



Huron River Report

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WINTER 2016



feature
story

Try Your Hand at Ice Fishing

And be sure to wear warm gloves!

Adapted from "Ice Fishing: The Coolest Sport Around" by the Michigan Department of Natural Resources. For more information, go to www.michigan.gov/dnr.

For many people, fishing offers a relaxing way to spend the day. In the winter months, the most popular angling activity is ice fishing. To those who have never tried it, ice fishing is sometimes looked upon as an oddity, but for others, ice fishing is the best kind of fishing. It offers a chance to breathe the cold, clean winter air, to spend quiet time outdoors with family and friends, and to relax and collect one's thoughts away from the hustle and bustle of a busy world.

Keep it safe, keep it fun

Just walking on the ice can be a unique experience. As with any

outdoor activity, safety should be a top concern. As a rule, no one should venture out on any ice when it is less than two inches thick (See sidebar "Ice Safety" on page 4).

Additional ice fishing safety rules include: 1. never fish alone; 2. tell someone where you are going and when you expect to return; 3. always test the ice with a spud (described later); 4. take the appropriate emergency items, such as a lifejacket and ice picks; and 5. take a cell phone with you in case you need to call for help. To enhance the experience, dress in warm winter clothes, fill a thermos with a hot beverage, and bring an empty bucket or old lawn chair to sit on.

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Learning to fish with a tip-up, a device that sits on the ice above the hole, with the bait dangling under the ice. credit: MDNR

Preparing for Climate Change

Anticipating an altered climate and its impacts on the watershed

Climate plays a defining role in what a river looks like and what species can live there. Rainfall and temperature interact with geology, soils, topography, and other physical factors to create conditions in the river. For the past 12,000 years, since the most recent glacial retreat, the Huron River has evolved to thrive

within a certain range of climatic conditions. In a fraction of that glacial time span, human-caused climate change will push the tolerance of the Huron River to conditions that fall outside that natural range.

Changes to patterns in temperature and precipitation due to climate change compound threats to

aquatic systems that already exist in urban and suburban settings. Rising air temperatures warm the water in rivers, lakes and wetlands. More consecutive dry, hot days lead to more frequent or prolonged drought.

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• **INSIDE: UPCOMING EVENTS AND WORKSHOPS** *RiverUp! improvements in Ypsilanti and a Great Lakes connection | HRWC gets a grant for Honey Creek | Kids snorkel in the Huron River*





While most of our work focuses on partners in the watershed (such as local governments, citizens, and businesses), state and federal government policies and plans greatly influence, and are influenced by, HRWC's work. This fall, a few of these issues are high on my priority list for action.

Dioxane clean up criteria

The Michigan Department of Environmental Quality (MDEQ) issued an emergency order lowering the acceptable exposure level of dioxane in drinking water from 85 ppb to 7.4 ppb on October 27, the same night as the Dioxane Town Hall Meeting in Ann Arbor. This order pulls dioxane out of the current draft revision of clean-up criteria that includes over 300 toxins. The order also offers the opportunity for parties to seek intervention in the long-running legal case (consent judgement) on the dioxane plume and get a seat at the table in the talks between MDEQ and Pall Gelman. HRWC is getting counsel from the Wayne State Great Lakes Environmental Law Center to evaluate alternative strategies and options to push for a quicker and more comprehensive clean-up.

Coal tar bans

Six watershed communities passed ordinances banning high PAH coal tar-based pavement sealcoats as a result of our work! Several other communities passed resolutions of support. The Michigan State Medical Society supports a statewide ban following the lead of the states of Minnesota and Washington. Representative Kristy

Pagan has introduced House Bill 5174 in support of a ban, yet we are still seeing resistance from state legislators. ***Please urge your senators and representatives to set a hearing and move this bill through to passage.***

Phosphorus and Lake Erie

It's been two years since the algae bloom in the western basin of Lake Erie shut down Toledo's drinking water, and relatively little policy or management progress has occurred to date. In mid-November Michigan took a common sense step towards protecting Lake Erie by announcing it will designate its portion of western Lake Erie as "impaired" under the Clean Water Act. States are required to compile a biennial list of waters that do not meet state water quality standards. There is plenty of data to indicate that the western basin does not meet Michigan or Ohio standards. While the "impaired water" designation is only a listing, the listing prompts the development of a phosphorus budget (a total maximum daily load (TMDL)) with reduction targets and detailed plans and commitments to action.

We've had our share of TMDLs in the watershed with HRWC implementing the State's first TMDL to address excessive phosphorus in Ford and Belleville lakes. While the budgeting and science part of the process is inexact, it does provide goals and a roadmap for responsible parties, including point-source, stormwater, and non-point sources, to follow. The parties are held accountable to take action and measure progress toward

these goals. It also provides a clear picture on where the phosphorus is coming from and where reductions are needed.

