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RESTORING THE RIVER

Official Newsletter of The St. Marys River Remedial Action Plan

Part 3: Restrictions on Fish Consumption BUI

This is Part 3 of our series, which provides important background on the sources of contamination in the St. Marys River and why they matter for our health and the River's. Understanding this history helps explain how far we've come, and why monitoring fish consumption remains important.

Where the Contaminants Come From

The St. Marys River has long served as an important waterway for shipping, hydroelectric power, and industry. This development, particularly from the mid-20th century, has contributed to polluting the river. Key sources included industrial discharges from mills, steel plants, and tanneries, as well as municipal wastewater from local treatment plants. Other contributing factors were hydropower generation and navigation channel dredging, which disturbed contaminated sediments and released pollutants into the river.

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When it comes to Restrictions on Fish Consumption BUI, the main contaminants of concern in the St. Marys River are mercury, PCBs (polychlorinated biphenyls), and dioxins/furans. These substances are particularly hazardous because they can persist in the environment for decades, accumulating in sediments and in the bodies of fish.

Remediation Highlights

To address the legacy pollution in the St. Marys River, major remediation efforts were implemented. Algoma Steel introduced advanced wastewater filtration and removed historical stores of mercury and PCBs. The closure of the St. Marys Paper plant eliminated a major pollution source. The City of Sault Ste. Marie upgraded its wastewater treatment system, introducing biological nutrient removal and UV disinfection. On the U.S. side, 44,000 cubic yards of contaminated sediment were removed from Tannery Bay, including an estimated 70 pounds of mercury. These actions, combined with stronger environmental regulations like the Fisheries Act and Canada's Effluent Limits, led to significant reductions in pollution.

Remedial Action Plan History

IThe Remedial Action Plan (RAP) process is part of a larger effort across the Great Lakes basin to restore "Areas of Concern" that were severely impacted by industrial activity.

How Do They Persist?

Contaminants such as mercury and PCBs pose long-term risks due to their ability to bioaccumulate. Bioaccumulation happens when contaminants like mercury build up in an organism's tissues over time, while biomagnification refers to the increasing concentration of those contaminants as they move up the food chain.

Although PCBs were banned in the 1970s, they are still found in river sediments and the fatty tissues of fish. Dioxins and furans, toxic byproducts of industrial processes, are harmful even in very small amounts and can linger in the environment for years.

In Ontario, RAPs have brought together communities, governments, and industries to identify problems, implement solutions, and monitor progress. The St. Marys River RAP has been a collaborative effort, with measurable results that show how collective action can drive environmental recovery.

Upcoming Projects

Now that we've taken a closer look at the contaminants of concern in the St. Marys River, including how they got here, why they matter, and what's being done to address them, we're excited to share what comes next.

In the upcoming newsletters, we'll explore findings from our Fish Consumption survey, highlighting favourite fishing spots along the river, share how local people interact with the river today whether through fishing, catch-and-release, or simply spending time by the water. We'll also dive into which species are most commonly caught and eaten, how often people eat local fish, and the most popular (and professional-recommended) preparation methods. Finally, we'll walk through the steps to delist the fish consumption impairment and what continued progress looks like today.

Outreach events are on the horizon too! So keep an eye out, and if you have an event you'd like us to join, we'd love to hear from you!

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