Cass River Greenway 2017 – A Decade in Review By CRG Chairman, Robert Zeilinger



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Organized in 2007, the Cass River Greenway has now been working for a decade to improve recreational use and improve the environmental well being of the Cass River. Therefore, this year's annual report will review our major accomplishments over the past 10 years.

Goals Developed by the Cass River Greenway Committee:

- Develop Recreation Opportunities on the Cass River and along its corridor
- Encourage Preservation of Wildlife Habitat and Critical Natural Lands
- Improve Water Quality of the Cass River

Goal – Develop Recreation Opportunities on the Cass River and along its corridor:

The design and construction of a water trail on the Cass River has been our top priority for this goal. In 2007. developed public access to the Cass River was limited to three boat launches and one canoe/kayak launch. Recreational use was primarily by small boat and pontoon (cruising and fishing) and an occasional paddler. Today, the Cass River Water Trail has been established between Juniata Township/M-46 Bridge launch and Wickes Park Boat Launch in Saginaw. The water trail is 37.5 river miles in length and consists of three public boat launches and ten public canoe/kayak launches. Working with our municipal partners and various grant funders, the Cass River Greenway established new access sites at Juniata Township/ M-46 Bridge, Vassar Township Caine Road, two sites in Vassar, one in Tuscola, two sites in Frankenmuth, two sites in the Bridgeport area and an agreement with the City of Saginaw for a site in Wickes Park on the Saginaw River. Water trail maps, brochures and common signage have been designed and are being installed at each launch site. A web design firm has been contracted to design a new Cass River Water Trail website with a focus on ecotourism – drawing tourists to our region to enjoy the Cass River and our communities amenities. The new website will be fully functional by summer, 2018 and available at www.cassriverwatertrail.org. Additionally, the Cass River Greenway has received an assistance grant from the U.S. National Park Service to help us implement the organization and management practices necessary to qualify for National Water Trail Designation status. Recreational use of the river, especially by paddlers, has increased significantly over the years. We expect this trend to continue as residents and visitors become more familiar with the water trail amenities. For the past six years a Paddle & Swim event between Tuscola and Frankenmuth has been sponsored to promote recreational use of the river. We expect more inter-community events like this to be featured in the future. Finally, preliminary proposals for an Upper Cass River WaterTrail from Cass City to Caro have been discussed.

Goal – Encourage Preservation of Wildlife Habitat and Critical Natural Lands:

The preservation of scenic vistas and wildlife habitat is important to a vibrant and healthy watershed. In partnership with UM Flint – University Outreach, the Cass River Greenway completed and released a Natural Lands Inventory and Assessment document. The study involved an assessment of existing habitat lands (forests, grasslands, wetlands, etc.) and ranked them as to their value/importance to sustaining wildlife populations and environmental processes. The scope of the study included six townships along the Cass River from Bridgeport upstream to Caro. The report and individual township maps are available on our web site www.cassriver.org.

The second initiative for this goal is a Phragmites control program. Phragmites is a non-native, invasive reed that threatens the ecological health of wetlands and the shorelines of lakes and rivers. Phragmites are extremely difficult to eradicate once they become well established, as evidenced by their total domination in many areas around the Saginaw Bay and area rivers. To date we have observed very little Phragmites on the banks of the Cass River. However, it is present and expanding along many roadside ditches in our area. Our intent is to eradicate/control Phragmites in our area before it invades the Cass River. This effort began in 2010 with a demonstration treatment project on five sites. Since then we have partnered with the Saginaw and Tuscola County Road Commissions each year to locate and treat phragmites along roadways in townships near the Cass

River corridor. Our joint efforts have treated 19 townships to date. In addition, we have assisted approximately 20 private property owners in controlling phragmites.

Goal – Improve Water Quality of the Cass River:

Improvement of river water quality is a watershed wide activity and involves a long-term commitment. In late 2010 the Michigan DEQ announced the Cass River Watershed had been selected for funding of a Watershed Management Plan project. This was an extremely important and necessary step in developing a long-term effort to improve water quality in the Cass River. The DEQ and EPA approved the resulting report in 2015. The report prioritized the environmental problems within the watershed, suggests remediation projects and timelines, and recommends funding sources for the projects. Areas of concern included sedimentation, phosphorus, e-coli and streambank erosion. The Cass River Watershed Management Plan can be found on www.cassriver.org. In late 2015 the first project approved and funded by the DEQ under the Watershed Management Plan was to implement Best Practices in Livestock and Manure Management in operations near several tributaries of the Cass River. The purpose of the project is to reduce documented e-coli in four streams located in Saginaw and Tuscola counties.

In August 2011 the Michigan DEQ awarded the Cass River Greenway a Water Quality Monitoring Project grant for a two-year study of the Cass River, testing water quality at nine sites from Cass City to Bridgeport. Testing parameters included phosphorus, suspended solids, dissolved oxygen, biological oxygen demand, temperature, fecal coliform, turbidity, nitrates and ph. The project results were approved by the DEQ in 2014 and the findings were incorporated into the Watershed Management Plan noted above. The results of the study indicated the overall quality of the water in the Cass River is "Good" and safe for recreational use. However, several tests under certain conditions indicated the potential for short term elevated levels of e-coli originating from tributary streams.

Sedimentation caused by streambank erosion changes a waterway in many ways that harm its natural course and ecology. For example it can; disrupt the food web by damaging habitat where stream organisms live, transport nutrients that feed the "wrong" types of plants and microorganisms in the water, and alter the flow of water and reduce water depths – making recreation more difficult. Funding was secured for a streambank erosion control project that entails installing tree revetments along severely eroding riverbanks. This method uses 15 to 20 foot conifer trees to create a secured natural structure that prevents loss of land into the river. In addition, the trees and their branches create habitat for aquatic insects and minnows.

In 2015 and 2016 over 2500 feet of severely eroded riverbank was protected with tree revetments.

Every year, starting in 2008, the Cass River Greenway, in partnership with a "river community," has sponsored a river cleanup. The event is scheduled when river conditions allow for walking in or along the shoreline as much as possible, thus exposing as much trash as possible. An average of 50 volunteers show up for each event and clean 4 to 5 miles of river. Canoes are used as "trash barges" and trash and tire recycle businesses donate equipment for disposal.

To date we have cleaned 43 miles of river, collecting hundreds of tires, car-truck-farm equipment parts, furniture, cans and bottles. Nearly the entire river from Cass City to Bridgeport has been cleaned.

A special thank you to our partner federal, state and county agencies, our donors and grant funders, our partner municipalities and Universities, and our faithful volunteers.

