Spring 2013

Manitoulin Streams Improvement Association is a grass roots, non-profit organization that is focused on large-scale, community based efforts to rehabilitate aquatic ecosystems on Manitoulin Island, in central Ontario. We bring the entire community together to do this via joint, private and public driven initiatives. Our efforts rehabilitate and enhance water quality and the fisheries resource on Manitoulin Island and Lake Huron which is fed by the streams.

What's Inside

Ontario Trillium Foundation $35,000 Contribution

Manitoulin Streams would like to thank the Ontario Trillium Foundation (OTF) for the $35,000 one year funding contribution that will go towards the Manitoulin Streams program manager position to implement stream rehabilitation projects across Manitoulin Island to enhance and protect aquatic and fish habitat.

http://www.otf.ca/en/index.asp

Paul Moffatt, Seija Deschenes & Michael Mantha (MPP Algoma-Manitoulin)

Recreational Fisheries Award

Manitoulin Streams is extremely honoured to be awarded The 2012 Canadian Recreational Fisheries Award.

Manitoulin Streams Board of Directors and staff (left to right) Pax McKenna, Algis Tribinevicius, Therese Trainor, Delmer Fields, Paul Moffatt, Ted Williamson, Sue Meert, Bob Florean, Seija Deschenes, Bill Strain

Left; Ed Debruyn speaking at event

Middle; Ted Williamson, chairman of Manitoulin Streams, thanking Fisheries and Oceans Canada for this prestigious award.

Right; Seija Deschenes thanking all of our partners that have contributed to our stream restoration efforts

In commemoration of the 2012 Canadian Recreational Fisheries Award Paul Moffatt and Ted Williamson presented Ed DeBruyn with a picture of one of our rehabilitation sites

Manitoulin Streams Canadian Recreational Fisheries Award

Ed DeBruyne Regional Director for Fisheries and Oceans Canada giving recognition to Manitoulin Streams for our accomplishments

Ed DeBruyn talking about the importance of the Canadian Fisheries which attracts 3.3 million anglers annually, including more than 400,000 foreign tourists, and contributing more than $8 billion dollars to the Canadian economy

Approximately 60 people from Manitoulin Streams and various community and partner groups attended the event to celebrate Manitoulin Streams awards ceremony.

Paul Moffatt and Ted Williamson accepting the National Recreational Fisheries Award from Ed DeBruyn Regional Director for Fisheries and Oceans Canada

A Sad Goodbye to a Dear Friend

Bob Hutton

Anyone who knew Bob would speak of him with compassion. He was a very loving man with a heart of gold. Tragically taken from us while fishing north of Quebec, he will be remembered and missed by all.

His dedication to conservation continues as donations pour into our organization at the request of his family. We will never forget his kindness, his gracious efforts in restoring Nortons Creek, and his compassion for life. We pray that Jean (wife) and his family gain strength in knowing that Bob has touched the hearts of many and his example of compassion for nature and life will live on in many.

Nortons Creek

Manitoulin Trade Fair

Manitoulin Streams in connection with Manitoulin Area Stewardship Council and Little Current Fish and Game Club was awarded First Prize for Large Booth, second year running at the Manitoulin Trade fair.

A successful weekend in educating the public of our efforts of stream rehabilitations, as well as encouraging all to plant trees donated by Manitoulin Area Stewardship Council.

KTEI Plants Again

We were honored to be invited back to M'Chigeeng to conduct an educational session and assist in tree planting with KTEI. The staff were very enthusiastic about giving back to nature and was eager to plant over 150 trees to make up for what they had calculated their paper usage was that year.

As always, it was a fun day with good friends. Thanks KTEI for your efforts!

Bass Lake Creek Educational

It was another good year for school groups to experience Little Current Fish and Games club educationals. Manitoulin Streams was very pleased to see a great turnout and many eager eyed young ones anxious to learn about walleye spawning and all other aspects of the importance of healthy streams.

Little Current and M'Chegeeng were the present groups for these 2 days of fun. Thank you to all volunteers and the Little Current Fish and Game Club for their efforts.

Tours

All tours will be running this year including the new session "**Learn to Fish**. This is a fun interactive session for all ages to learn how to bait, cast and hook a fish. This session takes place off of Bidwell Road at a privately owned and maintained pond.

Anyone interested in this or any other sessions being offered can contact our office at (705) 859-1653 or visit our website at www.manitoulinstreams.com

Upcoming Property Rehabilitations 2013

Bickel's Creek Rehabilitation and Enhancement (2013) Project

Bickel's creek is a 5.6km tributary of Lake Huron and is a well known rainbow trout and salmon spawning area. With drier summers and less precipitation this creek is becoming less navigable for fish to reach these critical spawning habitats .

The objective of the stream restoration plan will be to work with the United Fish and Game Club and Gore Bay Fish and Game Club to improve 0.4km of the tributary by creating vortex weirs near the mouth in the vicinity of the confluence with the bay to prevent sediment and sand build up. Improving the vertical access up the tributary by narrowing and creating weeping weirs to deepen water levels, construction of fish habitat structures (placing spawning gravel and random boulders, weeping weirs and woody material, etc.) and planting native trees and shrubs to create shade, reduce water temperatures and to provide protection from predators.

