



Saginaw Bay Watershed Initiative Network

2015 ANNUAL REPORT

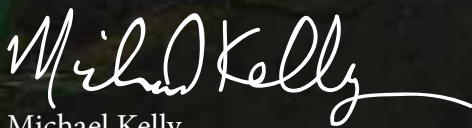
Dear Friends:

On behalf of The Conservation Fund and the Saginaw Bay Watershed Initiative Network (WIN), I am pleased to present to you our 2015 Annual Report.

This was another exciting year at WIN. Across our main program areas – land use, water resources, wildlife habitat, agriculture, and others – we continued to make strong progress in our mission to promote the concept of sustainability in our region. We did what we do best, provided both a forum and the financing to take good ideas to great projects. Through that sustainability lens – that relationship between the environment, the economy, and our communities – we made smart investments in initiatives that make real differences in communities. Often the first resources in on a project, WIN has continued to use its tools to build coalitions, broaden partnerships, leverage additional financial support, and create opportunities to engage people throughout the region in the important work of balancing what we want today, with where we want to be in the future.

This year, WIN provided nearly \$300,000 to a variety of projects across the region. In this report, you'll read about our continuing work to reconnect rivers, with a special project that we are supporting to remove a dam in Corunna. With the help of a passionate group of community members, the Shiawassee River in that Shiawassee County community will be free flowing for the first time in 175 years, providing new opportunities for canoeing, fishing and other recreation. In Saginaw County, we added to our investments in Frankenmuth – where we've supported a past dam removal and public access projects – by investing in park and boat launch improvements. We're also working on an important water quality project with the Gratiot Conservation District in the Chippewa River Watershed. By helping them identify failing septic systems and manage information, they are making big strides in the regional effort to eliminate bacteriological contamination in our waterways. Finally, you'll learn about a great project in the Village of Byron where community members and officials with the local school district have partnered to provide much needed public access to one of the Saginaw Bay watershed's most beautiful rivers. You'll learn about these projects, and more, in this report.

The Conservation Fund is proud to be a partner in this unique effort to build sustainable communities in the Saginaw Bay Watershed. I want to thank all of our task group members, resource group participants, and our funders. Because of them, we can look back on another extraordinary year for WIN, and look forward to new challenges and opportunities in 2016.



Michael Kelly
The Conservation Fund

Renowned photographer David Stimac captures an evening scene at Shiawassee National Wildlife Refuge in Saginaw County
Cover photo © David Stimac
www.davidstimac.com

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.

Watershed Community Currents and Connections

WIN's guiding principles center on the idea that "community" means more than what exists within a city's limits. For very real and extremely important environmental, economic and community reasons, much of the mid-Michigan community is defined by the Saginaw Bay Watershed and the citizens who are connected by its care and protection as well as its waterways. Because of that, WIN-funded projects often uncover a community full of support and action that is transformative for the people and wildlife in the watershed.

Focusing on the connections naturally built from sharing this beautiful and vital water resource, WIN-funded projects are designed to strengthen this sense of community, establish sustainability and invite collaboration between visionaries, leaders, funders and volunteers.

WIN strives to support the forward-moving currents of environmental, economic and social progress initiated by concerned and creative thinkers and doers in the Saginaw Bay Watershed. Our contributions are often the first funding a project receives. But more than money, WIN support and guidance offer a community of confidence that other funders, experts and volunteers seek.

