



Nipigon Bay Area of Concern

Newsletter 2014

Last action to begin this year

Efforts to clean up the environment in the Nipigon Bay Area of Concern (AOC) are almost complete. The last major required action will begin this year when the Township of Red Rock starts construction to upgrade its wastewater treatment plant. The estimated cost for the upgrade is \$9 million; the federal and provincial governments have committed \$4.5 million each toward the project. This upgrade will improve water quality in the area and is expected to be completed by 2019.

Fish habitat improvements will continue this year with construction to re-establish a channel from the Nipigon River to the lagoon area above the Nipigon boat launch. This area was blocked when the CN railroad was built in 1906. The project will create an opening in the breakwall to provide additional walleye spawning and nursery habitat.

Next steps

Environmental monitoring to date shows improvements in the health and abundance of



sediment-dwelling organisms in this area. The Ontario Ministry of Natural Resources and Forestry and Environment Canada are also currently reviewing data on fish populations and habitat.

When environmental monitoring shows that ecosystem health has improved and that locally-established environmental targets have been met, Canada and Ontario will engage with the Townships of Nipigon and Red Rock, local Aboriginal communities, the Public Advisory Committee, and other stakeholders on whether Nipigon Bay should be removed from the list of AOCs.

Background: The Nipigon Bay Area of Concern

Nipigon Bay is one of 43 AOCs (now 38 with five fully remediated) in the Great Lakes identified in accordance with the 1987 Canada-United States Great Lakes Water Quality Agreement. Canada and the U.S. work with partners to develop and implement Remedial Action Plans (RAPs) for each Area of Concern.

This AOC, located on the northernmost part of Lake Superior, includes Nipigon Bay, Lake Helen, and most of the Nipigon River, the largest tributary to Lake Superior. Part of the AOC is within the proposed

Lake Superior National Marine Conservation Area, which will be the world's largest freshwater marine protected area once it's established.

In Nipigon Bay, industrial and municipal effluent discharges, log driving activities, and hydro-electric development along the Nipigon River led to:

- water quality impairments
- impacts to sediment-dwelling organisms
- impacts on fish populations
- loss of fish habitat.

Many actions have been taken to help clean up this AOC. The local pulp mill upgraded its wastewater treatment plant in response to provincial and federal wastewater regulations in the 1990s. This resulted in better water quality and improved fish habitat. The mill closed in 2006. The Township of Nipigon upgraded its wastewater treatment plant in 2011, which reduced the amount of bacteria and nutrients entering the water.

Several fish habitat improvement projects have been completed, including a bioengineered marina at Red Rock. Armour stone breakwalls in the marina provide fish and wildlife habitat as well as public access. Logs, debris and wood pilings were cleaned up in the lower Nipigon River to restore the spawning grounds.

In 2012, Kama Creek, a historically important spawning ground for

Coaster Brook trout, was restored with funding from Canada, Ontario, and community partners. The project returned the creek to its natural channel and created additional spawning, nursery and feeding habitat.

The rehabilitation of lower Clearwater Creek, completed in 2005, restored severely degraded fish habitat and provides educational and recreational opportunities. In 2013, the Ontario Ministry of Natural Resources and Forestry removed barriers to fish migration to allow the passage of Coaster Brook trout. Eroding banks were stabilized to prevent sediment from entering Nipigon Bay.

In 2011, the Ontario Ministry of Natural Resources and Forestry constructed a walleye spawning shoal at the mouth of Bass (Purdum) Creek where it enters the Nipigon River. Monitoring of the site shows that walleye are spawning successfully which means the new shoal is helping the recovery of walleye in the Nipigon River system.

Cleaning up Areas of Concern

Canada and Ontario work together to restore the Canadian and binational AOCs. That work relies on collaboration with conservation authorities, municipalities, Aboriginal communities, environmental groups, industry and the public. Working together, communities and governments develop and implement RAPs.

Of the 38 remaining AOCs in the Great Lakes, there are nine in Canada, 24 in the United States and five that are shared by both countries. Three Canadian and two United States locations have been fully remediated and removed from the list of AOCs. Two Canadian locations have been recognized as Areas of Concern in Recovery.



Photo credit: Jim Bailey

For more information:

For more information on the Nipigon Bay Area of Concern: www.northshorerap.ca

For more information on Areas of Concern visit: www.ec.gc.ca/raps-pas

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