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WINTER 2014

Trail Towns of the Huron

Part 5 in a series: the City of Ann Arbor

Ann Arbor is the largest Trail Town on the Huron River Water Trail. As of yet, no "Best Town on a Water Trail" list exists, otherwise Ann Arbor might add that title to its impressive list of national rankings. The seven river miles that flow through the city are the busiest along the Water Trail, thanks to an active community of residents and students that enjoy the out-of-doors, plus terrific venues offered by the city's Parks and Recreation Department.

At River Mile 53

Variety characterizes the river miles that flow through Ann Arbor (miles 53 to 46 of the Water Trail). Early morning solitude for a single scull on a glassy pond gives way to afternoon crowds lugging tubes and kayaks to the Argo Cascades for splashy, droppool thrills. The flat water sections created by Argo and Dixboro dams are separated by a forested riverine section with soccer fields and rooftops that hint at the city that lays beyond the river's edges. No fewer than twelve city parks and nature areas line the river, along with substantial green space managed by Concordia University and the University of Michigan, all of which

makes for a scenic float. The nonmotorized Border-to-Border Trail follows the meandering path of the river, providing another dimension to the outdoor recreation experience. Gallup Park in Ann Arbor includes a wellstocked livery for river recreation, including canoes, kayaks, paddle boards, and paddle boats. credit: D. Coombe



Is Ann Arbor Trail Town-ready? Ann Arbor is unique among the five Trail Towns in a couple of notable ways. First, the city operates its own canoe and kayak liveries and manages

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Toxic Bacteria Impacts Lake Erie Communities

Harmful algal blooms and their connections to the Huron River Watershed

By now, the horror stories from this summer's massive "Harmful Algal Bloom" (HAB) are familiar, with news outlets reporting that the water supplies of several western Lake Erie communities were "unfit for public consumption." On August 2nd, Toledo made national news by banning the use of their drinking water supply due to toxic levels of bacteria. Overall, drinking water bans impacted 500 million people, including Michiganders in the River Raisin watershed, just south of the Huron River.

What Made the Water Toxic?

The culprit of all this turmoil was a nasty little class of organisms known by several names. Lake Erie was contaminated by a class of chemicals called microcystins. These toxins are

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INSIDE: UPCOMING EVENTS AND WORKSHOPS Natural Area Preservation Update Coal Tar Sealcoats and the Impacts on Environmental Health | Oral History Project Continues

Laura's Stream of Consciousness

HRWC status and updates

s we settle in for the winter, I worry that thoughts of

summer storms and algal blooms seem distant. The events this past August are fading, and the severe impacts are already cleaned up or fixed and forgotten. First, nearly 500 million people in the Toledo area lost their drinking water due to algal blooms in Lake Erie (see cover article).

This disaster pointed out that our drinking water treatment plants need major upgrades in technology AND just as important, that our rivers, lakes, and streams are struggling with excessive phosphorus from agriculture, lawn care, and human and animal waste. Climate change is only making the algal blooms worse. Second, severe flooding in Metro Detroit caused highways to close, businesses to shut down, and 14,000 houses to flood. The old stormwater pumps predictably failed to get the water off the streets, and the intensity of the storm overwhelmed the size of the current storm pipes.

Both of these events brought much needed attention to two of HRWC's central goals: to reduce phosphorus and to make our communities more resilient to climate change. For the past 20 years, HRWC has worked with local governments to reduce phosphorus. We've eliminated 6.3 tons of phospho-



rus from Ford Lake each year. While we've seen phosphorus vary year to year, the trend in the watershed is less phosphorus – and fewer algal blooms. Anticipating an increase in the intensity of storms and increased precipitation in the watershed, we have strong stormwater controls in many counties; we have

protected over 6,000 acres of natural area and farmland that help soak up rainwater; and, in the 16 local governments with strong wetland protections, we're protecting more wetlands to hold runoff back.

At a policy level, while we have some good regulations and programs, we need more. Current incentive programs for farmers include establishing buffers along water features, developing nutrient management programs, and implementing alternative farming practices, but these efforts are weak and have small gains. The Clean Water Act (CWA) regulates our wastewater treatment plants and, in the last decade, now even regulates stormwater for larger communities. These regulations have resulted in water quality improvements, though many communities struggle to meet these requirements due to a lack of dedicated funding. These policies and programs help. But the shutting of busi-



nesses, the closing of roads, the flooding of homes, and the loss of drinking water illustrates that we need to do more.