We are thrilled to be a founding community for many innovative and deserving projects. Projects that received funding in 2015 are:

Beaverton Trail and Trailhead – *City of Beaverton*

Chippewa Watershed Septic Source Identification and Database Development Project – *Gratiot Conservation District*

Corunna Dam Removal and Access Improvement – *City of Corunna*

Frankenmuth Memorial Park Boat Launch Renovations – *City of Frankenmuth*

Managing Nutrients at Shiawassee National Wildlife Refuge – *Friends of the Shiawassee National Wildlife Refuge*

Places Create Stories: The Power of Nature – *Heart of the Lakes/Little Forks Conservancy*

Seymour Trail – *City of Flushing*

Village of Byron River Access Facility – *Village of Byron Downtown Development Authority*

Saginaw Bay WIN Community Action Mini-Grants

The following are the Action Grants:

River-in-a-Box Watershed Model Outreach – *Huron Pines*

Watershed Boundary Signage – *Bay Area Stormwater Authority*

Demonstration Site for Conservation – *Little Forks Conservancy*

All Native Landscape – *Midland St. John's Lutheran School*

Outdoor Water Conservation Rebate Program – *Clare Conservation District*

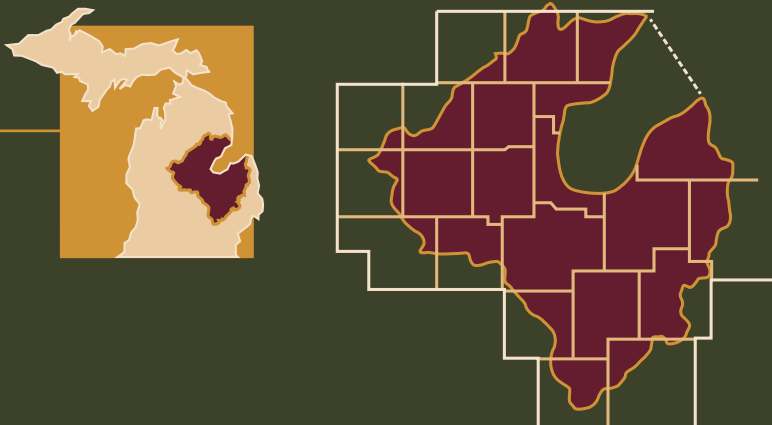
Preserve Outreach Brochures – *Chippewa Watershed Conservancy*

Septic System Care Educational Project – *Gratiot Conservation District*

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
- C.S. 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
- S.C. Johnson Fund
- Saginaw Bay Foundation
- Saginaw Community Foundation



River Powers 21st Century Goals

Corunna Dam Removal and Access Improvements



Corunna shares a part of its history with many other Michigan cities that built dams in the 19th century when progress was power-hungry and environmentally unaware. The Corunna Dam helped fuel the city's industry, contributing to growth and prosperity for 100 years.

Today, Corunna's residents see progress and the force of the Shiawassee River in a vastly different light. And, with WIN's investment and guidance, Corunna is developing plans to remove the dam, restore the natural course of the river and power the city's 21st century goals.

Built in 1843, the Corunna Dam ran a saw mill, grist mill, blacksmith shop and

woolen factory during its productive life. Since the early 1950s when the grist mill closed, the dam became more of a waterfall attraction than an energy provider. Despite its past contributions to Corunna's growth, the dam is now a major concern because it is deteriorating and, most distressing to residents, dangerous.

In 2009, the Michigan Department of Environmental Quality (DEQ) issued an order to immediately draw down the dam and develop a plan to repair, replace or remove it.

"At the time of the DEQ's order, the question wasn't whether something needed to be done with the dam. At issue was who owned it and who was going to pay for it. Ownership – public or private – was not clearly defined, and that led to a lawsuit with the State of Michigan," says Merilee Lawson, City Planner/Assessor, City of Corunna. "In 2015, with the help of the Friends of the Shiawassee River, we withdrew our lawsuit, took control

of the dam and are now pursuing plans to remove it and return the river to its natural state."

When Push Becomes Motivation

The decision to remove the Corunna Dam was a positive one, but not necessarily an easy one. The dam is a local favorite, attracting people of all ages for a variety of uses like weddings, scenic photography, fishing and other recreation. Though not welcomed at first, the DEQ's directive to draw down the dam eventually became a motivation that helped Corunna move past roadblocks like ownership and attachment to investigate creative, cost-effective solutions.

