

Dear Friends:

On behalf of the Saginaw Bay Watershed Initiative Network (WIN) and its partners, I am pleased to present our 2018 Annual Report.

Last year was an important one for WIN as we celebrated our 20th anniversary. We reflected on the early grants that set the stage for critical projects and programs over the next 20 years that showed we were here and ready to invest in our region over the long term. Since then, we have invested more than \$6 million into nearly 300 local projects and used those funds to leverage more than \$10 million in non-WIN support.

None of this would be possible without our incredible partners. Their willingness to invest in the long-term vision of WIN has been vital in the sustainability of our region. We appreciate their choice to prioritize WIN as they identify how they can make an impact in the economy, environment, and community.

In 2018, we are able to see the reward of years of habitat restoration, dam removal, public engagement programs, and more on rivers across the region. In this report, you will read an extensive article about what is perhaps the most important restoration action to ever take place in the Saginaw Bay system. Last year an amazing group of partners began a long-term project to re-establish the state-threatened lake sturgeon population in four rivers across the region. These incredible fish, whose lineage can be traced back millions of years, are considered to only have a "remnant" and non-spawning population in the Saginaw Bay system, even though 150 years ago they were one of the most plentiful species here. After years of hard work to restore the habitat for lake sturgeon and other fish, more than 1,000 juvenile sturgeon were brought from hatcheries and released into our rivers as part of a 20-year program to re-establish the species here. It is an exciting development, and it owes itself to WIN's many projects and our partners' commitment to a sustainable watershed.

You'll also read about other terrific initiatives that WIN supported – from increasing public access to important natural areas to building connections between communities. WIN's investments continue to build coalitions, create programs that have an environmental and economic impact, and turn new ideas into great projects.

WIN's success is founded in partnerships, and that was never truer than in 2018. A special thanks goes out to our investors, committee members, project sponsors, and everyone who helps make the Saginaw Bay Watershed a model of sustainability. These partnerships are the most important part of our success.



ON THE COVER: With the support of the Michigan Department of Natural Resources and Michigan Sea Grant, small fry (of both the fish and human varieties) delighted in the chance to meet, as more than 200 people gathered to reintroduce juvenile lake sturgeon into the Cass River. This momentous occasion celebrated the cumulative successes of many WIN-supported watershed restoration projects over the past two decades. *Photo courtesy of Michigan Sea Grant.*

WIN Partners

A committed group of 12 foundations support WIN with financial contributions and technical support. They are:

Bay Area Community Foundation Consumers Energy Foundation Cook Family Foundation **Mott Foundation** The Dow Chemical Company Foundation Harry A. and Margaret D. Towsley Foundation Herbert H. and Grace A. Dow Foundation Midland Area Community Foundation Rollin M. Gerstacker Foundation SC Johnson Fund Saginaw Bay Foundation Saginaw Community Foundation

Where Is the Saginaw Bay Watershed?

The Saginaw Bay Watershed region contains rich resources in agriculture, forestry, industry, and recreation. As the state's largest watershed, it encompasses nearly 8,700 square miles in all or part of 22 counties in central Michigan. Approximately 15 percent of the state's waterways drain into the Saginaw Bay.



Our Watershed Moment

Saginaw Bay WIN's efforts throughout the past 20 years culminated in a recent shining moment: the reintroduction of lake sturgeon into area rivers. This monumental event is proof that individual projects with great potential, plus many individuals passionate about those projects, add up to a big change. It's not a surprise that positive and sustainable progress comes from long-term commitment. The extremely gratifying discovery from the past two decades is that WIN's focus on supporting community-based projects that have broad approval has created exponential wins for the entire Saginaw Bay Watershed.

Environmental, economic, and social growth – WIN's three principal tenants – in our watershed communities can be mutally achieved when real-world projects, designed and led by concerned and creative individuals, find support from WIN and other funding organizations.

To help build that success, WIN continues to show initial confidence in projects through funding, as well as offering guidance from area experts with insight and experience. WIN's early adoption encourages other funding organizations to add financial commitment in support of our watershed communities.