With heightened awareness from these recent disasters, and acknowledging the existence and success of many federal, state, and local programs, we need strong and decisive leadership and action on two issues:

> Stronger controls on agriculture – Just as industry fought the Clean Water Act protections back in the early 70s and claimed it would kill the industry, agriculture is making the same claims. We have incentives for improved agricultural practices as mentioned above, but we need to complement these programs with regulations.

State-enabling legislation for stormwater utilities -Two lawsuits have questioned the legality of stormwater utility fees, making local governments reticent to enact them. Without a permanent and dedicated revenue stream for stormwater infrastructure, local governments don't have the resources in their general funds to fix old and breaking storm pipes, pumps, and holding basins. Michigan's legislature needs to pass legislation enabling and encouraging local utilities to provide stormwater systems that work.

Ultimately, we're working for good water quality. Please consider an end-of-year donation to support our water quality monitoring programs. These programs inform and direct all of the work we do to protect the Huron River watershed. Use the enclosed donation envelope or donate online at www.hrwc.org.Thank you!

Oral History Project

The importance of measuring insects - and more - in the Huron River

Insect populations in rivers are important markers of water quality, temperature, and flow. We know that now, but it wasn't always so. Janis Bobrin, Drain Commissioner (later Water Resources Commissioner) in Washtenaw County from 1989 to 2012, tells how HRWC began to count and assess the insect populations of the Huron River, working with volunteers, which led to HRWC's Adopt-A-Stream program.

An intern in Janis's office, Scott McEwen, visited the Seattle area and saw a program that impressed him. "He thought it was just fabulous, getting the public to feel some ownership over the waterways, and he wanted to bring it back here. I thought it would be a great idea. I said that my office would provide the funding."

So, Scott walked into the office of Paul Rentschler, HRWC executive director at the time, and said, "I want to start an Adopt-a-Stream Program for the Huron River...<u>and</u> I've got the funding for it."



Young volunteers get ready to help study aquatic insects in local creeks. credit: J. Lloyd

"Getting the public involved in water quality protection was just basically the bottom line," says Janis. "I was well aware of what a great partner HRWC could

be in doing technical work. And when Joan Martin took over the Adopt-A-Stream program for HRWC in 1992, she took it to a whole new, much more technical, level. Joan has a background in science that enabled her to get people involved in the monitoring that we've been doing now for so many years, really getting a grip on stream health and changes over time. All that kind of demonstrable difference in what kind of bug populations were living in those creeks did more to get responses from public officials in changing the way things happen than anything else that I've seen."

- Interview of Janis Bobrin, June 25, 2013

Shared Stories

HRWC will turn 50 in 2015. To help celebrate, Karen Snyder, a volunteer committed to preserving our natural resources, is compiling our oral history, interviewing HRWC "old timers" and "new timers" to capture precious stories that are part of our past.

HRWC will share excerpts from these oral histories over the next year. All transcripts and photos will be turned over to the Bentley Library at the University of Michigan for preservation. If you would like to assist with or be interviewed for this project, contact Jason Frenzel, jfrenzel@hrwc.org.

\$20,000 and counting. That's how much we've raised through Books by Chance with your support!

Proceeds from internet sales of old and unwanted books, CDs and DVDs helps HRWC. Please donate! We like the slightly esoteric, academic, scholarly, and - especially - university presses. To put your "treasures" to work for HRWC bring your donation to the HRWC office, 9am-5pm weekdays. We will handle the rest. QUESTIONS: Rebecca Foster (734) 769-5123 x 610 or rfoster@hrwc.org.

Trail Towns of the Huron continued from cover

the majority of land in the river corridor, providing extensive public access and programs. Second, unlike other trail towns, downtown is a fair distance from the river (a 20-minute walk from Argo Livery). Both factors present excellent opportunities and interesting challenges to the team forming around the Trail Towns effort.