HRWC has been successful in reducing phosphorus in Ford and Belleville lakes through the TMDL process over the last 20 years. The original reduction targets have pretty much withstood testing, the partners meet semiannually to report on progress, and HRWC monitors water quality, serving as an advocate and technical advisor. The overall result is an estimated reduction in the annual phosphorus loading rate of 6.3 tons since regular monitoring began in 2003, or 14.2 tons (39%) since targets were set in 1995. That means 6.3 tons of phosphorus each year does not reach Ford, Belleville Lake, or Erie downstream. Further, nuisance algal blooms now occur rarely, much less severely, and for much shorter lengths of time in the lakes. Based on our experience, the benefits of a TMDL and an "impaired water" designation outweigh the costs. It's not a perfect solution but in the absence of action made to date, "impairment" seems the clear choice. Michigan stepped up to do its part to ensure the lake's water is safe for people to drink, swim and fish.

— Laura Rubin
HRWC Executive Director



credit: H. Buffman



credit: HRWC

HRWC's longtime Board Member, Eunice L. Burns, peacefully passed away on October 20, 2016 at the age of 93. Eunice is the longest serving member of the HRWC board and the co-founder of Ann Arbor's Huron River Day with her friend Shirley Axon. Eunice's commitment to clean water and a healthy Huron River began with her service on the Ann Arbor City Council in 1962. She became involved with HRWC in the early 1970s and served as Chairwoman three times. The photo at left—on a paddle with Barry Lonik—is classic Eunice; she loved life, people, and making the world a better place. Eunice cared deeply about the Huron River and the Watershed Council. She was always there to help out, stand up and let her opinion be known, and offer a big smile of encouragement. We are grateful for Eunice's many contributions; she will be profoundly missed.



Hands-on Learning Gets All Wet!

Education Program takes on snorkeling

What better way for kids to learn about water quality and gain an appreciation for the river than to dive in and touch some fish, clams, and bugs? That was the aim of the summer snorkeling pilot program and the kids loved it!

Ann Arbor and Ypsilanti early teenagers got full emersion in the Huron River through a unique partnership among three organizations coordinating the program—the YMCA provided campers and a lifeguard, Michigan Sea Grant provided funding for the equipment, and HRWC provided staffing and expertise.

It all began when Clarence Fullard, an HRWC volunteer and Michigan Sea Grant staffer, approached HRWC to pilot a snorkeling program based on a US Forest Service program. Sea Grant staff Rhett Register, Jack Cotrone, and Kate Bailey (also an HRWC volunteer) took over the project from Fullard, while HRWC staff identified and coordinated with the YMCA. By summer's end, nearly 100 students got to know the Huron in a fun and unique way through this novel collaboration.

Each week throughout the summer, a group of YMCA campers, led by senior campers, met up at Riverside Park in Ypsilanti to learn about watershed basics, hydrology, and human influences on the environment. The groups quickly moved to learning traditional biotic sampling techniques such as seining for fish and benthic macroinvertebrate collection similar to those used by HRWC for water quality monitoring. Though apprehensive of the water and the animals living in the river, participants tentatively got in after discussions about river health and a safety briefing about snorkeling. Time and time again, the timid became increasingly comfortable with the river, especially after seeing something "awesome." Large clams and crayfish were by far the favorite. Fish and benthics piqued interest. Freshwater sponges, macrophytes, and sometimes even garbage generated intrigue.

The program found that, with encouragement and proper training, the young teens could get comfortable getting in the water while abandoning their fears of the harmless bugs. Clearly confronting these fears by experiencing the river directly is a great way for kids to gain understanding and appreciation for a "foreign" waterbody, hopefully fostering a sense of stewardship.

All in all, the snorkeling pilot was a fabulous success. A few lessons were learned and the partners are looking forward to next summer. Contact Jason Frenzel if you would like to help with this fun program next summer!

— Jason Frenzel



Dip nets, snorkels and seins are all part of the fun as kids discover the Huron River!
credit: all photos R. Kimmey, except second from top Michigan Sea Grant



Making an access hole

To begin ice fishing, you'll need to make a hole in the ice. Bring the basics: tools to make the hole; something to clear the hole and keep it open; and a plan to mark the hole when you are done so other anglers are aware of the open ice.

The two basic tools used to make holes in the ice are **spuds** and **augers**. A spud features a long-shank with a chisel-like end that's used to chip a hole in the ice. A spud is a tool used when the ice isn't too thick. An auger is a corkscrew-like device with a cutting blade that operates like a hand drill to make a hole in the ice. For extremely thick ice, power augers that run on batteries or small gasoline engines are available to make cutting holes much easier.



Use a slush scoop to keep the hole clear. credit: P. Verdonk, Flickr

Once the hole is created, it needs to be cleared of ice chips or slush. A **skimmer** (or a **slush scoop**) is a small cup with holes in it (to let the water run out) on a long handle. It is inexpensive and perfectly suited for the job. A skimmer is used to clear the hole right after it's made, as well as throughout the day if it is particularly cold and additional ice forms.