A watershed of success has come - and will continue to do so - as WIN welcomes collaborative projects from the region's visionaries, leaders, and volunteers who inspire, innovate, and engage in transformative action.

WIN funded several projects in 2018 that will help carry on the progress started 20 years ago:

Au Gres Harbor Park ADA Kayak Launch - City of Au Gres

Chippewa River Canoe and Kayak Access Site - *Chippewa Watershed Conservancy*

City of Gladwin Cedar River Access Site Improvements - City of Gladwin

Gladwin Trails: Buckeye Trailhead - Gladwin County Trails Recreation Authority

Saginaw Bay Area Lake Sturgeon Education and Outreach - Saginaw Bay WIN, MSU Extension, and Michigan Sea Grant

Sanford Lake Livery - Midland County Parks and Recreation

Shiawassee River Access at Fish Lake Road - Headwaters Trails, Inc.

South End BayZil Trailhead Project - Great Lakes Bay Regional Trail

Vernon Paddle Boat Launch - Village of Vernon

Wickes Park EZ Launch - City of Saginaw and Saginaw County Parks

Saginaw Bay WIN Community Action Mini-Grants

The following are the 2018 Action Grants:

Cass River Brochure and Map - Cass River Greenway

WOW Garden Club Raised Gardens - West Branch Schools

Caine Road/Cass River Kiosk - Vassar Township

Environmental Journalist Conference - BaySail

Riverview Improvement Project - Little Forks Conservancy

Restoration Helps Bring Lake Sturgeon Home

Lake Sturgeon Education and Outreach Program

A lake sturgeon may not be the most glamorous of fish, but it does capture the imagination. Often described as a living fossil – because it looks dinosaur-ish and has been around since dinosaurs roamed the planet – it is a rugged, freshwater fish that thrived throughout much of Earth's history.

That is until the last century, when the free-flowing rivers and lakes it inhabited changed. In the Saginaw Bay Watershed, overfishing, dams, loss of habitat, and pollution have caused lake sturgeon to all but disappear in local waterways.

Recent efforts by the Saginaw Bay Watershed Initiative Network (WIN) and many conservation partners are giving new life to this ancient species.

Beautiful Yet Threatened

Lake sturgeon is a remarkable example of evolutionary success. Yet it is now classified as below the minimum viable population (MVP) threshold and a state-threatened species in the Saginaw Bay Watershed. In fact, a century has passed since the last reproducing sturgeon was reported in the Cass River. This tenuous status is not just worrisome for the future of lake sturgeon, it is a warning sign for all wildlife in area rivers and lakes.

"Lake sturgeon is a keystone species. Like the canary in the coal mine, the sturgeon's status is a warning sign for a lot of other issues in the watershed," says Michael Kelly, director, Great Lakes



Most people who live in and visit the Saginaw Bay Watershed have never seen a live lake sturgeon. And since they are considered threatened and must be released immediately if caught, it's a good idea to get to know this fish friend to help better protect them.

Home base:

feels right at home in the Great Lakes basin and in rivers and lakes throughout the Saginaw Bay Watershed.

Favorite foods:

enjoys small invertebrates that are easy to suck up like a vacuum (remember, no teeth). Snails, fish eggs, larvae, and crayfish are favorites.

Interesting looks:

color-coordinated, fascinating looks with dark brown, light brown, and sandy coloring on a long slim body. Five rows of bony plates - called scutes - add to its rugged, prehistoric charm. Special features include a cartilaginous skeleton, long snout with four barbels that help detect food, and no teeth.

Likes to travel:

cruises from river where hatched out to the Saginaw Bay and Lake Huron. Likes to hang out in open water for 20 or more years before heading back to the river to spawn.



Office, The Conservation Fund. "Various human activities over the past century have negatively affected local rivers and lakes and are the reason the sturgeon population is struggling. For the past two decades, WIN and our partners have led efforts to reverse those adverse effects to welcome back lake sturgeon to its native waters."

WIN's many investments in habitat restoration projects across the Saginaw Bay Watershed have helped turn the tide not only for lake sturgeon but also for many other native fish and wildlife species.