The most paddled section of the entire Huron River is the 3.7 miles from Argo Livery to Gallup Livery. In addition to private boats, the City of Ann Arbor Liveries sent nearly 70,000 people down the river in rental boats during the 2014 season,



Paddle boarding is increasingly popular, both for its fitness benefits and because it allows participants a new perspective on the water. credit: D. Coombe

reports Liveries Supervisor Cheryl Saam. Those numbers represent a noteworthy increase of 35,000 annual rentals over the 2008 season. Moreover, a healthy return on investment landed this part of city government in the black for six years running. Saam's operations also handle maintenance such as managing woody debris, harvesting aquatic plants, improving launch sites and portages, and maintaining the Argo Cascades. HRWC works closely with the Parks & Recreation Department on Water Trail development, promotion, education, and maintenance.

Ann Arbor's founders platted and built the proverbial city on a hill, and the river running through it was not the Huron, but a creek named Allens, after one of the city founders. For the rest of the 19th century and

much of the 20th century, the Huron River corridor was used for livestock pens, the railroad, slaughterhouses, and various industries that valued the waste disposal afforded by the flowing waters of the river. Leap to presentday Ann Arbor where river recreation is highly valued, and the Trail Towns team is looking for ways to direct users to the right amenities such as overnight lodging, restaurants, and shopping. As illustrated in the Vision Map for the Ann Arbor section of the Water Trail (see next page), potential commercial destinations closer to the river include the North Main Street corridor, the partially restored DTE Energy waterfront property on Broadway Street, and Lower Town.

Ann Arbor has implemented many Trail Town features for the benefit of residents and visitors:

- A welcoming atmosphere includes friendly livery staff, way-finding signage for the liveries, Water Trail, and Border-to-Border Trail, and informative websites at www.a2gov.org and www. huronriverwatertrail.org;
- The right mix of services for trail users, such as the universal design launch at Gallup, improved access at Island Park for groups, the new boat slide at Barton Dam, Zingerman's coffee and baked goods at Gallup Park, concessions, bathrooms, shaded picnic tables, fishing docks, and rentals of standup paddleboards, tubes, rafts, canoes, and kayaks at two city liveries; and
- Trail-oriented events such as river camps and programs for nearly 400 day campers, fishing, full moon paddles, kayak and stand-up paddleboard instruction, stand-up paddleboard Yoga, Huron River Day, Trick or Treat on the river, and more.

Providing a Gateway

Opportunities for Ann Arbor to build its reputation as a Trail Town



Livery staff help rental customers get their boats and equipment ready for a paddle that starts at Argo Livery, heads through the Cascades, and ends at Gallup Park. credit: D. Coombe

include providing a gateway from the Water Trail to business districts using kiosks that highlight businesses and attractions within walking distance, and rental boat lockers specially designed for canoe and kayak storage and gear that allows people to store their equipment and belongings while visiting Ann Arbor for an afternoon or a weekend. Bandemer Park's north riverfront could work well for these features. In addition, the future uses and appearances of the DTE Energy property on Broadway will play a significant part in creating a sense of place for Ann Arbor along the river. Might the city's first waterfront restaurant pop up there? Or might the Argo Livery expand there to provide river access from downtown?

Building the Ann Arbor Team

Through the RiverUp! campaign, HRWC assists the Ann Arbor Trail Town team in crafting an identity around the Water Trail and implementing trail infrastructure improvements, way-finding signs, and marketing materials. The local team consists of representatives from the City of Ann Arbor, University of Michigan, Washtenaw County, DTE Energy, and community and business leaders, with facilitation and support

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Trail Towns of the Huron continued from previous page





Argo Livery, located on Longshore Drive, is a popular starting point for local river trips, with the Cascades offering a thrilling start to the adventure. credit: D. Coombe from HRWC's team of the Trail Towns Coordinator, Construction Manager, and RiverUp! Manager.