The size of the hole is important. The hole must be big enough for a fish, but not so large that it endangers someone's life. Anglers are recommended to keep their holes to a maximum of eight to ten inches in diameter which would accommodate the size of most fish species. When abandoning fishing holes, anglers should mark them with a tree branch, sticks or chunks of ice to alert others of their presence.

Reels, rods, hooks, and bait

Ice fishing equipment can be divided into three basic categories: hook-and-line, tip-ups, and spears.

Most **hook-and-line** anglers use short, limber rods with reels or simple spring-tension spools to hold the line. Sometimes they use something as simple as a couple of pegs on the rod handle to wrap the line around. Limber rods allow the use of light line, which usually results in better fishing and absorbs more of the shock when fighting fish.

Hook-and-line anglers use **live bait**, **artificial lures**, or sometimes both to catch many different species of fish. Anglers often use small lures, such as teardrops or flies, with live bait – such as wax worms (bee moth larva), spikes (fly larvae), wigglers (mayfly larvae), or minnows – attached to the hook for better action. The bait can be fished without movement, or **jigging** can be used to attract the fish. Jigging is most successful if a lure of any kind is used.

Hook-and-line anglers have the choice of using a bobber on the line, just as they would while fishing in the summer. Some may also fish with a tight line and use a **spring bobber**, which is a small strip of metal or wire that extends off the rod tip like an additional eye on the rod. Any motion alerts anglers to the bite, a bonus for small fish or light-biters. Generally, anglers begin by fishing near the bottom and work their way up in the water column until they locate the fish, then continue to fish at that same depth. Anglers can use bobbers to set their baits at a preferred depth or fish a tight line, either fishing without movement or jigging.

For bigger fish, anglers use heavier gear with larger lures or bigger hooks which allows them to use larger bait – minnows, smelt, salmon eggs or spawn bags. Anglers generally start at the bottom and gradually move up in the water column when jigging. Those fishing with live bait, spawn bags, or salmon eggs generally fish right off the bottom. The most common species that hook-and-line ice fishermen look for are panfish: bluegill, sunfish, perch, and crappie.

Tip-ups and **spears** (more at www.michigan.gov/dnr) are generally used for larger game fish: northern pike,

ICE SAFETY

Only go out on the ice for the first time after a hard freeze that forms clear solid ice. Four inches of this type of ice will support a person on foot, but six inches of ice are needed to support someone on a snowmobile or ATV. As ice thickness reaches 8 to 12 inches, it may support small cars and pickups. For taking larger vehicles out on the ice, wait until it is well over a foot thick.

Other conditions can also affect the safety of the ice cover. These include inflowing rivers or streams that can delay ice formation. Areas where this warmer inflowing water enters the lake are dangerous and should be avoided. In addition, there are inflowing springs in many lakes where warmer water flows in and can weaken the ice.

Adapted from "Knowledge of ice formation and safety precautions could help keep you safe when venturing out on the ice this winter" by Ron Kinnunen, Michigan State University Extension, Michigan Sea Grant. For more information go to www.msue.anr.msu.edu.

walleye, trout, muskellunge, lake sturgeon, and others.

Increasing the odds of a hit

Most ice fishing success happens from dawn until mid-morning and again from late afternoon until sundown, which is true for panfish and walleye, particularly. Some species can be more aggressive at other times during the day, such as northern pike. Fish are more sluggish during the winter and move around less, especially in mid-winter when ice thickness and snow cover is the heaviest. The more holes anglers cut and try, the better their chances are for locating

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Ice Fishing *continued from previous page*

aggressive fish. Common equipment for nearly all types of anglers are **electronic fish finders** which help locate both aggressive and non-aggressive fish and make it easier to determine if fishing holes will be active.

Bundle up

Ice fishing can be a fairly cold activity so be ready to face the elements with appropriate shelter and apparel. On windy days a shanty is almost a requirement. Portable shanties are available at local sporting goods stores. In areas where the ice fishing season can last for many months, some anglers build elaborate, removable shanties on the ice.

On less harsh days, many anglers can be seen on the ice on portable folding stools or overturned five-gallon plastic buckets that double as gear carriers. Anglers can fit their rods, lures and baits into a bucket for easy transport. In many cases, anglers build gear boxes, often on sleds or skis to pull behind them.

Ice fishing anglers should dress in layers that can be removed or added as the temperature changes. It is common to break a sweat trudging across the lake, especially when carrying or pulling equipment. An outer layer of wind-breaking fabric, layers of modern lightweight fabrics that provide warmth, and a layer

of thermal-wear against the skin to absorb sweat and wick away moisture help keep anglers warm and dry. Waterproof boots are a must, and a pair of moisture-wicking socks under wool socks will help.

In the case of any winter activity, it is wise to know the early signs of hypothermia: uncontrolled shaking, lack of coordination/fumbling, and disorientation. It is important to get warmed up before the situation becomes critical. Learn more at www.redcross.org.

