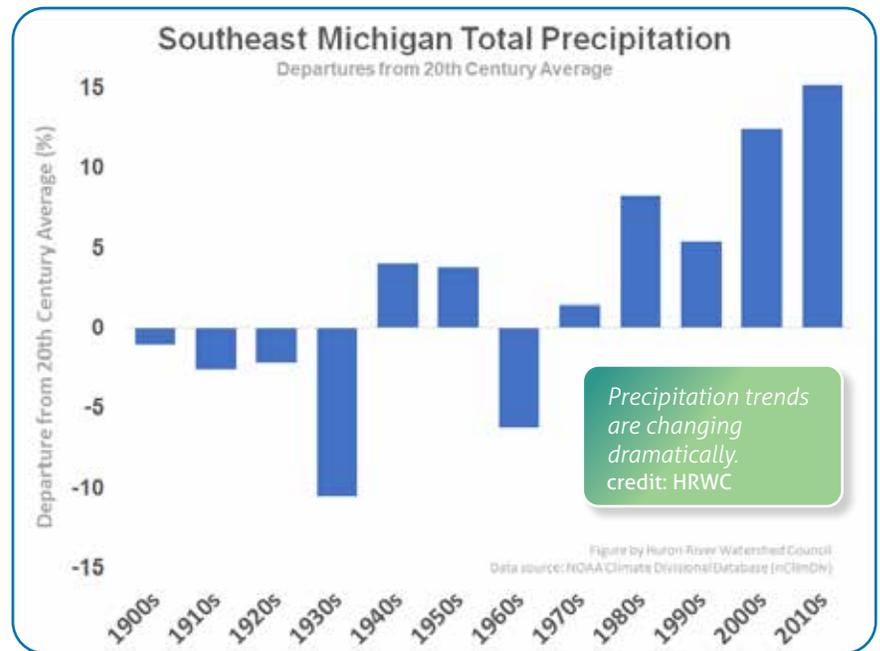
### Climate change makes the water cycle more chaotic

These events are all symptoms of climate change. Several climate factors affect how much water is in the Great Lakes basin over any given period of time. Evaporation, precipitation, and ice cover are the dominating climatic characteristics.

A warming world increases evaporation over the long term. Once water evaporates from a watershed, it falls anywhere the wind takes it—potentially removing available water from the region. Warmer temperatures therefore tend to lead to drier soil and lower water levels in the affected region.

Precipitation and ice cover in the region, however, have become more variable with rising temperatures. Warmer air holds more moisture. For every 1°F rise in temperature, the atmosphere holds around 4% more water vapor, providing more readily available fuel for storms.

When the Great Lakes freeze over in late winter, the ice effectively shuts down evaporation from the lakes and, counterintuitively, a warming world can lead to variable periods of greater ice cover. As the polar regions warm faster than the rest of the planet, the temperature gradient that keeps cold air trapped in the arctic weakens. Cold air masses can break away to the south (the “polar vortex” outbreaks) and cause the lakes to freeze, thus reducing evaporation even as more moisture and precipitation arrives from outside the region. Since 2014, this has been a recurring pattern and, as the world continues to warm, variability in ice cover could become even less predictable. The Great Lakes and our watershed could see higher highs and lower lows in water levels.



### Increased precipitation, flooding, and pollution

Since 1951, precipitation has increased by 14% across the Great Lakes region. The frequency of heavy storms has risen by 35%, a major cause of widespread flooding. In some hotspots, including parts of Southeast Michigan, the increase has been greater. Perhaps more important is how and when that precipitation is reaching us. The most intense storms have become more powerful and more frequent, delivering a greater proportion of our precipitation in downpours rather than gentle sprinkles. Fall snow is coming later, and spring snow is melting earlier.

These seasonal changes affect the timing and volume of water moving through the system, requiring adaptations in how the water is managed. In Dexter, for example, the new storage basin the city installed to hold wastewater during large events overflowed twice in the first year. Disrupted spring weather means that rain falls on rapidly melting snow and still-frozen ground, causing abrupt flooding that carries road salt and other recently thawed contaminants to streams.

Unless global greenhouse gas emissions are drastically reduced, the current trends will likely continue and worsen. Even if emissions are reduced enough to avoid the worst impacts of climate change, some

amount of change is inevitable for decades to come due to the residual warming effect of greenhouse gases already emitted. That means local communities need to be prepared for unprecedented weather events in addition to working to reduce emissions and slow global warming.