"The Friends of the Shiawassee River was instrumental in showing us the positive side of dam removal. Their ideas about recreational alternatives inspired us to take action. And WIN's funding makes it possible for us to work with engineering professionals to ensure the project is environmentally and structurally sound," says Lawson. "We are excited about all the new possibilities for the site like fishing piers, walking paths and rock rapids for kayaking."

The engineering firm's site restoration plans focus on much more than removing the dam. Suggested efforts also include stabilization of the streambank using natural materials, redirection of the river's flow with j-hooks and installing rock rapids in the Shiawassee River near one of the city's parks. Overall, the restoration plans are designed to meet Corunna's environmental, budget, aesthetic and recreational objectives.

"WIN is very approachable. I've gathered a vast amount of knowledge on state environmental issues from them. WIN's grant gives us the opportunity to complete our dam removal plans and then approach other organizations for additional funding with a comprehensive concept and budget."

— Merilee Lawson,
City of Corunna

LOCAL CHAMPION:

City of Corunna

PARTNERS:

Corunna Parks and Recreation,
County Drain Office, Friends of
the Shiawassee River, Michigan
Department of Natural Resources
Trust Fund, U.S. Fish & Wildlife
Services

WIN GRANT AWARD:

\$25,000



Recommendations are designed to target the community’s short- and long-term requirements as well. For example, plans to reuse the structure’s existing materials for the rock rapids and riverbank stabilization will save money. The resulting riffle in the river will offer paddlers great kayaking and canoeing experiences for many years. Also, once the j-hooks are installed, the force of the water against the riverbank will be reduced. That will lead to less erosion and, at the same time, create fishing opportunities on the Shiawassee that anglers will enjoy for generations.

“We are very excited about the entire engineering plan, especially that it looks forward. This will help us implement phases of our updated Parks Master Plan as we are able in the coming years,” notes Lawson.

The Power of the Shiawassee River

The engineering plans funded by WIN help Corunna gain access to opportunities that have been closed by the dam for almost 175 years. As the Shiawassee River is restored to its natural state, 11 river miles will be reopened for improvements in the waterway’s environment, connections and quality of life.

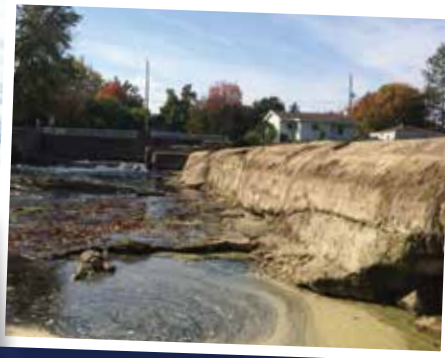


Removal of the dam will have a significant effect on the environmental health of the Shiawassee River and its wildlife. The fish habitat and native plants will once again thrive unobstructed in the river’s natural and unique ecosystem.

Currently, the dam is an impediment to easy and safe travel along the Shiawassee River. When the dam is gone, the city will join the Shiawassee River Heritage Water

Trail, which is designed for kayakers and canoers. Reconnected to the Shiawassee River community, Corunna will help maintain and protect this valuable amenity so that residents and visitors can enjoy safe recreation and a desirable quality of life along its waters.

“This entire endeavor will help educate residents about the problems of aging dams and the pressing need for removal. Making the Corunna Dam a part of history is a positive thing for our community’s future,” says Lawson. “We are actively using what we’ve learned about river restoration from WIN to build a successful project, one that will power Corunna’s progress for many years to come.”



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

Ecotourism Hits the Trail

Frankenmuth Memorial Park Boat Launch Renovations



Frankenmuth is one of the most popular and well-known destinations in Michigan. Besides its quaint German character and famous chicken dinners, the city has festivals and year-round entertainment that range from beer to music to hot air balloons. Given its experience as a welcoming host, the planned renovations for Frankenmuth's Memorial Park boat launch on the Cass River make perfect sense. More and more people are enjoying the natural beauty as they travel the age-old water route and, with WIN's help, the City of Frankenmuth is making it easier for them to hit the (water) trail.