Stream restoration at Bickel's Creek will increase the reproductive potential for spawning Chinook and Coho salmon in the fall and Rainbow trout in the spring. This project will demonstrate the valued benefits of this community stewardship initiative increasing angling opportunities and creating economic spin-offs.

Community volunteers were called on for riparian vegetation planting. We had several volunteers show in helping to plant 2800 trees.

YET TO COME, installing in-stream habitat (weeping weirs, vortex weirs, spawning gravel, woody material etc.). Heavy equipment will be needed for placement of larger boulders at the mouth of the stream to help clear away sediment build up due to receding water levels in order to promote migrating fish access. The Town of Gore Bay will be approached to use heavy machinery as in-kind support. First Nations, OMNR Stewardship Rangers, local landowners, Gore Bay Fish and Game Club, the United Fish and Game Club, local citizens as well as lake associations will all be approached to assist in this project.

Proven bio-engineering techniques for riparian zone restoration will be implemented to provide fish and wildlife habitat along the river edges. Dependant on availability, native trees and shrubs species will include; white cedar, willow, red osier dogwood, tamarack, white spruce etc. This will shade the creek so the water will stay cooler, which will help to maintain an ideal overall water temperature for all cold water biota as well as to provide future suitable shelter and shade for a variety of aquatic and wildlife species. Furthermore, plant root systems will allow for natural stabilization of the creek banks to prevent further erosion and sediment deposits onto spawning ground and other aquatic habitat.

Bickels Creek

Watch our Facebook page for dates on in-stream restoration; Volunteers will be needed and greatly appreciated!

Mindemoya River Site MIN-604 Rehabilitation and Enhancement (2013) Project

Manitoulin Streams completed an Enhancement Strategy for the Mindemoya River. Last year we contacted two landowners along the Mindemoya River who want to work with our organization to prevent further river bank erosion and reduce the negative impact on the aquatic ecosystem and the riparian area along the shoreline.

Improving the fish habitat in this area will reduce the effects of low water levels and increased temperatures in the summer and will enhance the overall quality and productivity of this river's aquatic and riparian habitats for the long term.

Manitoulin Streams is excited about rehabilitating this site on the Mindemoya River. By providing sustainable fish habitat and structure, we hope to re-establish severely degraded aquatic habitat, which in turn will increase salmonid and other associated species of cold water habitat.

The Mindemoya Enhancement Strategy recommends that rehabilitation of site MIN 604 should include bank stabilization and enhancement of critical in-stream habitat. We intend to improve the stability of the sand bank and in-stream habitat by implementing a bio engineered site design.

The sand bank at this site is approximately 18 meters long by 3.5 meters tall at its highest point. This is a critical spawning and nursery area as the culvert at Cranston Road prevents many fish from migrating further upstream. Special consideration will be given to creating in stream habitat along this area.

Community volunteers will be called on for riparian vegetation planting and possibly weeping weir construction. Heavy equipment will be needed for stabilizing the sand bank and enhancing the in-stream habitat. Stream restoration may involve a variety of in-stream rehabilitation and bio-engineering techniques including; stabilizing the toe of stream banks with boulders and root wads, creating additional pool and riffle areas, placement of spawning gravel, installing LUNKERS and placement of woody material in-stream.

Proven bio-engineering techniques for riparian zone restoration will be implemented to provide fish and wildlife habitat along the river edges. The riparian area will be restored by planting native tree and shrub species such as eastern white cedar, speckled alder, heart leaved willow and native grass seed. This will shade the creek so the water will stay cooler, which will help to maintain an ideal overall water temperature for all cold water biota as well as to provide future suitable shelter and shade for a variety of aquatic and wildlife species.

Mindemoya River Site MIN-900-902 Rehabilitation and Enhancement (2013) Project

Providence Bay Beach Waterfront Revitalization

Providence Bay Beach is a popular destination and one of the most scenic attractions on Manitoulin Island. It is the largest beach on Manitoulin Island and in the summer of 2011, approximately 6500 people visited the Interpretive Centre. A boardwalk leads

from the Centre that spans the beach and crosses the Mindemoya River. The Centre will serve as a base for experiential tours offered by Manitoulin Streams, such as our Stream Detective tour experience.

Mindemoya River

The Mindemoya River has a total length of approximately 10km from its origin at the control dam on Lake Mindemoya to its outlet in Providence Bay of Lake Huron. Recent Ministry of Natural Resources scientific studies have shown that 70% of Manitoulin Islands streams have been damaged by a variety of improper and outdated land use practices over the past century.