### Planned climate resiliency

HRWC has been working with communities to adapt to the increasing volume of water flowing through the watershed. Recent partnerships include:

- The City of Wixom—installing rain gardens to restore a section of Norton Creek;
- The City of Ann Arbor—installing green infrastructure to help reduce runoff; and
- The City of Ypsilanti—removing Pen Dam to restore the natural ability of the river to absorb high flows through Ypsilanti.

Working at this scale in our home communities is where individuals and groups can have the greatest positive impact. As we try to avoid the worst impacts of climate change by reducing greenhouse gas emissions, we can work to adapt to the unavoidable and keep our heads above water.

—Daniel A. Brown



## Plan Your Summer Paddling *continued from cover*

depending on the season or day of the week. Some have restrictions or additional charges for launching private watercraft at their locations. Some are in parks with public launches nearby. Some allow small well-behaved dogs and some prohibit pets altogether. Some have rules about coolers. Most, but not all, offer trips where you can stop at a public park to enjoy a picnic or use a restroom. All are popular and get very crowded on warm sunny summer weekends, including Fridays.

### Upper Huron

#### Heavner Canoe & Kayak Rental

Heavner Canoe & Kayak Rental offers unique outdoor educational and recreational programs year-round. Experience "up north" paddling close to home. Launch from one of three locations on the Huron River and meander on the water through beautiful Proud and Island Lake State Recreation Areas, Kensington Metropark, and Milford's Central Park. Stop to hike, swim, picnic, fish, or camp along the way. Enjoy concerts at Central Park or delicious food and artisanal brews at River's Edge Brewing Co. on a Proud Lake trip. Heavner's also offers popular moonlight paddles in the summer.

Rates: \$20-\$50 per kayak or canoe, transportation included

Equipment: single kayaks, canoes

Porter service for private craft by special arrangement

Open: May 16-September 15. Pre-season April 1-May 15 or September 16-October 30 by advance reservation only. Year-round activities offered, weather-permitting.

Locations:

Proud Lake  
2775 Garden Road  
Milford, MI 48381

Kensington Metropark Farm Center  
4570 Huron River Parkway  
Milford, MI 48380

Island Lake  
12950 Grand River Road  
Brighton, MI 48116

Phone: (248) 685-2379

Website: heavnercanoe.com

The Big Bend picnic area and launch at Willow Metropark in the Lower Huron (outfitter Motor City Canoe Rental). credit: E. McMillen Cislo



#### Village Canoe Rental

Hidden away in the southeast corner of the Village of Milford is Village Canoe Rental, with plenty of parking and a picnic area for your enjoyment.

Rates: \$30-\$36 per day, pick up and drop off \$8

Equipment: sit-on kayaks, single and tandem kayaks, canoes

Open: May 1-September 30. May and September by advance reservation only.

Location: 1216 Garden Road  
Milford, MI 48381

Phone: (248) 685-9207

Website: villagecanoe.com

### Middle Huron

#### Skip's Huron River Canoe Livery

Paddle or float through the designated natural river district of the Huron River in the Dexter area on a 1-2-hour or 3-4-hour trip that travels the river as it winds through Hudson Mills Metropark and Washtenaw County nature preserves. You will be enchanted by the scenic beauty, birding and wildlife viewing. On warm sunny days, see the smallmouth bass and other fish species as you float along. Pack a picnic lunch for a leisurely stop at Dexter Huron

Metropark (restrooms on-site). Known for excellent customer service, the friendly and helpful staff will make you feel well cared for!

*"Skip's is a full-service canoe and kayak rental facility providing access to the most scenic and cleanest stretch of the Huron River. We get regular feedback that our customers feel like they are paddling in northern Michigan. Since 1973, we have been offering a family-friendly adventure down the Huron without the hassle of dams, lakes or portages."*

—Nate Pound and Tyler Soja, Owners

Equipment: single and tandem kayaks, canoes

Open: first weekend in May through mid-October, weekends only before Memorial Day weekend and after Labor Day

Trip rates: \$22-\$43 per kayak or canoe, transportation included

Tubes: yes, float from Dexter-Huron to Delhi Metropark (3.5 hours), \$18

Location: East Delhi Road  
Ann Arbor, MI 48103

Phone: (734) 769-8686

Website: paddlethehuron.com

*continued on next page*



## Plan Your Summer Paddling *continued from previous page*

### City of Ann Arbor Parks & Recreation

With two locations, the City offers a variety of paddling experiences through the heart of Ann Arbor and its lush parks and natural areas. There's a 2.5-hour trip and a 1.5-hour trip; both include paddling through the Argo Cascades, a 1500-foot long series of nine small drops and pools. The longer trip includes the Barton and Argo nature areas, where birds and wildlife are plentiful. There are also options to go out and back at your own pace in the still-water sections of the Argo and Gallup reservoirs.