Classes and events

Although the idea of going ice fishing may seem daunting, many fishing clubs and sporting goods stores hold annual ice fishing clinics where anglers can learn the basics. A number of Michigan state parks, interpretive centers, Metroparks, and fish hatcheries host programs during the winter months that teach basic techniques and offer hands-on experience.

— Pam Labadie, Article Editor

Thanks to Ed Wojtan, lifelong ice fisherman and staff member at the Washtenaw County Parks & Recreation Commission (WCPRC).



credit: WCPRC

BAIT

Ric's Bait Shack
9815 Main St, Whitmore Lake

Klave's Marina
8789 McGregor Rd, Pinckney

More: the MDNR's website has a map-based retail bait locator.

ICE CONDITIONS

www.IceFishingMichigan.com
An online forum where anglers report in and share inland lake ice and fishing conditions.

KEEP IT LEGAL

"Michigan Fishing Guide"
Check the MDNR's annual for all fishing restrictions and license requirements. Take advantage of the 2017 Winter Free Fishing Weekend, February 18-19 to fish for FREE, no license required!

TRY IT!

13th Annual Ice Fishing Derby
Independence Lake Park
Saturday, February 11
7am to 5pm

Come out for a fun-filled day of family-friendly competition and prizes catching northern pike, blue gill, bass, and crappie! Hosted by the Washtenaw County Parks & Recreation Commission. Other events for Free Fishing Weekend will be listed at the MDNR's website.



• An electronic fish finder makes things easier at the Annual Independence Lake Park Ice Fishing Derby. credit: WCPRC



Preparing for Climate Change *continued from cover*

Heavy rain leads to rapid changes in flow that can harm fish and insects and degrade habitat. Looking back, data shows each of these conditions now occurring more frequently than in the past. As greenhouse gases continue to increase in the atmosphere, even with significant reductions in global emissions, these changes in temperature and precipitation will continue. In response, HRWC is implementing a suite of strategies to help keep water temperatures cool, river flow within the natural range of variation, and fish populations healthy.

Stronger protections for riparian vegetation keep waters cool.

Forests and other natural ecosystems along the river can reduce impacts from increasing air temperatures while allowing water to infiltrate,

cool, and enter the river as groundwater. The Huron supports warm and cool water fish. While species composition may shift to favor those that can handle warmer water temperatures, shading the river is one of the best ways to keep water cool. Much of the river between Kent Lake and Barton Pond, and parts of Arms, Mill, and Davis creeks are a designated Natural Rivers District (NRD) by the State of Michigan. This designation is a first line-of-defense for the river because it limits development activities that reduce the number of trees along its banks. The NRD requires a minimum 50 foot vegetative buffer adjacent to the river. HRWC has been working with NRD communities (townships of Hamburg, Green Oak, Dexter, Webster and Scio) to make sure NRD protections are in place. Through local ordinances, renewed awareness at the municipal



University of Michigan students installing low cost water level sensors to help dam operators manage flows.

credit: 7 Cylinders Studio

level, and outreach to waterfront landowners, HRWC is ensuring an intact tree canopy to reduce the impacts of high air temperatures.

HURON RIVER



Protect The River For Future Generations.

The Huron River didn't become the cleanest urban river in Michigan by accident. It happened because of generous and forward-thinking people (like you!) who know that when we preserve today's natural resources, we protect the river for future generations to enjoy.

It's easier than you think.

- Make a tribute gift through your will
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Discover your perfect legacy gift at hrwc.plannedgiving.org
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Habitat restoration provides safety during extreme storms.

Fallen trees are an important component of river habitat. Fish and insects benefit from access to areas on, under and near this kind of woody debris. For example, fallen trees provide refuge from fast moving water. These areas of slower moving water are important when rivers run swiftly after large rain events or rapid snowmelt. In October, 2015, HRWC worked with crews in Ypsilanti to place 25 streamside trees into the river and anchor them. This stretch of the river was identified as an area particularly poor for habitat but with potential for supporting a more robust smallmouth bass population. These submerged trees will help recovering fish populations bounce back from losses caused by extreme events including flooding and drought.

Dam management reduces the impacts of fast flow on spawning fish.

Dams exert considerable control over how water moves through a river system since each dam holds or releases water under certain conditions. Dam operators on the Huron are exploring ways to reduce

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Preparing for Climate Change *continued from previous page*

impacts of extreme events on fish and insects. For example, smallmouth bass are native to the Huron, play an important role in the ecosystem, and are a prized game fish. These fish spawn in the spring, the time of year projected to see some of the greatest increases in precipitation. Research shows that rapid changes in the flow of the river during the spawning season greatly reduce the number of young fish surviving to leave the nest. HRWC is interested in exploring the possibility of reducing the loss of young fish by slowing the release of flood waters from dams during that critical spring window. To that end, HRWC developed a set of flow recommendations to protect native species. In 2016, dam operators began piloting these recommendations to see what potential lies in this strategy.