Engaging in the "Blue Economy"

Investing in the river corridor is a way to engage in the "Blue Economy" locally, and the payback is clear and compelling. President and CEO of the Ann Arbor Area **Convention & Visitors Bureau** Mary Kerr reports that a recent survey of prospective and past visitors to the area ranks the Ann Arbor area 13% higher in scenic beauty and 8% higher in outdoor activities compared to its peers. In 2013, the area welcomed 5.6 million visitors who generated \$535 million in tourism, of which \$66 million is attributed to entertainment and recreation. In the past year, HRWC and Washtenaw County released an economic impact analysis of

Huron River recreation in the county that conservatively reported \$33 million in revenue. More details on the value of river recreation are available from the 2014 State of the Huron Conference session at www.hrwc.org/ events/sohc2014.

Hit the Trails in 2015

From Dexter to Flat Rock to Ypsilanti to Milford and now to Ann Arbor, this Trail Towns series of articles presents an introduction to experiences for the river traveler, as well as to some of the people putting out the welcome mats for their towns. Over the next several months, HRWC and the Trail Towns will release a series of brochures with complementary web content detailing each location. In addition, plans are underway for a Trail Towns Week in summer 2015 to showcase these five special places on the Huron River.

— Elizabeth Riggs

Toxic Bacteria Impacts Lake Erie continued from cover



Harmful algal blooms like this one occurred all across the western Lake Erie basin this August. credit: NOAA

released in large quantities during the rapid reproduction of cyanobacteria, which are sometimes referred to as blue-green algae. Though not technically algae, the cyanobacteria can "bloom" under the same conditions as many types of nontoxic algae, and they are not visually distinguishable from algae.

Symptoms of Microcystin Exposure

High levels of microcystin can cause abdominal pain, vomiting, diarrhea, liver inflammation, pneumonia and other health problems, some of which can be life threatening. No known human deaths have occurred due to microcystin exposure, but some animal deaths have been attributed to the toxin. What makes microcystin particularly concerning is that water treatment facilities do not filter or treat for it, and even boiling water does not eliminate the toxin. Microcystin levels in the Lake Erie source of drinking water for Toledo and Monroe were many times greater than safe standards established by the World Health Organization.

How Did It Happen?

The HAB that led to the drinking water ban was not Lake Erie's first. Throughout the 1970s, Lake Erie routinely experienced HABs during summer months. Algal blooms can occur in warm waters that are high in nutrients, particularly phosphorus. Lake Erie is much shallower, and thus gets warmer, than the other Great Lakes. At certain times, enough algae are present to consume all the oxygen in bottom water layers, which leads to the release of additional phosphorus from bottom sediments. This additional food causes an explosion of algae and cyanobacteria. Not all such blooms are toxic, but some are.

The primary sources of phosphorus in the western Lake Erie basin are fertilizer runoff from agricultural fields, wastewater discharge, and urban stormwater runoff. HAB occurrences declined substantially through the turn of this century as several regional and federal initiatives, such as the Clean Water Act, were employed to better treat point sources (mostly wastewater treatment plants) and eliminate some sources like phosphorus in detergents and lawn fertilizer.

In comparison, relatively little has been done to control agricultural sources. Large agri-businesses also moved relatively recently to pelletized fertilizers that are easier to deliver but more readily dissolve and run off during rain storms. Additionally, the 1980s and '90s saw the invasion of non-native zebra and guagga mussels. These mussels feed on non-toxic algae and avoid cyanobacteria and ultimately excrete phosphorus back into lake sediments, adding fuel for the next bloom. All these factors contributed to an increase in HABs in recent years, and climate change models forecast warmer summer temperatures and a greater frequency of intense storms – both of which will exacerbate the situation.

What is the Role of and Impact on the Huron River?

All of the tributaries to Lake Erie contribute phosphorus. A 2011 study identified seven major tributaries loading phosphorus to the western Lake Erie basin. The Huron River ranked fifth on the list, contributing a load that is $1/10^{th}$ that of the largest source, the Maumee River. Still, phosphorus reductions in the Huron will reduce impacts in Lake Erie. Also, phosphorus loading in the watershed has led to HABs in inland lakes. As previous Huron River Report articles have described (see the Summer 2014 issue, p. 6, for example), HRWC and partners have significantly reduced phosphorus loads to the river over the last 20 years. These efforts have likely resulted in a lower frequency of HAB events in local waters and reduced the Huron's phosphorus contribution to Lake Erie.

What Else is Being Done?