Frankenmuth's Memorial Park has the only boat launch on that section of the Cass River. Yet the steel seawalls, regular sediment buildup and shallow approach severely limit river access in an otherwise desirable area. Visitors and residents

with boats, canoes, kayaks and fishing poles find it difficult, if not impossible, to get in, out and alongside of the river. Not particularly boater- or paddler-friendly, the launch lacks Frankenmuth's legendary welcome as an entry point along the Cass River Water Trail.

"The existing boat launch has been here for many years. But it is hard for our residents and tourists to use," says Daren Kaschinske, Director, City of Frankenmuth Parks and Recreation. "The planned renovations and improvements will make the launch more usable, dependable and sustainable for years to come."

Trailing Access

The City of Frankenmuth's renovation plans for Memorial Park focus on the changes needed to add functionality to the boat launch. And with an overall

goal to improve accessibility to the river, the plans also detail new additions that will make the launch area more inclusive for people with differing interests and abilities.

"The Cass River Water Trail was a stimulus for our boat launch renovation project since more people are on the river thanks to the trail. And as fishing in this part of the river improves due to the WIN-funded Frankenmuth Fish Passage, we expect more people will use the launch to reach prime fishing locations," says Kaschinske. "Coinciding with both of those, there's been a shift in our visitors: they care more about the environment, are more active and show more interest in being on the river. We are excited that the launch upgrades will offer people of all ages and activity levels a wider variety of natural water experiences."

WIN's grant for the renovation, combined with other funding, builds on recent investments in and around Frankenmuth, including the dam removal and riverbank restoration efforts. Continuing and benefiting from these resource advances, the Memorial Park boat launch improvements will feature:

- **Wider, longer launch** extending further into the river, helping deter sedimentation around the launch
- **New boat dock** making it easier to get on and off motorized boats at the park
- **More environmentally and user-friendly materials** designed to better accommodate wildlife, as well as

"WIN has a very thorough application process. They review all the details of a project, and they are willing to make suggestions and help develop it. Because of that, WIN's acceptance of a project gives it the credibility that other sources of funding are looking for. WIN is an excellent resource for information and ideas to develop good projects."

— Daren Kaschinske,
City of Frankenmuth Parks and Recreation

LOCAL CHAMPION:

City of Frankenmuth

PARTNERS:

Cass River Greenway,
Frankenmuth Community
Foundation, Michigan Natural
Resources Trust Fund

WIN GRANT AWARD:

\$25,000



canoes and kayaks, installed near the water's edge

- **Permanent platform** providing fishing from the shore for non-boaters and people physically unable to use a boat

The planned improvements include changes on shore as well with expanded and reconfigured boat trailer parking and other amenities.

Adding Advantages

The Memorial Park boat launch renovations go further than just making it easier to boat, canoe and fish at the site. Sustainability and community connections – two important WIN-aligned objectives – are deeply ingrained aspects of the city's plans. The renovations are designed to strengthen the environment along the riverbank while creating awareness of this incredible resource in the Saginaw Bay Watershed.



The anticipated reduction in sedimentation will positively affect the launch site environmentally, aesthetically and economically. Less sediment improves habitat and available food for area wildlife. It also enhances the clarity of the water, making it more inviting for recreational use. And less sedimentation cuts the need for dredging, which regularly costs money and stirs up the river bottom which negatively impacts fish habitat.

As an access point to the Cass River Water Trail, the boat launch provides a vital connection for Frankenmuth to the Cass River community. The water trail is a series of public access sites, many of which were previously supported by WIN, that strengthen the perception

of the river as a common resource in the watershed. Joined by the waterway, communities along its length realize that they all share in and contribute to river stewardship, prosperity and enjoyment.

“Project success will be seeing more people use Memorial Park more often with fewer accessibility problems. And they will enjoy a greater variety of recreational opportunities, not just boating but also canoeing, kayaking, fishing and picnicking at the park,” Kaschinske states. “Frankenmuth thrives on tourism. Now ecotourism can be part of the package as this part of the city becomes a desirable stop on the Cass River Water Trail.”