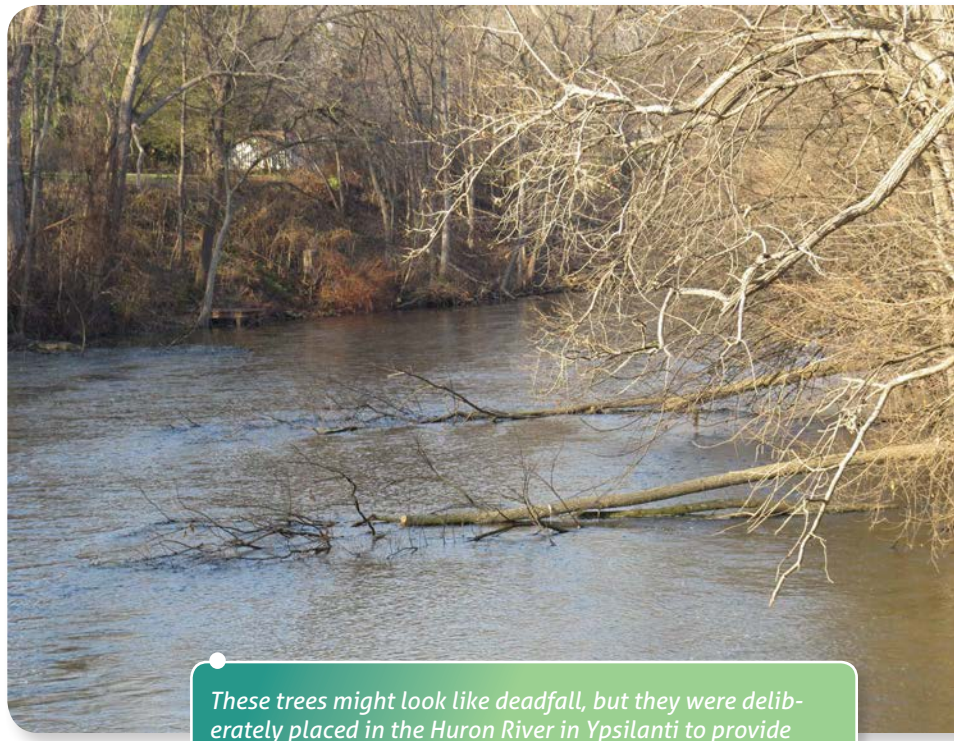
Catch and release fishing during spawning season will keep fish populations healthy.

Healthier fish communities are more likely to recover from extreme climate change-induced events in the future. In addition to habitat restoration and flow management improvements, HRWC is implementing an education and outreach campaign to reduce catch-and-keep fishing that occurs during spawning season. The State of Michigan requires anglers to carefully release their catch back into the environment during the spawning season, but not everyone adheres to this law. Additional signage at common fishing locations and educational materials distributed at bait shops and where licenses are sold will hopefully result in less catch-and-keep fishing during this critical time.

A multipronged approach

The impacts of global climate change to riverine systems are many. No single climate adaptation strategy can ensure that the Huron River system will remain healthy. Consequently, HRWC's investment in this suite of strategies will help the river and its communities acclimate to a future climate that looks noticeably different from that of the preceding 12,000 years.

— Rebecca Esselman



These trees might look like deadfall, but they were deliberately placed in the Huron River in Ypsilanti to provide much needed habitat diversity for fish and insects, as well as protection from high flow events. credit: HRWC

Taking Action

Efforts made to prepare the Huron River for a changing climate are already paying off. Outcomes achieved through this project to date include:

- Webster Township deciding to strengthen its involvement in the natural rivers program by adopting its own ordinance language to ensure the natural river district is protected.
- Encouraging approximately 2,200 riverfront landowners to help decrease the removal of riverside vegetation, facilitated through dissemination of a brochure on the Natural River District requirements and the importance of natural buffers.
- Habitat restoration in 3500 meters of river in Ypsilanti including a rock vein at Riverside Park, which will also provide great fishing and fish viewing .
- HRWC working with the fishing community to discourage catch-and-keep fishing during spawning season. Look for new signs in fishing hot spots this spring.
- University of Michigan researchers donating time and equipment to collect more flow data on the river to help dam operators manage flow.
- City of Ann Arbor changing the timing of a dam repair to avoid potentially damaging flows during spawning season. This action was taken in response to environmental flow recommendations based on HRWC and UM data.

Founded in 1965, the Huron River Watershed Council (HRWC) protects and restores the river for healthy, vibrant communities.

HRWC coordinates programs and volunteer efforts that include pollution prevention, hands-on river monitoring, wetland and floodplain protection, public outreach and education, and natural resources planning.