*"My favorite trip is our 1.5-hour river trip from Argo Park to Gallup Park through Ann Arbor. This trip starts with the super fun rapids at the Argo Cascades and then floats through beautiful river parks. Love hopping in a boat, escaping the city life and immersing myself in nature. And it is convenient and easy and available every day, no reservations needed."*

—Cheryl Saam, Recreation Supervisor

**Equipment:** sit-on kayaks, single and tandem kayaks, canoes; 3 or 4-person paddleboats and kid kayaks (Gallup only); 6-person rafts and SUPs (Argo only)

**Open:** Gallup, April 18-October 18; Argo, May 2-September 27

**Rates:** \$21-\$32 per kayak or canoe for trips, transportation included, 6-person rafts \$72; \$10-\$20 per boat for 2 hours of still-water paddling

**Tubes:** yes, from Argo Park only, for short trips down the Cascades or longer trips to one of the downstream city parks, \$10 for 2-hours (walk back or pay \$9 for transportation from Gallup Park)

Additionally, for \$9 per person anyone can ride the shuttle bus from Gallup Park back up to Argo Park, even if you didn't rent from the livery (people only, no equipment or tubes).

**Locations:**  
Argo Park  
1055 Longshore Drive  
Ann Arbor, MI 48104  
Phone: (734) 794-6241

**Gallup Park**  
3000 Fuller Road  
Ann Arbor, MI 48104  
Phone: (734) 794-6240

**Website:** [a2gov.org/canoe](http://a2gov.org/canoe)

**Porter Service for private equipment:** yes, call in advance

**Locations:**  
Outpost at Oakwoods Metropark  
32911 Willow Road  
New Boston, MI 48164  
Phone: (313) 473-0396

**Atwater Paddles**  
26425 Atwater St.  
Flat Rock, MI 48134  
Phone: (313) 473-9847

**Website:** [motorcitycanoerental.com](http://motorcitycanoerental.com)

### H2E River Adventures

H2E River Adventures is a pop-up outfitter that provides kayak, canoe and tube trips on the lower Huron River from the boat launch in Flat Rock. Kayak or canoe trips are offered from Flat Rock to Dodge Park in South Rockwood (4 hours) or to the mouth of the Huron River at Hull's Trace (7 hours).

**Rates:** \$25-\$50 per kayak or canoe, transportation included

**Equipment:** single kayaks, two-person canoes

**Tubes:** yes, float from Flat Rock to South Rockwood (8 hours), \$25

**Location:** Flat Rock Boat Launch  
28911 Seneca Street  
Flat Rock, MI 48134

**Phone:** (734) 379-9912

**Website:** [h2eriveradventures.com](http://h2eriveradventures.com)

## Lower Huron

### Motor City Canoe Rental

Paddle through the scenic beauty of the Lower Huron, Willow and Oakwoods Metroparks (6-hour, 4.5-hour or 2-hour trips offered) or tour from Flat Rock to South Rockwood (2-hours). Their outpost for staging trips in the Metroparks is at Oakwoods, with a second location next door to the new Atwater Street Tacos (yum!) in Flat Rock.

**Trip rates:** \$25-\$45 per kayak or canoe, transportation included

**Equipment:** single and tandem kayaks, canoes

**Tubes:** yes, float from Willow to Oakwoods Metropark (3 hours), \$10-\$20

### WATER TRAIL RESOURCES

Find maps, recommended trips, links to outfitters, things to see and do in Trail Towns along the way, and more at [huronriverwatertrail.org](http://huronriverwatertrail.org).