Our 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.

Solving a Septic Source Mystery

Chippewa River Watershed Septic Source Identification and Database Development



The biggest mystery about water quality issues in the Chippewa River Watershed isn't whether *E. coli* is present in area water. It is. In fact, *E. coli* levels are dangerously high throughout central Michigan. Nor is it a question of whether human waste from septic systems is a source of the *E. coli*. That fact is confirmed by many researchers and environmental studies. The real mystery is where in the watershed are these failing septic systems? Solving this mystery – and making it easy to access that vital information – is at the heart of the Gratiot Conservation District's (GCD) long-term septic source identification and database development project.

Not all bacteria enter streams through septic system failures. However, aging and failing septic systems became the main suspects when a recent university study showed that *E. coli* levels in the Upper Pine River are more than four times the legal limit. In addition, the use

of trained scent dogs in several areas within the Saginaw Bay Watershed has shown that human waste is present in a statistically significant number of testing sites. Both discoveries shine a spotlight on a major human and environmental health concern in the larger watershed.

"Without clean water, a community cannot thrive. What is found in our rivers could enter our drinking water," says Julie Spencer, administrator, GCD. "Preventing pollution from entering the water in the first place is the best and smartest line of defense. One way to do that is to find the septic systems that are contributing to high *E. coli* levels so that that they can be repaired or replaced."

Funding from WIN is helping the GCD continue its efforts to improve water quality by pinpointing aging septic systems near streams in the Chippewa River Watershed. The project will also educate the community about this issue

and provide support for homeowners of aging systems so that they can take action.

Using Modern Tools to Identify Sources

The good news is that GCD's project uses data that already exists. Much of the information needed has been collected for many years by the Mid-Michigan District Health Department (MMDHD), a project partner, and stored alphabetically as paper records. These physical records are difficult to access and categorize by relevant criteria, especially geographic and spatial details. One of the goals of the project is to make this valuable information more useful by digitizing it into a searchable computer database.

The GCD will use Geographic Information Systems (GIS) to view a computer map of the Chippewa River Watershed. The high-tech GIS map

"WIN saw our vision and understood what we are trying to accomplish. WIN and the Gratiot Conservation District share the desire to make a positive difference in the future of the Saginaw Bay Watershed."

— Julie Spencer,
Gratiot Conservation District

LOCAL CHAMPION:

Gratiot Conservation District

PARTNERS:

City of Alma, Mid-Michigan District Health Department, Saginaw Bay WIN (a separate Community Action Mini-Grant for outreach and education)

WIN GRANT AWARD:

\$9,700

links a variety of relevant data about the landscape. As the project starts, it will include well locations and landowner data in addition to typical elements like roads, streams, rivers and cities.

The GCD will then use the completed GIS map to visualize the watershed by specifying criteria based on relevant categories or layers. Especially important to the project is seeing well locations in terms of their close proximity to streams in the watershed. As these areas of possible human waste contamination are identified, the MMDHD will input specific septic system information into the computer, building the searchable database.

Accurate information and a list of locations where there may be a higher risk of surface water pollution gained from the GIS map and database will help the MMDHD reach out to homeowners in the Chippewa River Watershed with aging septic systems.

“Eventually, it would be ideal to have a complete database that includes every single septic system that exists in the Chippewa River Watershed. Right now we are making a great start on developing a valuable resource that can be used to communicate with homeowners who have at-risk systems,” says Spencer.

Making Improvements Possible

It’s no mystery that a reduction of *E. coli* from septic systems will make a big difference in the watershed’s water quality. But a significant reduction means homeowners have to act. So WIN’s funding will also support GCD’s development of outreach materials designed to increase awareness of the issue and encourage involvement.