The national attention to this issue has led several agencies and organizations to call for more comprehensive action. The Lake Erie Task Force, in its report to the International Joint Commission, calls for a 40% reduction in phosphorus sources to Lake Erie. The Great Lakes Commission recently passed a resolution to form a task force to develop a plan to meet that reduction. If it follows conclusions from a National Academy of Sciences report, recommendations should focus on reducing agricultural fertilizer runoff. The Great Lakes and St. Lawrence Cities Initiative also called for better agricultural nutrient management, as well as a water quality standard for phosphorus, the addition of green infrastructure, and other pollution prevention measures. Curiously, the Michigan Department of Environmental Quality places less emphasis on agricultural controls and calls for greater efforts to control invasive mussels, among other measures.

Conclusion

The recent HAB that led to drinking water bans raised attention to the lake nutrient management issue, but the issue is not new. Unless serious efforts are made to better control fertilizer runoff from farm fields, the events of August will become more the norm than the exception.

— Ric Lawson

Word on the Streets

Coal tar sealcoat emerging as serious human and aquatic health threat

Applying sealcoat to asphalt is a common practice. In Michigan, coal tar-based sealcoat is applied widely on driveways, parking lots, and even playgrounds. Sealcoat applicators and their customers say the product enhances the look of weathered asphalt surfaces and prolongs product life.

However, coal tar sealcoat poses numerous threats to aquatic ecosystems and human health, and the contaminant is found throughout the Great Lakes region. A growing body of evidence on the toxicity of coal tar sealcoat has spurred action at the national, state, and local levels. Austin, Texas, the location of some of the earliest studies on the effects of these sealcoats, banned their use in 2005. Several other cities have followed suit. Washington and Minnesota are the first states to ban the use of coal tar sealcoats.

PAHs and the Environment

Coal tar sealcoats are high in polycyclic aromatic hydrocarbons, or PAHs. PAHs are of concern because many of these compounds have been identified as toxic, mutagenic, teratogenic (causing birth defects) and/or probable human carcinogens. Coal tar sealcoats contain 1,000 times more PAHs than asphaltbased sealcoats (a readily available alternative) and are the number one source of PAHs in lake sediments. In fact, studies show up to 50-75% of all PAHs found in sediments within the Great Lakes region come from coal tar sealcoat.

PAHs from coal tar sealcoat are released into the environment in several ways. When applied, these compounds volatilize into the air, affecting air quality. As the sealcoat weathers, dust from the pavement makes its way into homes on shoes and clothing. When it rains, loose particles move into soils, stormwater catch basins, lakes, and rivers.

Aquatic Health Impacts

In rivers and lakes, PAHs are found primarily in the sediments. Organisms that spend part or all of their life cycle in contact with these sediments can experience adverse effects due to exposure to elevated concentrations of PAHs. Affected organisms include mammals, birds, fish, amphibians, and plants.

A study of urban lakes in the

central and eastern United States found that one-third of the lakes tested exceeded the Probable Effect Concentration for PAHs in sediments, which is the level beyond which harmful impacts are expected to appear. Studies have linked PAH exposure in aquatic animals to stunted growth, reduced reproduction, difficulty swimming, liver problems, altered development, immune system impairment, and death.

Human Health Impacts

The International Agency for Research on Cancer lists coal tar pitch (a major component of coal tar sealcoat) as a Group I carcinogen, which means it is known to cause cancer in humans. This product has been in production at high volumes since the 1960s, yet very little has been published on the potential for adverse human health outcomes. Recent research found that in apartment complexes that used coal tar sealcoat versus those that used alternatives (concrete, unsealed asphalt, or sealed with asphalt-based sealcoat): dust inside homes contained 25 times more PAHs; and parking

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Founded in 1965, the Huron River Watershed Council (HRWC) is southeast Michigan's oldest environmental organization dedicated to river protection. HRWC works to inspire attitudes, behaviors, and economies to protect, rehabilitate, and sustain the Huron River system.