*Kayakers having fun on the Cascades at Argo (outfitter City of Ann Arbor Parks & Recreation). credit: B. Mitchell*



# The Huron River Watershed

## MISSION

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

## VISION

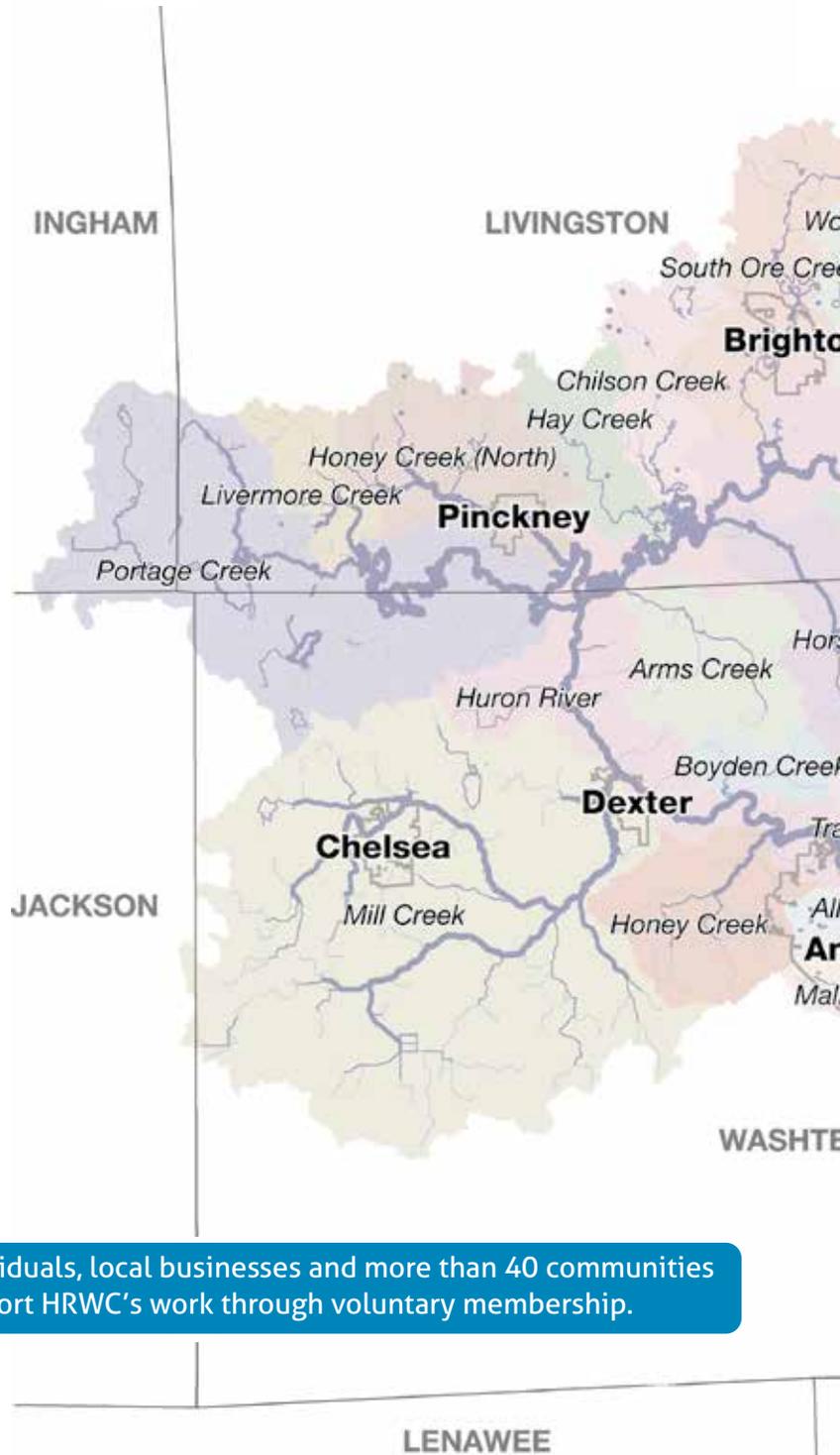
We envision a future of clean and plentiful water for people and nature where citizens and government are effective and courageous champions for the Huron River and its watershed.

## 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.



## HRWC BOARD OF DIRECTORS

### Executive Committee

Mary Bajcz  
Chris Benedict (Vice Chair)  
Janis Bobrin  
Paul Cousins  
Matthew LaFleur (Treasurer)  
Dick Norton (Chair)  
Diane O'Connell  
Evan Pratt  
Steven Wright

### Board of Directors

Susan Bade  
Scott Barb  
Sue Bejin  
Marlene Chockley  
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Larry Dishaw  
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David Glaab  
Mandy Grewal  
Fred Hanert  
Gerry Kangas  
Michelle LaRose  
Molly Maciejewski  
Erica Perry  
Sharon Popp  
Peter Schappach  
Matt Stuk  
Curt Wolf  
Lisa Wozniak

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

Visit [www.hrwc.org](http://www.hrwc.org) for detailed maps, monitoring data and creekshed status updates.





