



AREAS OF CONCERN ST. MARYS RIVER

Efforts in the St. Marys River (Canadian Section) are undertaken in a partnership between the Government of Canada, other levels of government and non-government groups, including members of the public.

Undertaking environmental restoration requires a large amount of scientific and technical expertise, local knowledge and hard work. One agency or group cannot engage in such a large task on its own, without the help of others.



© Environment Canada

The contributions of binational, federal, provincial and local agencies, local industries, and other community partners continue to have a positive impact upon the water quality and ecosystem health within the Canadian section of the St. Marys River Area of Concern (AOC).

Why was it listed as an Area of Concern?

The St. Marys River was designated as an AOC because a review of available data indicated that water quality and environmental health were severely degraded. Pollution from local industries, insufficiently treated municipal wastewater, and other pollutant sources have historically contributed to the environmental issues within the St. Marys River. The river has also been physically modified to accommodate ship navigation, vehicle and rail transportation, and hydroelectric power generation. Cumulatively, these issues have led to reduced water quality, contaminated sediments on the river bottom, and have impacted fish and wildlife habitat.

What have we accomplished?

Major accomplishments have been realized in the St. Marys River as a result of the implementation of federal pulp and paper regulations and the Province of Ontario's Municipal Industrial Strategy for Abatement (MISA) regulations in the mid-1990s. In anticipation of these regulatory requirements, and in an effort to reduce environmental impairments, local industries and municipal wastewater plants made process changes and upgrades to the treatment processes:

- Essar Steel Algoma (formerly Algoma Steel) reduced the amount of oil and grease entering the river by more than 96%, suspended solids by more than 94%, odour-causing phenols by more than 99%, and ammonia by more than 95%.

- The St. Marys Paper Mill cut wastewater contaminants significantly, reducing suspended solids by more than 91%, biological oxygen demand (BOD) by more than 97%, and phenols by more than 95% before it ceased operations in 2012.
- As a result of a \$77 million infrastructure program in the mid-2000s supported by \$47 million in federal and provincial grants and \$30 million in city funds, the City of Sault Ste. Marie in Ontario upgraded its wastewater treatment plant in the east end of town, reducing BOD by more than 96%, suspended solids by more than 89%, and phosphorus levels by more than 91%.

As well, habitat restoration work has been undertaken, including a naturalization project within the Bar River (a tributary to the St. Marys River). This project involved youth planting trees on a number of properties along the Bar River, thereby helping to reduce sedimentation, expanding habitat, and allowing for better fish-spawning in the upper reaches of the river, and providing a hands-on educational opportunity to the next generation.

What's left to do?

Future efforts will focus on addressing contaminated sediment, stormwater runoff, and fish and wildlife habitat in the St. Marys River.

A multi-agency technical team has been working toward developing a sediment management plan appropriate for the river. Co-led by Environment Canada and the Ontario Ministry of the Environment, this technical team includes participants from the Sault Ste. Marie Innovation Centre, the Binational Public Advisory Council, the Conservation Authority, the City of Sault Ste. Marie and Transport Canada. The work is complex and takes time. The technical team expects to complete the site and sediment assessment and share the results with the public by the end of 2014.

With financial support from Environment Canada, the City of Sault Ste. Marie is undertaking targeted monitoring to determine the potential use of oil/grit separators to reduce contaminants entering the river from stormwater outfalls, along with evaluating local sites to determine if they are sources of runoff contaminants. This is in addition to the city's

use of a Citywide Stormwater Management Approach to help it address stormwater quantity and quality issues within new and existing development around the community.

Environment Canada is conducting a multi-year study on wildlife habitat and population levels in the St. Marys River area. Marsh bird surveys and wetland evaluations are underway to provide insight into the current status of wildlife populations and habitat, and the findings will influence future decision making on remedial actions.

Outlook

Environment Canada is committed to implementing the required actions needed to remediate this area. All actions to finalize the clean-up of the Canadian section of the St. Mary's River AOC are expected to be completed by 2025.

Where can you find more information?

Environment Canada E-mail :
greatlakes-grandslacs@ec.gc.ca

Environment Canada Web site:
www.ec.gc.ca/raps

Binational Public Advisory Council:
www.lssu.edu/bpac/

PARTNERS

Listed below are participants that contribute to efforts in the St. Marys River AOC, specifically for the Canadian section:

Algoma Public Health	Ontario Ministry of Natural Resources
Algoma University	Sault Ste. Marie Innovation Centre
Binational Public Advisory Council	Sault Ste. Marie Region Conservation Authority
City of Sault Ste. Marie, Ontario	Transport Canada
Fisheries and Oceans Canada	
First Nations and Métis communities	
Ontario Ministry of the Environment	