LOCAL CHAMPION:

Saginaw Bay WIN, Michigan State University Extension, and Michigan Sea Grant

WIN GRANT AWARD: \$18,600

"All of us out in the field working on the lake sturgeon restocking project believe in what we're doing. But it's not something that other people often get to see. WIN's involvement in the restoration of lake sturgeon is bringing people to the project so that they can be part of it, see the fish firsthand, and share our passion for this important effort. It doesn't get much better than that."

Randy Claramunt,
 Michigan Department of Natural Resources



(Continued on next page)

Rough and tough:

keeps out of predators' stomachs thanks to jagged scutes, even though birds – a main predator – may try. (Getting dropped by birds that change their minds is a hazard.)

Slow to spawn: not shy, just slow to mature. Fits right in with average female lake sturgeon that are ready to spawn at around 20 years old and male sturgeon at 15 years old.

Interests: swimming, growing, eating, growing, living, growing, and spawning. And growing.

Achievements:

recognized for amazing physical achievements, such as being one of the largest freshwater fish with a weight of up to 300 pounds and length up to 7 feet, having a super lifespan of 80 years or more, and working to overcome threatened species status.

Hard to meet:

follows along with discerning females that spawn every four to nine years and males that spawn every two to seven years. That means only 10 to 20 percent of adult lake sturgeon spawn during a given season.

WIN Vision

As stewards of the Saginaw Bay Watershed, we value our shared, unique resources, and together we will balance economic, environmental, and social priorities to enhance the quality of life for this and future generations.

Setting the Stage

To make today's Saginaw Bay Watershed a home in which lake sturgeon could thrive once again, a lot of work had to be done. Since 1998, WIN and its partners have supported several watershed restoration efforts, including sturgeon population research, clean water activities, dam removals, fish passage installations, and reef habitat reclamation. This systematic approach over the years set the stage for the reintroduction of sturgeon in local rivers.

Many project successes combined to create a huge difference in the health of the Saginaw Bay Watershed, including projects like:

1998

Fisheries Scoping Study

2006

Frankenmuth
Fish Passage
Project on the
Cass River Dam

2009

Assessment of WIN-Supported Fish Passage Projects

2016

Restoring Spawning Reef Habitat in Inner Saginaw Bay

2004

Evaluation of Lake Sturgeon in the Saginaw River Watershed

2008

Shiawassee River Restoration and Chesaning Dam Removal Project

2012

Vassar Dam Removal



A Little Lake Sturgeon Fishtory

Finding lake sturgeon in the Saginaw Bay Watershed these days is not a common occurrence, but it wasn't always that way. This prehistoric fish species was an evolutionary winner that flourished in the Great Lakes Basin. Fish bone evidence from archeological digs at the Chippewa Nature Center in Midland County show that for hundreds of years lake sturgeon was an integral part of Native American lifestyles.

While this fish was populous and popular among indigenous people and even early European settlers in Michigan, its perceived value started to change in the 1800s as new industries and practices were introduced. Increased fishing, agriculture, manufacturing, and power production significantly altered how people used

lake sturgeon and controlled water flow in the watershed.

As a result of overfishing, dams, loss of habitat, and pollution, lake sturgeon went from being plentiful to reaching an MVP threshold in little more than 100 years. The current lake sturgeon population in Michigan is estimated to be 1 percent of its historic numbers. By the time people realized the plight of the lake sturgeon, it was too late. Or was it?

Today, efforts to restock lake sturgeon in the Saginaw Bay Watershed and other Michigan rivers are helping turn back the clock for this native species and change its threatened history into to a success story.

Thanks to these projects and others, the Michigan Department of Natural Resources (MDNR) began the process of re-establishing lake sturgeon in the Saginaw River system in 2017. And in 2018, the MDNR, along with the U.S. Fish and Wildlife Service (USFWS), expanded the effort to restock a total of 1,500 young sturgeon per year in the Cass, Flint, Shiawassee, and Tittabawassee rivers over the next 20 years.