For most paddlers, spring is the welcome start of the season for recreation on the river. credit: M. Margineanu

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Watershed  
Council

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Ann Arbor, Michigan 48104  
(734) 769-5123  
[www.hrwc.org](http://www.hrwc.org)



## River Givers Gathering

Sunday, March 8, 1 - 3pm, Ypsilanti Freighthouse, 100 Market Place, Ypsilanti  
*A celebration of you, the volunteers and donors who work to protect the Huron River and all that we accomplish together. Join us for live music, food, science, door prizes and fun for all ages. Free for all River Givers who have volunteered or donated to HRWC in the last 12 months and friends and family.*

Contact: Allison at [agotelaere@hrwc.org](mailto:agotelaere@hrwc.org) or x 610

## Chemistry and Flow Monitoring Orientation

Saturday, March 21, 1 - 2:30pm, NEW Center, Ann Arbor or  
Saturday, March 28, 2 - 3:30pm, Riverview Veterans Memorial Library, Riverview  
*Help measure the quality of local rivers and streams this spring and summer! Collect water samples, measure stream flow and record chemistry measurements. Monitoring sites are in Washtenaw, Livingston and Wayne counties. Commitment is two or more hours per month, April—September, depending on availability and interest. We have a strong need for volunteers to work downriver. Additional hands-on training will occur in the field during the first week of sampling.*

Details: [www.hrwc.org/water-quality-monitoring](http://www.hrwc.org/water-quality-monitoring)

Registration: [www.hrwc.org/volunteer/water-sampling](http://www.hrwc.org/volunteer/water-sampling)

## River Roundup

Saturday, April 18, 9am or 10:30am, starting at the NEW Center, Ann Arbor  
*Volunteer with us on EARTH DAY! Join a small team with your friends and family and help us monitor the health of our streams. Travel to various locations to collect a sample of the bugs and other creatures (benthic macroinvertebrates) that live in the Huron River system. ESTIMATED TRAVEL and FIELD time: 4 HOURS*

Registration: [www.hrwc.org/roundup](http://www.hrwc.org/roundup)

## Big House 5K

Sunday, April 19, 8am, University of Michigan Big House, Ann Arbor  
*The Big House 5K is an exciting run/walk that courses through the University of Michigan campus before participants finish the race on the 50-yard line of Michigan Stadium. All race proceeds are split among the six nonprofit beneficiaries, including HRWC. This year, 8,500 runners and (maybe you) will run for the Huron River! This race sells out, so register early.*

Registration: [www.hrwc.org/event/big-house-5k/](http://www.hrwc.org/event/big-house-5k/)

## Board Meeting

Thursday, April 23, 5:30pm, NEW Center, Ann Arbor

Contact: [resselman@hrwc.org](mailto:resselman@hrwc.org)

## Insect ID Day

Sunday, May 3, Noon or 2pm, lasts 2 hours, NEW Center, Ann Arbor  
*Discover what kinds of bugs volunteers found at the recent Roundup. Separate them into look-alike groups, and then an expert will identify them with you. You record the data and compare the results to past years.*

Registration: [www.hrwc.org/id-day](http://www.hrwc.org/id-day)

## Huron River Day

Sunday, May 17, Noon - 4pm  
Gallup Park, 3000 Fuller Road, Ann Arbor  
*Discount canoe and kayak rentals, children's activities, live animal programs, river exhibits, music, food, fishing, and much more. Ride your bike to the event and receive a coupon for a free boat rental. Sponsored by DTE Energy Foundation.*

Details: [www.a2gov.org/hrd](http://www.a2gov.org/hrd)

More events at  
[www.hrwc.org/calendar](http://www.hrwc.org/calendar)