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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Keeping the 'Shed Natural

Natural areas and farmland preservation

The Huron River is only as healthy as the lands through which it flows. Studies have shown that watersheds that remain mostly natural - with minimal impervious surface - remain clean and cool, and have more constant flow. Natural lands like forests, wetlands, and grasslands intercept pollution and soak up rainwater, where it either evaporates back into the air or soaks into the soil to become groundwater. Agricultural lands also allow the land to continue to infiltrate rainwater, and most farm properties have significant areas of woodlots, wetlands, and riparian areas important for conservation.

Preservation Tools

Land conservancies and local government programs throughout the watershed have been working over the years to conserve natural areas and farmland. HRWC works with many of these agencies, including serving on Ann Arbor's Greenbelt Committee and Washtenaw County's Natural Areas Preservation Program Committee.

HRWC's Bioreserve Project provides these and other agencies its Bioreserve Map as well as data from natural area field assessments.



Volunteer Toni Spears assessing property prior to its being protected by the Legacy Land Conservancy. credit: HRWC

The Bioreserve Map shows all the remaining natural areas in the watershed, ranked according to their ecological importance, allowing conservation agencies to prioritize their preservation efforts. These field assessments provide more detailed information about particular natural area properties. For more details, see www.hrwc.org/bioreserve/.

Remaining Natural Areas

Throughout the 577,000-acre watershed, about 247,000 (43%) remain in a natural state, such as a forest or wetland. In large measure, it is the presence of these areas that keeps the Huron healthy. About 66,000 (about one quarter) of those natural lands are preserved as part of a state or local park, preserve, or conservation easement. There remains a great deal of natural area yet to protect.

Land conservancies and local government programs continue their work to add to the watershed's "protected lands bank." In the last year, HRWC and partner efforts achieved the following:

- Livingston Land Conservancy established the Strawberry Point Preserve, 30 acres of wooded swamp and former Huron River bottom with oak forest hummocks between Strawberry and Gallagher Lakes.
- The Ann Arbor Greenbelt program purchased 2 properties including a 20-acre parcel that joins a block of over 1,000 acres of protected land in Webster Township (in the Arms Creek watershed).
- Scio Township's Land Preservation Program added 107 acres of farmland and natural area, including important Mill Creek floodplain forest.
- Legacy Land Conservancy added 271 acres, including 67 acres of

TAKE ACTION

- Support your local conservancy. They work hard to preserve lands that are vital to the watershed.
- If your community has a farmland and/or natural areas preservation program, vote to support its funding through your local millage.
- If you own property with wetlands or forest, consider options for permanent preservation through a land conservancy or local government program. You can also contact Kris Olsson at HRWC (kolsson@hrwc.org) to arrange a field assessment of your property and gain more information about its ecosystems.

wooded hills in Lyndon Township and two properties acquired with the help of Bioreserve field assessment data.

- Livingston County Parks was bequeathed a 198-acre property, named Fillmore Park. HRWC performed a field assessment on the 81 acres of wetlands and woodlands on the property and found a beautiful mature oak forest and highly diverse woodland swamps. The county is using the field assessment report to help them plan for trails and stewardship, and to locate more intensive recreational uses away from those areas.
- Washtenaw County Parks and Recreation purchased property totaling 858 acres this year, including Weatherbee Woods Preserve, which gets its name from respected local naturalist

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Word on the Streets continued from page 7-

lot dust contained 530 times more PAHs. For someone who spends their lifetime living adjacent to coal tar sealcoated pavement, the average increased cancer risk is estimated to be 38 times higher than the urban background exposure. Much of the increased risk occurs during early childhood. Children play on and near these surfaces and are, therefore, more likely to inhale or ingest PAHs associated with coal tar sealcoat.

Coal Tar in the Watershed

While there has not been comprehensive testing for PAHs in the watershed, they were found in sediments behind Peninsular Dam in Ypsilanti at levels that exceed Probable Effect Concentrations. Application of coal tar sealcoat is common throughout the watershed. Phone calls to area asphalt companies indicated that using coal tar sealcoat is the standard practice for driveway and parking lot maintenance.

Raising Awareness

HRWC has been digging deeper into this issue – learning more about the use of coal tar sealcoat in the watershed and at what levels it occurs in local waterways. As part of the solution, HRWC is raising awareness among residents, municipalities, and other environmental organizations and promoting actions that will reduce or eliminate the use of this contaminant in the watershed.