"The fact that we are restocking lake sturgeon in the watershed now means that earlier improvement projects have been unqualified successes. We couldn't have done it 20 years ago when we first started talking about it," says Randy Claramunt, MDNR Fisheries, Lake Huron Basin coordinator. "Decades of planning, hard work, and progress have made it possible to entrust these fishery-raised juvenile sturgeon to four area rivers."

This commitment is a long-term one. Given that the lake sturgeon matures slowly, the fish released in 2018 will not return to their native rivers to spawn until about 2038, 20 years later. Public awareness and enthusiasm for the project will help sustain momentum for the many years it takes to accurately gauge sturgeon population growth.

(Continued on next page)





Sturgeon Starts

Reintroducing lake sturgeon in the Saginaw Bay Watershed is only possible thanks to federal and state government organizations and many other partners (like Michigan State University and the Black Lake Sturgeon for Tomorrow Chapter) working together to raise juvenile fish for release. The USFWS and MDNR share a common goal: to re-establish a flourishing lake sturgeon population in the watershed.

All the sturgeon raised and reintroduced have microchip PIT (passive integrated transponder) tags implanted, which will provide vital information about where and when each fish was released. Classroom sturgeon are being provided by the MDNR's Black River Streamside Rearing Facility and the Little Traverse Bay Bands of Odawa Indians under an agreement with Sturgeon for Tomorrow.

WIN's Guiding Principles

- Provide a pleasant and healthy environment
- Conserve historic, cultural, and natural resources
- Integrate economic prosperity, ecology, and aesthetics
- Use land and infrastructure effectively
- Continually evaluate and refine shared vision and goals

Education and Outreach

Saginaw Bay WIN's 2018 grant is designed to start building public appreciation for and understanding of this unique, long-term lake sturgeon restocking program. By partnering with MSU Extension and Michigan Sea Grant, WIN is reaching out to communities and students in several creative and informative ways.

Bringing Lake Sturgeon to the Classroom

Through the Black Lake Sturgeon for Tomorrow Chapter's Sturgeon in the Classroom program, students at three area middle schools adopted one fingerling lake sturgeon per school. These schools were three out of only 15 Michigan schools to host lake sturgeon in their classrooms. The students nurtured and learned about their sturgeon through a STEM-based curriculum adapted from the SCUTES (Students Collaborating to Undertake Tracking Efforts for Sturgeon) curriculum. WIN's 2018 grant paid for equipment, such as aquariums, bubblers, and food for two of the middle schools.

The classroom experience for students at White Pine Middle School in Saginaw Township, Bay City Western Middle School in Auburn, and St. Lorenz Lutheran Middle School in Frankenmuth will culminate at the end of the 2018-2019 school year when students release their lake sturgeons into the Saginaw Bay Watershed.

"Place-based education, like Sturgeon in the Classroom, empowers students to apply their learning to help protect the Great Lakes and serve as leaders in their communities. By embedding education about lake sturgeon and related topics in the classroom, learning happens in a fun and engaging way as students become responsible stewards of their fingerling," says Meaghan Gass, Michigan Sea Grant Extension educator. "Students take an active role in this important restoration effort while meeting people who have careers in conservation. The kids are involved, excited, and eager to contribute to the success of their lake sturgeon and its environment."

Bringing Lake Sturgeon to the People

To help connect the public to lake sturgeon in a personal way, gatherings were held to celebrate restoration efforts and release juvenile fish in four rivers. At the August 31, 2018, release on the Cass River in Frankenmuth, a crowd of more than 200 people gathered at the Frankenmuth fish passage, a WIN-supported project. At this event, lake sturgeon lovers helped release 140 juvenile fish into the river.