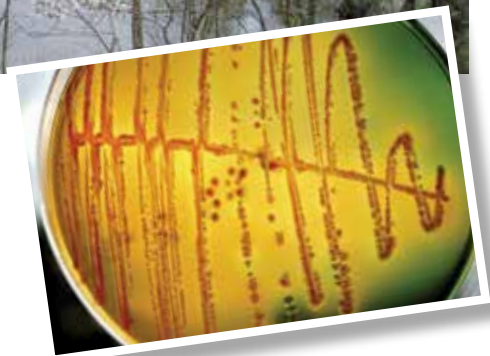


Photo courtesy of Chippewa Watershed Conservancy

“The general public needs to be aware that there are problems with failing septic systems and that the problems are easy to fix,” notes Spencer. “They also need to understand that it is the homeowner’s responsibility to have the system checked, pumped and/or replaced as needed.”

To promote replacement of failing septic systems yet not create an undue monetary hardship on lower socioeconomic communities, the GCD has future plans to develop a loan program for landowners. This program would be similar to the successful WIN-funded Septic Revolving Loan Fund created in Bay County.

“There is a great deal of community support for improving water quality in the Chippewa River and its tributaries. We are optimistic

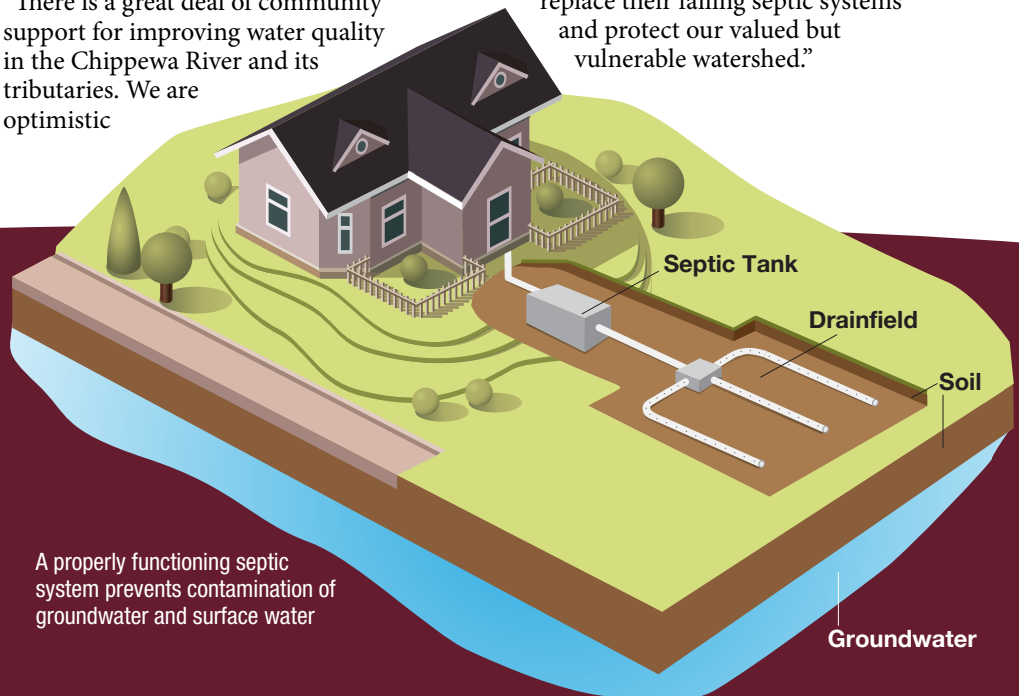


E. coli is a type of bacteria that can cause health problems in high concentrations.

that several other area organizations will follow WIN’s example by supporting our project,” says Spencer. “With additional funding, we can establish a revolving loan fund sooner. Our goal is to make it possible for every homeowner to replace their failing septic systems and protect our valued but vulnerable watershed.”

