



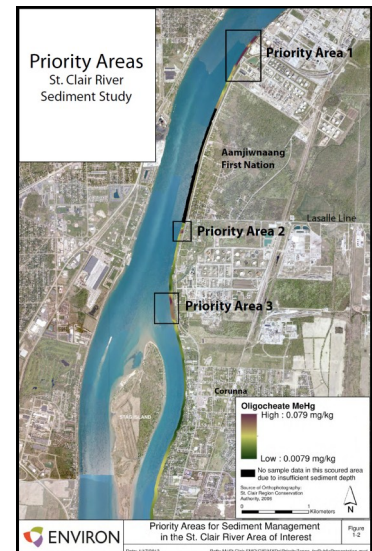
St. Clair River Area of Concern

On the Road to Recovery!!

Sediment Management Project

Contaminated sediment can impact aquatic ecosystems and biota, especially fish and bottom-dwelling organisms. In some areas of the St. Clair River, mercury levels in sediment are at concentrations that pose the risk of biomagnification in the food chain.

From 2002 to 2004, Dow Chemical Canada removed approximately 13 000 m³ of sediment polluted with mercury and other organic compounds. Chemical, biological and physical studies have since identified three remaining areas of mercury-contaminated sediment along the St. Clair River shoreline that require management. Following decisions on clean-up options the next steps will include securing funding, engineering design and the awarding of contracts. The project is anticipated to be completed in 2017.



Location of the three remaining areas of mercury contaminated sediment along the St. Clair River shoreline (ENVIRON, 2013)



Environment Canada, the Ontario Ministry of the Environment and the St. Clair Region Conservation Authority hired experts to conduct chemical, biological and physical studies to delineate areas of contaminated sediment in the St. Clair River.



Hydraulic dredging was used in the 2004 sediment clean-up by Dow Chemical Canada. A hydraulic dredge works like a vacuum. Sediment is drawn through a hose to a processing area where it is treated and disposed of in an appropriate manner.



A number of open houses and consultations were conducted in 2012 and 2013 to gauge community preference on how best to remediate the contaminated sediment.

What is Biomagnification?

Biomagnification is the biological process by which contaminant concentrations increase throughout a food chain. Generally, top predators will have greater contaminant concentrations in their bodies than consumers lower in the food chain. Contaminants that biomagnify well (e.g., mercury) mix with fats and oils and are difficult for most organisms to expel from their bodies. Biomagnification leads to limitations on the number and types of fish that can be eaten from the St. Clair River. The Ontario Ministry of the Environment provides information on restrictions on fish consumption (www.ontario.ca/fishguide).

More Information Available Online at:

www.scrca.on.ca/sediment