## LOCAL EARTH DAY EVENTS

### 2020 Michigan Climate Action Summit

Thursday, March 12  
Michigan Union, Ann Arbor

### 50th Anniversary Earth Day Celebration

March 11 – 14  
University of Michigan  
and the Ecology Center  
Ann Arbor

### Ann Arbor Earth Day Festival

April 19  
Gallup Park, Ann Arbor

### Brighton Earth Day Challenge

5K and 1.Mile Run  
April 25  
Mt. Brighton



Thanks to its striped camouflage, silent flight, and status as an apex predator, the Great Horned Owl is called the "tiger of the sky." Native to North America and a resident of the Huron River watershed, this owl is adaptable to many environments and considered common, but populations are declining. Their diet is varied, including rodents, rabbits, skunks, porcupines, reptiles, birds, and other raptors. This majestic owl is at risk of accidental death by poisoning as the result of the human use of toxic substances to control for rodents.

credit: J. Wolf



# Revised Phosphorus Policy Approved

## *Lower limits will impact many, but will they fix Ford and Belleville lakes?*

Last November, Michigan's Department of Environment, Great Lakes, and Energy (EGLE) received approval from the U.S. Environmental Protection Agency for a revised policy to reduce algae blooms in two Huron River impoundments: Ford and Belleville lakes. The policy, known as a Total Maximum Daily Load (TMDL), establishes a pollution diet for phosphorus within the section of the watershed that drains to those two water bodies. As part of the initial analysis conducted by EGLE in 1995-96, phosphorus was determined to be the nutrient that controls the growth of algae in the lakes, especially toxic blue-green algae and microcystis bacteria. The revised TMDL lowers the original limit for Ford Lake from 50 µg/l to 30 µg/l, among other changes.

### **Why was a policy revision necessary?**

The TMDL policy needed revision for several reasons. As the first nutrient-based TMDL in Michigan, approved back in 2000, it needed some structural changes to be consistent with other TMDLs around the country. Originally, a phosphorus *concentration* was set as the limit, rather than a phosphorus *load*, or annual weight. This allowed new developments to add phosphorus to the system as long as the concentration in their discharge was low enough. Thus, with these new sources, EGLE allowed the total load to the lakes to increase. The revised TMDL corrects this problem.

In addition, many conditions in Ford and Belleville lakes have changed over the past two decades. HRWC has been monitoring phosphorus in the streams since 2003. The most recent load calculation (a five-year mean through 2018) indicates a 53% drop in phosphorus entering Ford Lake. While EGLE does not calculate phosphorus loading in the same way, they did confirm a 20% decrease in phosphorus concentrations entering the lake. At the same time, biennial lake monitoring shows no change in phosphorus concentrations in either lake. Despite tremendous effort and

investment from municipalities, the trophic condition of the river impoundments has not improved.

The final (and most direct) driver of the revision was an administrative law judge's order. Four of the wastewater treatment plants (WWTPs) in the watershed sued EGLE over permit restrictions tied to the TMDL. The judge ordered EGLE to honor its commitment to revise the TMDL by October of 2019.

### **What changed?**

The most important change is that EGLE, arguing that reductions to-date have not done enough to improve impoundment conditions, dropped the concentration target for Ford Lake by 40%, from 50 µg/l to 30 µg/l. That concentration target is then used as the basis for calculating much lower load limits for all sources. EGLE also established a separate limit for Belleville Lake and extended both limitations to year-round (previously, the limitations only applied to the April-September "growing season"). Finally, the policy contains a more comprehensive list of individual point sources, with phosphorus load limitations for each. All municipal stormwater is included as a single source category, separate from generalized landscape runoff.

### **What are the likely outcomes?**

It is unclear what long-term impacts these policy changes will have on the river impoundments. Evidence from efforts to control sources to eutrophic lakes elsewhere suggests that it may require decades for lake phosphorus concentrations to recede. A significant problem is that the lakes contain a substantial phosphorus load in bottom sediment from past years of upstream pollution as well as a naturally high phosphorus content in underlying soils. While EGLE considered this "internal load," they under-represented its importance. Continued periodic bottom-releases during the growing season by Ypsilanti Township to keep bottom waters oxygenated will still be important to prevent algae blooms. Unfortunately, this is not possible in

Belleville Lake due to the structure of that dam.

The bigger impact will be on the existing phosphorus sources in the watershed. They will now see lower phosphorus limitations in their discharge permits from EGLE. On the positive side, there is no room for any new dischargers. Hopefully, EGLE will uphold this strict limitation and deny any new permit applications it receives. On the negative side, many existing sources have already invested millions of dollars to reduce phosphorus loading to low levels. Any additional reductions will come at great cost. The WWTPs have not committed to any next steps, but their lawsuit against EGLE is likely to continue.