"At the Frankenmuth release, I could see people of all ages were captivated by this little spiny fish with a shovel-shaped head. They came to admire and appreciate this threatened species after meeting lake sturgeon in person," says Claramunt. "People immediately connected with the baby fish when



About the Saginaw Bay Watershed

- Home to more than 90 fish species, 138 endangered or threatened species, and 1.4 million people
- Includes more than 175 inland lakes
- Contains about 7,000 miles of rivers and streams
- Path for migrating song birds and waterfowl on the Mississippi Flyway
- Significant agricultural and industrial resources supporting Michigan's economy

Sneak Peek Into a Sturgeon Future

So far, time travel isn't possible. But in February, 2019, a teenage fisherman provided a sneak peek into a hopeful sturgeon-full future when he caught a juvenile lake sturgeon on the Saginaw River. The fish was very likely released in one of the MDNR or USFWS river releases. This may be the first juvenile sturgeon caught in the Saginaw Bay Watershed since records have been kept. The catchand-release experience is an exciting hint of early success for lake sturgeon population restoration efforts.

they saw them or held them in their hands. And that is a big help in understanding why it's worth the time and resources to answer this fish's urgent need for help and management."

A second release occurred on September 22, 2018, on the Tittabawassee, Shiawassee, Cass, and Flint rivers, where 1,500 lake sturgeon were introduced into the newly opened waterways that lead out to the Saginaw Bay.

Future Outreach

WIN funds are also being used to create a Michigan Adopt-A-Sturgeon Saginaw Bay pilot program, support area teachers as they attend Sturgeons in the Classroom training in 2019, and host a future community roundtable that will bring stakeholders together to share information and network.

"This is one of the greatest examples of restoration that has ever happened in the Saginaw Bay Watershed. Although the focus is on lake sturgeon, it could not happen without the strong, dedicated partnerships between WIN, federal and state governments, MSU Extension, Michigan Sea Grant, local river conservation groups, and area communities," says Kelly. "We have a great story to share with our communities about the many successful restoration efforts that led to reintroducing lake sturgeon in the Saginaw Bay Watershed."



This winter fishing expedition also highlights the extraordinary natural life and wonder that lake sturgeon add to the Saginaw Bay Watershed. Andy Hartz, one of the founders of the St. Clair and Detroit River Sturgeons for Tomorrow Chapter, noted in a 2012 article in The Ann Arbor Chronicle, "It's such a neat fish. And they live for so long that it's the only fish that three generations of a family can catch. You can catch it, and then years later your son can catch it – the same individual fish – and then your grandson can catch it."

Bien, Laura. "In the Archives: From Cordwood to Caviar," The Ann Arbor Chronicle, February 28, 2012, http://annarborchronicle.com/2012/02/28/in-the-archives-from-cordwood-to-caviar.



WIN Funding Process

WIN follows a unique, interactive process for awarding grant funding for projects and initiatives. Throughout the community-based review process, individuals from many organizations take part by reviewing project applications and offering their expertise on a variety of topics.

WIN awards grant funding twice each year; there are no grant deadlines. If you have a project to submit for funding consideration, contact WIN at (989) 892-9171 for an application.

LOCAL CHAMPION: City of Au Gres

WIN GRANT AWARD: \$30.000



Launch for Lifestyle

Au Gres Harbor Kayak Launch

Access to 150 miles of the Au Gres River and 50 miles of Lake Huron frontage is more than an asset for the City of Au Gres, it is part of an effort to strengthen a positive, river-focused lifestyle in Arenac County. The ADA (Americans With Disabilities Act) Kayak Launch is centrally located on the Au Gres River in the City of Au Gres and will provide a summer recreation destination for residents and seasonal tourists interested in non-motorized water sports. When the launch is completed, kayakers and canoers of all abilities will be able to experience wildlife along the northern coastline of the Saginaw Bay and the Au Gres River system. The ADA-accessible kayak launch will help increase tourism, create a gathering place for kayaking and canoeing, and promote the responsible use and enjoyment of the waterway. WIN's support will help design and build the launch and advance this critical part of a \$500,000 improvement project at the former MDNR Harbor of Refuge site.

"After reading about WIN, we realized that it was exactly the partner we needed to help complete our goal at the Harbor Park site. WIN's support is very important to smaller communities such as ours, especially when competition for grant funding is so tough. Our partnership with WIN makes it possible for us to redevelop this property into a family-friendly, accessible site."