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



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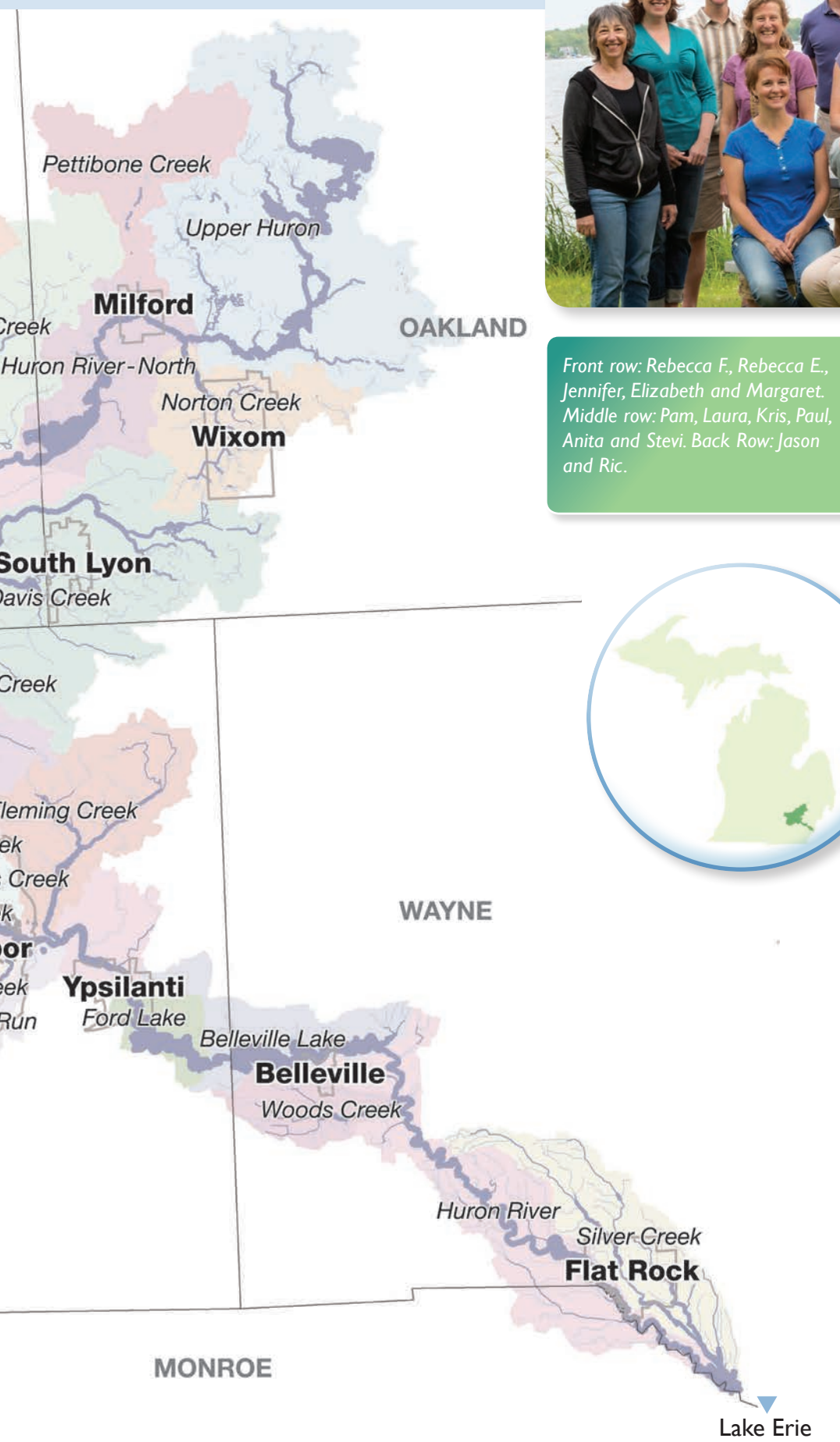
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J. Wolf, Laughing Goat Arts © 2016

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The Huron River Watershed



For additional, detailed maps please go to: www.hrwc.org/the-watershed/maps



Anne Savage Photography

Front row: Rebecca F., Rebecca E., Jennifer, Elizabeth and Margaret.
Middle row: Pam, Laura, Kris, Paul, Anita and Stevi. Back Row: Jason and Ric.

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RiverUp!

RiverUp! is a campaign to restore and revitalize the Huron River. It is the Huron's signature place-making initiative that seeks to transform the river corridor into a premier destination in Michigan and the Great Lakes. HRWC leads this public-private partnership and executes projects that improve river health, recreation access, and water-based investments in local economies. www.riveruphuron.org



Residents enjoy many new improvements to Frog Island Park. credit: HRWC

Frog Island Park Renovation

The river access at Frog Island Park on the Huron River, located just north of Depot Town between Forest and Cross, is getting a makeover. Since November 2015, invasive shrubs were removed and sight lines to the river opened up, hand rails on the stairs were installed, concrete cleaned, and an access path and launch were graded with gravel added. Now the access is safer and easier to use. A new river-themed mural and signage is in the works for spring 2017.

HRWC led this project in cooperation with the City of Ypsilanti. Thanks to Bill Kinley for championing it, with support from the Walter J. Weber Jr. Family, and many individual donors. Much gratitude to Washtenaw County Convention and Visitors Bureau and Margolis Landscaping for the many hours of labor and materials generously given to the renovation. Thanks to all of the community volunteers who kicked off the work. Paddle Ypsi!

