



Montmorency Conservation District  
13210 M-33 North (Fairgrounds)  
P.O. Box 789  
Atlanta, MI 49709  
989-785-4083  
montmorencycd.org

## **Thunder Bay River Gets a Boost**

*Lisha Ramsdell, Huron Pines RC&D*

The Thunder Bay River, a tremendous natural resource and economic asset for Northeast Michigan, is soon to receive nearly half a million dollars' worth of conservation work. With an increased focus in recent years on conserving the Great Lakes, protecting and enhancing high quality tributaries is a recognized key strategy for protecting Lake Huron and indeed, the Great Lakes Watershed. That's why Huron Pines, a Grayling-based conservation nonprofit, made the case for investing in the Thunder Bay River.

Some of the biggest threats to the Thunder Bay River include the lack of fish access to spawning habitat; alteration of stream channels, natural flow, and sediment transport; increased water temperatures; and loss of plant and animal diversity and associated food web impacts. While there are many different strategies to improving water quality and fish habitat, the major source of problems in the Thunder Bay River system are points where roads, especially sand/gravel backroads, cross over the many small streams that flow into Thunder Bay. More than 500 of these sites were inventoried and by attacking the most critical ones, water quality can be measurably improved.

Lisha Ramsdell, Huron Pines Program Director, has been with the organization for eight years and has spent countless hours in the Thunder Bay River Watershed. "We've put in the time collecting field inventories and prioritized the most critical sites in nearly every watershed in Northeast Michigan—we call this the 'Megalist.' This approach gives us the ability to compare sites from one river to the next and find where we can get the biggest bang for the buck. The Thunder Bay River has been at the top of the list for some time and I couldn't be more excited to see major funding finally come into this watershed."

The top ten sites were selected in the Thunder Bay Watershed and after confirming with county road commissions that they would be willing to participate, Huron Pines applied for grant funding to the Sustain Our Great Lakes (SOGL) program. SOGL is a combination of private funding paired with dollars from the Great Lakes Restoration Initiative and is a program run by the National Fish and Wildlife Foundation. The grant announced July 18th from the SOGL program for Huron Pines to work on the Thunder Bay River is for \$420,000.

By addressing the top ten sites in the Thunder Bay, Huron Pines will open up 134 miles of habitat for the fishery and reduce the annual amount of sediment from these crossings by 113 tons per year. Huron Pines staff will develop conceptual plans, hire design engineers, obtain permits, administer the grants and contracts, raise additional funding, and oversee the work. With everything including the cost of materials covered by the project funding, the county road commissioners are asked to provide the labor and equipment as a donation to the project. This type of partnership has historically proven to be very successful because the outcome results in a win-win for water quality and an improvement in local transportation infrastructure.

Why is excess sediment so detrimental to water quality and stream health? Excessive amounts of sand bury the gravel substrate in the stream bottom. Aquatic insects and spawning fish need this gravel habitat. The gravel provides shelter for the juvenile stages of these insects. With more gravel, there is more surface area on which algae and other primitive aquatic plants can grow. That algal and plant life is the basis for the insect food chain, as many of the gravel dwelling insects consume this plant material.

Increasing the amount of sand on the river bottom also leads to a "filling in" of the river. With

excessive sediment, the natural response of the river is to become wider. As sand continues to enter the river system and is not carried out, the river becomes wider as well as shallower. Decreasing the depth and increasing the width of the river leads to an increase in the amount of river surface area exposed to the sun. Increasing solar radiation means the water will become warmer, an often overlooked impact associated with increased sand load.

Because much of the Thunder Bay River functions as a coldwater fishery, the impact of warming water poses a serious threat. As water warms, dissolved oxygen decreases. Fish such as brook trout need high amounts of dissolved oxygen to survive.

Another negative impact from an increased sediment load is increased erosion. As the river gets wider, there is more erosive energy directed at the streambanks. This leads to more streambank erosion, further compounding the sediment problem.

“Road/stream crossing projects may not be the most attention-grabbing but their conservation value is unparalleled in many watersheds. Huron Pines works with many great partners in Northeast Michigan and I look forward to working more in the Thunder Bay River Watershed,” noted Ramsdell.

Huron Pines is a not-for-profit, 501(c)(3) organization with a mission of conserving the forests, lakes and streams of Northeast Michigan. This mission is accomplished by coordinating large scale restoration projects, using a hands-on approach to improving natural resources, providing technical support to our grassroots conservation partners and building partnerships between the public and private sector.

On average, Huron Pines administers one million dollars of conservation projects annually and works with 150 different agencies, contractors, funders, local governments and conservation partners. Huron Pines’ niche is providing partner coordination and project management. In addition, Huron Pines frequently takes a leadership role in such activities as developing conceptual plans, financial management, fundraising, installing Best Management Practices for water resource protection and public outreach. For more information or to learn how to get involved, contact the organization at [info@huronpines.org](mailto:info@huronpines.org) or 989-344-0753.

SOGL is a public-private program designed to achieve ecological and habitat restoration goals developed through the Great Lakes Regional Collaboration. SOGL is coordinated by the National Fish and Wildlife Foundation and funded by ArcelorMittal, the U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, U.S. Forest Service, and the National Oceanic and Atmospheric Administration.

**Visit the Huron Pines website at [www.huronpines.org](http://www.huronpines.org)**