The bottom line is that municipal partners within the middle Huron River watershed have made tremendous progress in phosphorus reduction over the years, and this is helpful for the entire river system all the way to Lake Erie. However, Ford and Belleville lakes are not natural. They may always be stressed by high phosphorus concentrations, or, at best, it will take many years to see significant improvement. The revised policy makes some steps in the right direction, and HRWC will continue to work with our partners to develop solutions to address phosphorus pollution.

—Ric Lawson



*The goal of the phosphorus limit policy is to restore function to the lakes, like here on Belleville Lake. credit: HRWC*



credit: C. Hieber

# Volunteer Spotlight • Paul Cousins

With deep gratitude and admiration HRWC presents the Lifetime Achievement Award to Paul Cousins. Paul is HRWC's longest standing board representative, serving since 1968, first for Webster Township and more recently for the City of Dexter. Paul is an inspired ambassador for the Huron River, forging relationships and facilitating initiatives that support its protection and restoration. He was Chair of the HRWC Board (2003-2009), has been a member of numerous committees, volunteered for nearly all events, and has

nourished the larger HRWC family with his amazing food and famous hospitality. His vision and leadership led to the removal of Dexter's Mill Pond Dam in 2008 and the restoration of more than 200 miles of stream to free-flowing habitat and a Mill Creek park that is a community focal point.

Paul's early environmental career was sparked during his time as a teacher at Dexter High School and his work with the Environmental Club. He and fellow teachers cleaned up the property behind what is now Mill Creek Middle School. The outdoor classroom that Paul led for a decade

drew its teaching methods from Dr. Bill Stapp, just as HRWC's Streamside Education Program does today.

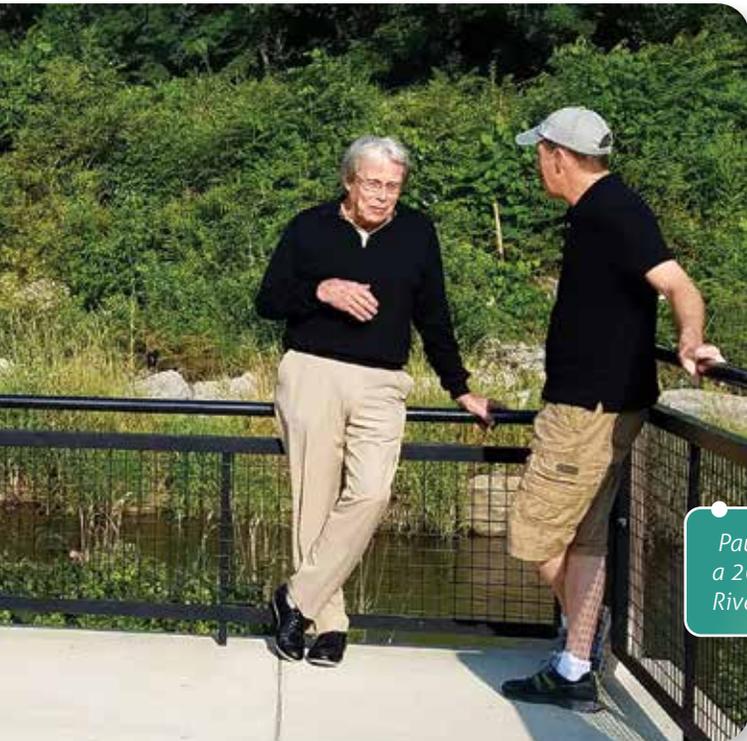
When asked about his philosophy of community service Paul says, "if someone thinks I can be of assistance, I will, and will try my best." His

secret to success, "always attend the meetings!" Paul's commitment to community finds him serving as a Dexter City (Village) representative on and off for 20 years—as well as on numerous commissions and nonprofit boards supporting transportation, education, and the arts—where his knack for fundraising has benefitted an untold number of residents and visitors. He and his wife Pat also owned and operated Cousins Heritage Inn—a beloved local farm-to-table restaurant—for 18 years.

Always one for appreciation, some of Paul's best experiences from his time of service are the amazing friends he's made, including numerous HRWC staff and board members. He is also exceptionally proud to have participated in HRWC's "growing up."