Connecting the Huron River Water Trail to the Great Lakes

With support from the State's Coastal Zone Management's Coastal Community Development program, HRWC spent a year working with partners from Flat Rock to Lake Erie on making this 10-mile stretch a destination for residents and visitors. The work addressed two high-priority needs in the trail segment connecting to Lake Erie. First, HRWC led the creation of a Trail Town Strategic Plan for Flat Rock to guide efforts that connect with the river while stimulating local economic investments that promote stewardship of the river and Water Trail. The City of Flat Rock and the local team enthusiastically welcomed the plan and will be incorporating it into existing plans.

Second, the project team completed a master plan for Labo Park in South Rockwood, a popular put-in spot for the 3.5-mile paddle to connecting coastal water trails and the preferred resting spot for the longer Flat Rock to Lake Erie route. The plan includes the following items:

- Improved access to the Huron River for watercraft put-in and take-out
- Parking and a drop-off area for use by local outfitters and others
- Canoe staging area and Universal Access for paddlers with disabilities
- Huron River Water Trail signage and information for coastal water trails
- Stormwater management associated with proposed improvements
- Riverbank restoration opportunities

Implementing the plan for Labo Park will help South Rockwood meet several objectives in its Parks and Recreation Master Plan including a terrific place for residents and paddlers to enjoy the Huron River. HRWC looks forward to supporting the Village in seeking funding to realize the plan.

— Elizabeth Riggs



Huron River
WATER TRAIL



Making Honey Better

HRWC receives grant to improve Honey Creek in Scio Township

HRWC recently received a 3-year grant from the Michigan Department of Environmental Quality (MDEQ) to implement priority recommendations in the Honey Creek Watershed Management Plan, completed in 2013. HRWC's Honey Creek field research found high levels of *Escherichia coli* (*E. coli*) – an indicator of potential human health threats in the creek. Genetic fingerprinting of the bacteria determined pet waste, farm animal waste and waste from failing septic systems to be the main sources of contamination in the creek. The plan recommends steps to restore and protect the watershed by addressing these critical issues. HRWC's new Honey Creek project will implement the plan's recommendations with the following activities.

Canine teams (dogs!) trained to sniff out sources of human sewage waste will focus on two key areas of the watershed. Once the dogs help identify specific areas with septic issues, HRWC will work with Washtenaw County and property owners to help them address problems and meet county health standards for septic systems. The project team will also work together to conduct wider public outreach on routine septic system inspection and maintenance.

Pet waste removal – scoop that poop! Since pet waste was identified as a predominant source

of bacteria in Honey Creek, the project team will educate pet owners on the importance of removing pet waste from yards and parks, and install pet waste pick-up stations in public areas. HRWC will also work with Scio Township to pass a pet waste ordinance.

Storm drains are a direct conduit for wildlife and pet waste to Honey Creek and the Huron River downstream. The team will mark 1,000 storm drains with circular decals. Flyers will be disseminated door-to-door, raising awareness of the direct connection to the creek, and providing information for capturing and reducing polluted runoff.

Farmers in the Middle Huron watershed will be invited to join the Farmer Advisory Council (FAC). The FAC will advise HRWC and project partners on future plans to address bacteria and nutrient reduction from agriculture including innovative approaches such as "pay for performance" subsidies for nutrient and bacteria reduction practices.

HRWC and volunteers will return at the end of the project to sample the creek to determine if bacteria levels have declined enough to meet state standards and allow residents to safely interact with the water. This



Volunteers Jennifer Carman, Hannah Butterworth and Otho Ulrich measure conditions in Honey Creek for HRWC's Water Quality Monitoring Program. credit: HRWC

program will not only improve Honey Creek, but also the Huron River.

— Ric Lawson and Anita Daley

The Honey Creek project is funded in part through MDEQ's Nonpoint Source Program and the US Environmental Protection Agency.



Chipmunks are industrious throughout the fall, caching food for winter. Chipmunks enter a form of hibernation – with slowed respiration and heart rates, and lowered body temperatures – but they do not increase the fat stores within their bodies. To compensate, they wake up periodically, snack on their stores of seeds, nuts and other foods, drink, and void body waste. Then they return to their state of hibernation. Scientists are using new technologies to study the exact mechanisms that help chipmunks survive a variety of winter conditions. credit: J. Wolf

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HRWC Events and Workshops

DECEMBER • JANUARY • FEBRUARY • 2016/17

Chocolate & Cheer

Thursday, December 15, 4-6pm, NEW Center, Ann Arbor

Please drop in for delicious treats and lively conversation to share the warmth of the holiday season with HRWC and Legacy Land Conservancy. Chocolate confections with coffee, tea and hot chocolate compliments of Roos Roast, Arbor Teas, and Trader Joe's. No RSVP necessary.

Details: msmith@hrwc.org

Annual Presentation of Field Season Results

Thursday, January 19, 6-8pm, NEW Center, Ann Arbor

Join us to review the data collected and lessons learned from HRWC's 2016 field season. Which creeks are improving from our work and which are losing ground? Which are degrading and why? Presentations by HRWC staff. Hope to see you there!!

