Cass River Greenway Year End Report January 6, 2012 By CRG Chairman, Robert Zeilinger

### **Community Membership and Agency Support:**

Organized in 2007, the Cass River Greenway Committee membership includes volunteer residents and municipal leaders from cities, communities and townships along the Cass River from Cass City downstream to Bridgeport. Expanding the volunteer base for work on the Cass River Greenway project is critical to achieving many of the committee's goals, and we welcome additional volunteers. The Cass River Greenway Committee is strongly supported by federal, state and county agencies whose representatives are members of the committee. They include: MDEQ Water Bureau, US Fish & Wildlife Service, USDA/Saginaw RC&D, Saginaw Basin Land Conservancy, UM Flint-University Outreach, Saginaw Area Storm Water Authority and Saginaw County Conservation District.

## **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 is our top priority for this goal. Major accomplishments in 2011 were the completions of new canoe/kayak launches in Frankenmuth and Tuscola. The Frankenmuth launch, located in Heritage Park, features an ADA accessible floating dock that was dedicated in June. Major sponsors include the Michigan Natural Resources Trust Fund, Saginaw Bay WIN and Frankenmuth Jaycees. The Tuscola launch, located on their township hall property, was completed in November. The facility includes new restroom facilities that will be used by park users. A spring 2012 dedication/opening is being planned. Major sponsors include the Michigan Natural Resources Trust Fund, Saginaw Bay WIN, and Tuscola Township. The Lower Cass River Water Trail Map can be downloaded from our web site www.cassriver.org. On-river signage between Vassar and Frankenmuth is planned to be installed before the start of the 2012 season. Signage for the two new launch sites is currently being designed by UM Flint – University Outreach and will be installed next spring. Plans for a new launch in Vassar are currently on hold, pending the removal of the breached dam in Vassar. US Fish & Wildlife Service has committed \$25,000 in funding for the dam removal with the expectation of project completion within 5 years.

Preliminary discussions with area Parks & Rec Directors have begun regarding expanding the water trail both upstream and downstream of the new facilities in Tuscola and Frankenmuth.

### **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 has 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 townships included Bridgeport, Frankenmuth, Tuscola, Vassar, Juniata, and Indianfields. The 18 page report and associated maps are being distributed to the parks and recreation and planning commissions of the respective communities. The report and individual township maps are available on our web site www.cassriver.org and can be purchased from Frankenmuth Printing.

The second initiative in this area is a Phragmites control project. 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 not observed Phragmites on the banks of the Cass River between Vassar and Bridgeport. However, it is present and expanding along many roadside ditches in our area. Our intent is to eradicate Phragmites in our area before it invades the Cass River. In 2010, a demonstration project was implemented, spraying recommended herbicides to five sites of emergent Phragmites. The result was almost total eradication. In 2011, a student at Frankenmuth High School completed a senior project on Phragmites Control. As part of his project he surveyed every road in Frankenmuth and Bridgeport Townships and mapped every site of emergent Phragmites. With the support of the Managing Director of the Saginaw County Road Commission, these sites were treated in October 2011. Sponsors of the effort included Frankenmuth Conservation Club, Frankenmuth Township, Star of the West and Saginaw County Road Commission. Our intent going forward includes monitoring the sites treated in 2011, developing a plan to expand control efforts into neighboring townships, and assisting property owners interested in treating Phragmites present on their property.

#### 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 is an extremely important and necessary step in developing a long term effort

to improve water quality in the Cass River. The approximately \$300,000 budget grant is providing funds to support agency experts and engineering firms to complete an in-depth two year study and plan. The resulting report, due in early 2013, will prioritize the environmental problems within the watershed, suggest remediation projects and timelines, and recommend funding sources for the projects. Activities in 2011 have focused on completing on-the-ground surveys of existing conditions and planning for the communication and rollout activities to occur in 2012.

Also, late in 2010 the Cass River was one three river systems in the Saginaw Bay Watershed selected for a "Land Use Policy" analysis to be conducted by Michigan State University. The objective of this study is to compare various municipal land use policies (master plans and ordinances) under various landscape conditions (agriculture, rural/developed, natural) and develop "best practice" land use policies that promote environmental stewardship practices which can be considered by municipalities state-wide. During 2011, three meeting/workshops were held in our area to inform interested residents and engage local planning commissions. The project completion is scheduled for late 2012.

The 3rd annual Cass River Clean Up was held on August 13 and over 50 volunteers worked to clean up the river from Dixie Highway downstream to Bridgeport Township Hall. Once again, trailers full of plastic, rubber, metal and glass were removed from the river and disposed of. Next year's clean up will take place between Vassar and Tuscola and will be hosted by Tuscola Township.

In June, 2011 the Cass River Greenway was informed our grant request for a Volunteer Stream Monitoring project was approved. The funding source is the Great Lakes Commission and contracted through the Michigan DEQ. The project involves recruiting volunteers to take river sediment samples and examine them for the presence and type of macro-invertebrates (bugs). The quantity and type of macro-invertebrates is an indicator of the health of the river (water quality). The testing will take place in 2012 between Bray Road Bridge in Tuscola Township and Beyer Road Bridge in Frankenmuth Township.

A second water quality monitoring grant was awarded to the Cass River Greenway in August, 2011. This was a major grant (\$64,000) awarded by the Michigan DEQ and involves a two year water quality study of the Cass River from upstream of Cass City to downstream past Bridgeport. Testing parameters will include phosphates, suspended solids, dissolved oxygen, biological oxygen demand, nitrates, turbidity and E-coli. The project will be managed by Environmental Science Solutions, and our area waste water treatment plants have agreed to conduct a portion of the testing. The water sampling and testing will occur during the open water seasons of 2012 and 2013.