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



A properly functioning septic system prevents contamination of groundwater and surface water

Village Growth Flows with the River

Village of Byron River Access Facility



The Village of Byron is tucked away in a southern corner of mid-Michigan. Its small footprint encompasses a community full of active and engaged residents who care about Byron's success. When a fire in the downtown damaged several buildings, as well as dampened residents' spirits, the community took a determined look at its recovery and future development. Then, with the help of WIN and other sponsors, they built a new canoe and kayak launch near downtown on the Shiawassee River Heritage Water Trail.

A canoe launch might not seem like the most obvious of comeback projects, yet it was a natural fit for the Village of Byron. Like many communities along the Shiawassee River, Byron is rediscovering the river as a valuable natural asset that draws people to the area for nature, recreation and fun. So the Village of Byron Downtown Development Authority (DDA) and other

organizations started working on the launch project resolved to quickly make a positive difference in the community.

"The fire in 2013 took out several downtown businesses, including our restaurant and some apartments. It was a big hit to our small community," says Rob Vandemark, chairman, Village of Byron DDA. "The losses made us look at our village in a new light and we saw that the Shiawassee River is truly an essential part of our community's quality of life and future growth."

A Successful Landing

As one of the Village of Byron DDA's first community projects, the new launch site was designed to provide easy access for canoes and kayaks to the Shiawassee River. Fortunately, the location on property owned by the Byron Area School District already had a "stamp of approval" from the public. Locals had used it with difficulty as a makeshift boat launch for several years.

The old, improvised "launch" was rocky and muddy, making it hard and unstable to use. On top of that, its unofficial status as a safe put-in discouraged many people from using it or even seeing the river as a valuable part of the community.

"We felt that building a new, proper canoe launch with parking and informative signage would strengthen the perception of this part of the Shiawassee River as an attractive recreation spot," says Vandemark. "We also wanted to make a positive change that would foster a sense of stewardship for the river in our residents and visitors."

A collaborative effort by the Byron DDA, Byron Village Council, Byron Area Schools and local volunteers provided the momentum that propelled the new canoe launch from a good idea that fit WIN's objectives to a successful finished project.

More Growth Around the Bend

WIN's grant, along with other funding, helped "formally introduce" the Village of Byron to its river community by building a usable and official canoe and kayak launch. Now as a starting – or stopping – point on the Shiawassee River Heritage Water Trail, Byron offers residents and visitors an opportunity to paddle their way into the heart of the village.

"We knew that WIN had helped with other canoe and kayak launches upstream in Shiawassee County. That was a great stimulus for our ideas and efforts. Our project was small, yet the WIN people were patient, answered our questions and helped us throughout the entire process."

— Rob Vandemark,
Village of Byron Downtown Development Authority

LOCAL CHAMPION:

Village of Byron Downtown Development Authority

PARTNERS:

Byron Area Schools, Friends of the Shiawassee River, Keepers of the Shiawassee, Village of Byron

WIN GRANT AWARD:

\$6,444



“We’ve seen a significant increase in use since the improvements were made,” says Vandemark. “It is incredibly satisfying to see the growing positive focus on this part of the Shiawassee River and on the Village of Byron itself. We look forward to becoming a favorable spot for leisure, recreation and fishing in this part of the state.”

This successful improvement is helping launch other development activities in the community as well. Just a little north at the same location, Byron Area Schools is creating a nature trail for students and others, helping them connect to the unique environment along the river. In addition, the Friends of the Shiawassee River (FOSR) has organized the Byron Stream Team that will regularly measure water quality by conducting stream sampling from the launch area. Extending its environmental education goals, the FOSR team will give nearby Byron High School students an active role in monitoring the river’s macroinvertebrate populations.



The canoe launch project has created a framework for Byron DDA’s future development plans. “We couldn’t have done the project without WIN’s guidance. They helped move the project along and kept things on track,” notes Vandemark. “The village can now move forward with its professionally designed riverscape concept that honors our natural heritage flowing along the Shiawassee River.”



Improvements to a river access point in Byron make it safer for users.



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.



Contact Us

For more information about WIN, visit www.saginawbaywin.org or contact:

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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 region.



THE
CONSERVATION FUND