The mouth of the Mindemoya River in Providence Bay is often obstructed by a large sand bar, created by coastal wave action and a lack of water coming downstream. The loss of water during the summer dry season and into the fall reduces the velocity of the river. For this reason, the river is not able to scour the sand effectively from the mouth. This results in the low velocity water taking a path parallel with the beach, and then it eventually makes a shallow trickle out into Lake Huron. This shallow mouth is approximately 3 inches deep and cannot accommodate the spawning salmon who often die on the resulting sand bar while trying to access the critical upstream habitat. Each full sized female can contain 2000 to 3000 eggs, that fact alone illustrates the tremendous loss when just one dies stranded on the beach in Providence Bay. In late September of 2011, Manitoulin Streams in partnership with the Municipality of Central Manitoulin and opened up the mouth of the river using heavy machinery, the resulting salmon spawn was one of the largest MNR personnel and local citizens had ever seen. This proposed project would see professionally bioengineered structures installed near the mouth of the river so that the mouth can be cleared of sand properly. This would allow the mouth to remain open from that point on during especially low water time periods that often coincide with peak spawning runs on the Mindemoya River. The resulting salmon and trout hatches would see a direct spinoff in economic increases in the tourism and sport fishing area and would contribute to the social well being of the Providence Bay area, Manitoulin Island and the greater Great Lakes community.

Restoration work would involve bio-engineering techniques that would increase the amount of the habitat, which in turn would increase the biodiversity, spawning activity and angling opportunities. Finally, bio-engineered structures would be installed to increase velocity and clear sand from the mouth of the Mindemoya River to allow migrating fish to spawn. The use of natural materials such as boulders, cobble, spawning gravel, root wads, Coconut coir matting to stabilize the shoreline as well as native grass seed and trees/shrubs.

Fishing Platform

Back before the Great Lakes fisheries reached a tipping point and crashed, places like Providence Bay saw "shoulder to shoulder" fishermen during annual fish migrations. Hundreds of people would fill the banks of the Mindemoya River contributing to the local economy with various spin-off items. Rehabilitation increases and renews fishing opportunities. A fishing platform would serve as a designated and safe place for young and old to fish and learn how to fish. This will allow people to take part in one of Canada's oldest cultural heritage activities while helping to prevent inadvertent damage to the newly restored shoreline and in-water habitat.

Educational Platform

Tourists and residents alike will be able to learn about and view bioengineering techniques, biodiversity, food chains as well as see migrating salmon and trout. The educational platform will allow people to see real world solutions such as the proposed stream restoration and learn why it was necessary to conduct the work and how stream degradation can be prevented in the future. In other words, it will teach people how natural environments function and particularly how human beings can manage their behavior and ecosystems in order to live sustainably. Finally, it will be of interest to young people who are the future stewards of the land. There would be displays that would acknowledge contributions toward the project.

Min 900-902

Mindemoya River Site MIN-602 Rehabilitation and Enhancement (2013) Project

By providing sustainable fish habitat and structure, we hope to re-establish severely degraded aquatic habitat, which in turn will increase salmonid and other associated species of cold water habitat in this area of the Mindemoya river.

Community volunteers will be asked to plant riparian and canopy zones as well as contribute to some in-stream habitat creation. First Nations, OMNR Stewardship Rangers, local landowners, local citizens as well as lake associations and fish and game clubs will all be enlisted to assist in this project.

The Mindemoya Enhancement Strategy recommends that rehabilitation of site MIN 602 should include sand bank stabilization and enhancement of in-stream habitat.

Rehabilitation of this site will include sand bank stabilization, as well as enhancement of critical in-stream habitat. The sand bank on this site is approximately 46 meters long by 7.5 meters high at its tallest point. This particular site has a large circulating pool which is a critical spawning and nursery area. The culvert at Cranston Road prevents many fish from migrating further upstream. Special consideration will be given to create in-stream habitat with the possibility of creating a structure(s) that will allow fish to navigate the step created by the culvert without comprising the road or upstream properties. It should be noted that very low water levels in the fall often compound this navigation issue. The Municipal road may eventually have a bridge installed instead of a culvert, however Municipal representatives indicated a replacement would not be installed in the near future.

Community volunteers will also be called on for riparian vegetation planting, installation of woody material and possibly weeping weir construction. Heavy equipment will be needed for moving materials that will stabilize the sand bank and to create in-stream structures for habitat.

MIN 602 stream restoration may involve a variety of stream rehabilitation and bio-engineering techniques including; stabilizing the toe of stream banks with boulders and root wads, creating additional pool and riffle areas, placement of spawning gravel, installing LUNKERS and placement of larger woody material in-stream.

Proven bio-engineering techniques for riparian zone restoration will be implemented to provide fish and wildlife habitat along the river edges. The riparian area will be restored using volunteer labour by planting native tree and shrub species such as eastern white cedar, speckled alder, heart leaved willow and native grass seed. This will shade the creek so the water will stay cooler, which will help to maintain an ideal overall water temperature for all cold water biota as well as to provide future suitable shelter and shade for a variety of aquatic and wildlife species.

Acknowledgments

We would like to thank the following contributers to our efforts this year;

Ausable Bayfield Conservation Authority and partners
MOE (Min. of Environment) & EC (Environment Can) $15,000

Great Lakes Guardian Fund $75,000

Ontario Trillium Contribution $35,000

New DFO funding

Recreational Fisheries Conservation Partnership Program $50,000

Manitoulin Transport $5000

Orr's Value Mart

Shaw Septic Farm Supply