Details and registration: jfrenzel@hrwc.org

Board Meeting

Thursday, January 25, 5:30pm, NEW Center, Ann Arbor

Details: lrubin@hrwc.org

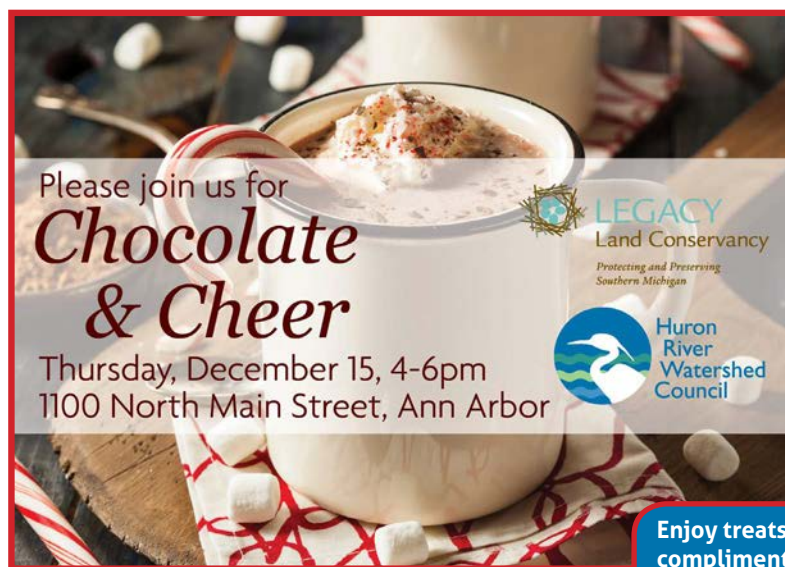


Winter Stonefly Search

Saturday, January 21, 10:30am or Noon start times, NEW Center, Ann Arbor

Winter Stoneflies are elusive! These underwater creatures avoid predators by growing during the winter months when most fish are sluggish. They live only in high quality streams so searching for them reveals problems in the river and its streams. Children are welcome, with their own adult. Start at the NEW Center and then go to two stream sites in Livingston, Oakland, and Washtenaw counties. Time commitment is four hours, with part of that outdoors.

Details and registration (required): www.hrwc.org/stonefly



SAVE THE DATE!

Quiet Water Symposium

Saturday, March 4, MSU Pavilion for Livestock and Agriculture Education, East Lansing

Join Huron River Water Trail staff at this day-long expo to plan your Michigan summer paddling adventures. Talks, demonstrations and exhibits from outdoor recreation providers, experts and outfitters. www.quietwatersymposium.org.

Native Plants and Rain Gardens

Saturday-Sunday, March 18-19 Home, Garden, and Lifestyle Show at the Washtenaw Farm Council Grounds

Learn tips for using native plants in landscaping or designing and building a rain garden to capture and infiltrate runoff from HRWC and the Washtenaw County Water Resources Commissioner's Office. Experts on hand to answer questions and give advice. www.bragannarbor.com.

Water Quality Monitoring Training

Saturday, March 25, 1pm
NEW Center, Ann Arbor

Help measure the quality of local rivers and streams this spring and summer! Learn how to collect water samples, measure stream flow, and sample runoff from rain storms. No prior experience needed, but participants must attend this first classroom kick-off training. Additional hands-on field training will take place during the first week of sampling in April. Sampling in the field is 2 or more hours each time out, with a commitment of 8 times out during the season (April – September). Volunteers near or willing to travel to Wayne and Livingston Counties are particularly needed.

Registration and info:
www.hrwc.org/water-sampling/

Enjoy treats compliments of Roos Roast, Trader Joe's, and Arbor Teas.



We are grateful to our hosts Connie Hunter Belda and John Belda, our Host Committee and Sponsors, Volunteers, and all the wonderful guests who raised a glass with us at our Suds on the River event in September.



(left to right) Laura Rubin, John Belda, Connie Hunter Belda



Photo by John Lloyd



Photo by John Lloyd



Photo by Katie Alexis Photography



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Afternoon Delight
Anthony's Gourmet Pizza
The Bar at 327 Braun Court
The Common Grill
Dexter's Pub
Durham's Tracklements Smokery
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Grizzly Peak
Jerusalem Garden
Jolly Pumpkin Café and Brewery
La Dolce Vita
Logan

The Lunchroom
Mac's Acadian Seafood Shack
Morgan & York
Pacific Rim by Kana
Paesano Italian Restaurant
People's Food Co-op
Pretzel Bell
Real Seafood
Redbrick Kitchen
Terry B's Restaurant & Bar
Tuptim Thai Cuisine
Zingerman's Bake House and Creamery



HRWC would like to extend our gratitude to everyone who helped protect the Huron River by giving of their time, talent, in-kind contributions, and financial resources.

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