It is HRWC's pleasure to induct Paul Cousins into the Hall of Fame, following other beloved members Herb Munzel, Eunice Burns, David Wilson, Magda Herkof, Sally Rutzky, Janis Bobrin, and Dave and Sharon Brooks.

—Jason Frenzel



Paul talks to Under the Radar host Tom Daldin for a 2017 episode featuring Dexter and the Huron River Water Trail. credit: HRWC



## Make a Gift for Ages to Come

Contact Allison Gotelaere about your planned gift to HRWC: [agotelaere@hrwc.org](mailto:agotelaere@hrwc.org), (734) 769-5123 x 610





# The Bill and Mary Kinley Innovators Fund

## A shared vision for innovative solutions in water protection

HRWC is excited to announce the launch of the Bill and Mary Kinley Innovators Fund! Bill and Mary have been long-standing champions for the Huron River. Their commitment to HRWC's mission over the years has made a lasting difference in the health of the river and in engaging watershed residents in experiencing and protecting it. **With the Innovators Fund, the Kinleys are investing in HRWC's future—our ambition to explore and lead new and innovative approaches to river protection and restoration.**

They have seeded the Fund with a generous gift. The Fund will allow HRWC staff to pursue new ideas and partnerships, gain the necessary skills to increase our impact, and quickly tackle emerging threats to clean water. It gives the organization critical flexibility to do our best work at the time that it is needed most and the ability to grow high-impact

long-lasting solutions from the seeds of great ideas.

Together we can grow and sustain this fund over the long term and find innovative solutions for clean water. Help us reach our goal by contributing to the Innovators Fund today. **Donate between now and June 1, 2020, and your gift will be matched dollar for dollar by the Kinleys (up to \$22,000).** Achieving this match goal will allow HRWC to launch the Fund with \$162,000! If you would like to make a lasting difference by contributing to the Innovators Fund contact Allison Gotelaere at [agotelaere@hrwc.org](mailto:agotelaere@hrwc.org) or use the enclosed envelop and check the box for Innovators Fund.

Thank you for giving us room to spread our wings, Bill and Mary!

—Rebecca Esselman



*"Having worked with the Huron River Watershed Council for over a decade, we have full confidence in them to use this Innovators fund wisely. We feel it's a forward-looking step for HRWC initiatives that might not be possible otherwise, such as developing self-sustaining programs to increase rain gardens, or conducting research on microplastics in the river."*

—Bill and Mary Kinley

## Welcome New Staff; Thank You, Margaret!

### Allison Gotelaere and Kate Laramie join HRWC's team

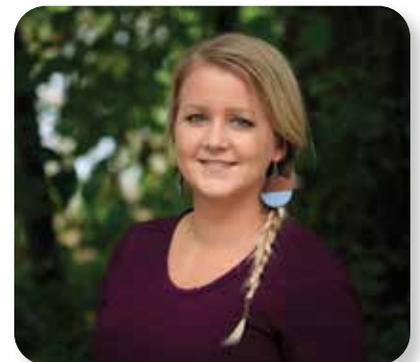
HRWC is pleased to introduce you to new staff—Allison Gotelaere and Kate Laramie. Allison joined HRWC in September as Development Associate. She has been a great addition to our development team, leading on membership and this year's events like River Givers, the Big House 5k and Suds on the River. She also provides support on fundraising and helped make our 2019 year-end campaign a huge success. Allison previously worked at the Leslie Science and Nature Center and the Michigan Municipal League, bringing strong experience in fundraising for the environment and knowledge of how to work with communities. When not at work, you may find Allie and her fiancée hiking with their dog Argo along the banks of the Huron.

Kate Laramie joined our team in February as a Watershed Ecology Associate. Kate provides support for our benthic macroinvertebrate program, summer internships, STEM

education efforts, and natural areas assessments. Kate has extensive field experience and has shined in many teaching roles. She has worked at the University of Michigan Biological Station and Tip of the Mitt Watershed Council, and is currently pursuing her Master of Science degree at the University of Michigan. She was an intern with HRWC in 2018, and we are delighted to bring her on permanently.

In October, we said goodbye to long time Development Director, Margaret Smith. Like all non-profit organizations, HRWC relies on the support of people within our community. Margaret's efforts in forging that support will outlast her tenure at HRWC and carry us forward into the future. We thank her from the bottom of our hearts for her efforts. We are glad of the time she spent with us and wish her well in her future endeavors.

—Rebecca Esselman



Allison (top) and Kate. credit: HRWC



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