The coal tar industry is aware of the bad publicity about their product and has been pushing back. For example, the industry and coal tar applicators state that using alternative sealcoats will not seal the driveway as long or as effectively as using coal tar sealant. Even if true, this does not mean the product is any less harmful to the environment or human health. The industry has also funded its own scientists to conduct research to counter the research performed by the leading scientists from the United States Geological Survey. The reports produced by industry scientists are suspect, given that the industry seeks to protect the reputation of their product and subsequent sales. However, the industry arguments have been effective in confusing the issue enough to block resolutions and ordinances in several communities and in the state legislatures that were considering bans.

For more information on this issue visit www.hrwc.org/coaltar, where HRWC has compiled links to research, useful fact sheets, lists of vendors who work with alternative sealcoats and sample resolution and ordinance language.

— Rebecca Esselman

Keeping the 'Shed Natural continued from previous page -

Ellen Weatherbee who, in combination with the Superior Land Preservation Society, was instrumental in the protection of this high quality, mixed hardwood forest.

In total, local preservation programs have protected about 1,384 acres this year. These programs will continue to work to conserve natural land important to the Huron River ecosystem. In addition, a new partnership of the above-mentioned conservancies as well as others in Southeast Michigan, SEMIWILD (www.semiwild.org/), has chosen to focus on the Huron River watershed for its first campaign. HRWC is working with SEMIWILD to contact natural area landowners and encourage them to pursue permanent preservation of their lands.

- Kris Olsson



TAKE ACTION

Homeowners and those who manage grounds for private entities such as churches, daycares or businesses can help....

- Eliminate sealcoating as a maintenance practice for asphalt surfaces.
- If sealcoating cannot be eliminated, use asphaltbased sealcoat rather than coal tar sealcoat. Contractors can apply asphalt-based sealcoat, which is available at most hardware stores.

Cities and municipalities can change policies and practices....

- Pass an ordinance banning the use of coal tar sealcoat within the municipality. Winnetka, IL is the latest city to pass a ban.
- Adopt a resolution committing to the reduction or elimination of the use of coal tar sealcoat on city property.

Universities and schools can protect the environment and student health....

 Commit to phasing out the use of coal tar sealcoat on properties. The University of Michigan, for example, does not use sealcoats of any variety.



HRWC Events and Workshops

DECEMBER 2014 • JANUARY • FEBRUARY • 2015

LEARN

Executive Committee Meeting

Thursday, December 11, 5:30 pm NEW Center, Ann Arbor Details: lrubin@hrwc.org

Board Meeting

Thursday, January 22, 5:30 pm NEW Center, Ann Arbor Details: lrubin@hrwc.org

VOLUNTEER

Winter Stonefly Search Saturday, January 26, 10:30 am 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

good quality streams, so declines in their numbers can reveal problems in the river and its streams. Experienced volunteers will help you identify stoneflies, figure out what makes the stream healthy or unhealthy, and gain an understanding of how river ecology works. Children are welcome, but each one must be attended by an adult. Start at the NEW Center, 1100 N. Main Street, Ann Arbor, and then go out to 2 stream sites somewhere in Livingston, Oakland, and Washtenaw counties. Takes 4 - 5 hours, only part of that outdoors.

Registration and info: www.hrwc.org/volunteer/roundup

Water Quality Monitoring Training

Saturday, March 21, 1:00 pm NEW Center, Ann Arbor

Help to measure the quality of local rivers and streams this spring and summer! Collect water samples and learn to measure stream flow and sample runoff from rain storms. Teams will be formed based on interest and availability. Sampling sites include one or more stream sites in Washtenaw or Wayne Counties. Sampling commitment is 2 or more hours per month April through September, depending on availability and interest. There is a keen need for volunteers willing to work in Wayne County streams. Requirement: attendance at the March 21 classroom training for water quality monitoring. Additional hands-on training will occur in the field during the first week of sampling.

Registration and info: www.hrwc.org/water-quality-monitoring

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credit: E.Wolf



We raise our glasses in good cheer and gratitude to all the stewards who protect the Huron River and clean water throughout our watershed community.







Walt Weber and Iva Corbett, hosts













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