> - Dale Wiltse, City Manager, City of Au Gres

LOCAL CHAMPION:

Chippewa Watershed Conservancy



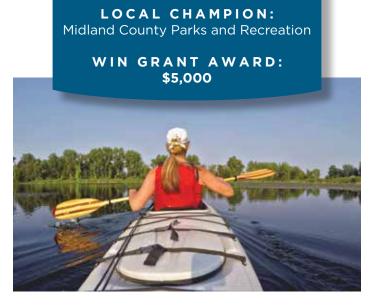
Open for Activity Chippewa River Canoe and Kayak Access Site

"A site with a lot of potential" was a good description for an underutilized section of the Chippewa River between Midland and Mt. Pleasant. Now with WIN's support, that potential has changed to momentum as the new Chippewa River Canoe and Kayak Access Site will open up a 24-mile run of the river for activities, including kayaking, canoeing, fishing, and wildlife viewing. Although the site located on the Chippewa Watershed Conservancy's Stephen and Agnes Szok Riverbend Preserve protects mature forest land and the riparian corridor, the lack of public access limited use of this outstanding water resource. The canoe and kayak access site project will give individuals an easy entry to this section of the Chippewa River, bring people together to enjoy outdoor recreation, and fortify the riverbank. WIN's grant will be used to engineer and build stairs and a launch platform, as well as create an informational kiosk and other signage.

"WIN is unique in that it takes a collaborative approach to grant making. The feasibility of completing our project increased tremendously when we received the grant. And because WIN isn't scared to provide initial funding, we are able to leverage that confidence as we seek other sources of funding."

- Jon Breithaupt,

Executive Director, Chippewa Watershed Conservancy



More to Row and Paddle Sanford Lake Livery

Paddles, oars, and their associated watercraft are soaring in popularity as kayaking and stand up paddle boarding have become the largest-growing segment of watersports recreation in the country. Sanford Lake Park in Midland County will be a great place to put a paddle in the water, thanks to the new Sanford Lake Livery. The grant from WIN is helping Midland County Parks and Recreation purchase rowboats, kayaks, and stand up paddle boards for the livery, along with lockable racks, lifejackets, and other equipment required for safe paddling adventures on the lake. The Sanford Lake Livery will provide opportunities for residents and visitors to participate in a popular and peaceful sport, build heart-healthy lifestyles, and enjoy nature with little impact on the environment.

"WIN provided helpful insight and advice that showed us how to align the scope of our project with WIN's objectives for economic, community, and environmental sustainability. The grant award was fantastic and has allowed us to do more than we originally planned, including purchasing new boats for the livery."

— **John Schmude,** Director, Midland County Parks and Recreation

LOCAL CHAMPION:
Great Lakes Bay Regional Trail

WIN GRANT AWARD: \$15.000



Starting With Zil South End BayZil Trailhead Project

Biking, running, and walking the serene BayZil Trail that follows alongside the Saginaw River will soon start with Zil, thanks to the development of a second trailhead at the south end of the trail. Once completed, this southern trailhead will be a second public access point to seven miles of asphalt trail and two bridges that connect Bay City to Zilwaukee. Building on a 2006 WIN grant - the only grant for land acquisition in WIN's history - this funding supports the installation of a covered gazebo, interpretive signage, and a bicycle maintenance unit at the new trail entrance. The South End BayZil Trailhead Project will provide increased economic benefits for local businesses, improve health for residents and visitors, and encourage environmental stewardship among trail users.

"WIN's vast experience in the development of projects like ours was insightful as we outlined our goals. It champions projects that protect – and provide access to – our beautiful watershed. With WIN's support, we were able to provide more amenities for trail users who want to experience one of our region's most valuable resources."

— **Brian Keenan-Lechel,** Director, Saginaw County Parks and Recreation



Contact Us

For more information about WIN, visit www.saginawbaywin.org or contact:
Saginaw Bay WIN
P.O. Box 734
Bay City, MI 48707
(989) 892-9171
Fax: (989) 892-9172

E-mail: info@saginawbaywin.org

The Saginaw Bay Watershed Initiative
Network is facilitated through a
partnership of The Dow Chemical
Company Foundation, The Conservation
Fund, and local and regional
organizations dedicated to promoting
the concepts of sustainability in the
Saginaw Bay Watershed.



