

Environment Canada



AREAS OF CONCERN

ST. CLAIR RIVER

Efforts on the Canadian side of the St. Clair River are undertaken in a partnership between the Government of Canada, other levels of government and nongovernment 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 their own without the help of others.

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. Clair River Area of Concern (AOC).

Why was it listed as an Area of Concern?

The St. Clair River was designated as an AOC in 1985 because a review of available data indicated that water quality and environmental health were severely degraded. A history of industrialization, urbanization and agricultural land use activities on the St. Clair River and in its tributary watersheds resulted in 12 of the Great Lakes Water Quality Agreement's 14 beneficial use indicators of quality being deemed as impaired.

Today on the Canadian side of the St. Clair River AOC, seven beneficial uses are considered impaired, three require further assessment and two have been restored. Current impairments include restrictions on fish consumption, restrictions on drinking water, degraded benthic communities (consisting of organisms that live in and on the bottom of the river floor), restrictions on dredging activities, beach closings, degraded aesthetics and loss of fish and wildlife habitat.

What have we accomplished?

By 2009, the amount of chemicals on the Canadian side of the St. Clair River declined by more than 75% from 1990 levels as a result of better environmental regulations.

Since 2000, municipal wastewater pollution from the City of Sarnia dropped by 50%, thanks to more than \$61 million in capital investments to reduce combined sewer overflows (a mixture of untreated sewage and stormwater). In 2012, the Courtright and Corunna wastewater treatment plants were upgraded at a cost of more than \$28 million.





Between 2002 and 2004, Dow Chemical cleaned up approximately 13,300 cubic metres of mercury and organics-contaminated sediment in the area adjacent to their property, which led to improvements in local water quality.

With support from Environment Canada's Great Lakes Sustainability Fund, 250 hectares of wildlife habitat have been created or enhanced, of which 42 hectares are wetlands. Eight shoreline areas have been restored to provide two kilometres of habitat for fish, and also to control shoreline erosion.

In 2011 and 2012, binational celebrations to remove two beneficial use impairments – "tainting of fish and wildlife flavour" and "added cost to agriculture and industry" – were held in Canada and the U.S.

What's left to do?

Addressing sediment contamination in the river continues to be the main cleanup effort. Sediment management options are being formulated to address the remaining contaminants within three priority areas.

Further habitat restoration – particularly the rehabilitation of coastal wetlands, construction

of fish spawning habitats and shoreline naturalization projects

– is also a major priority in the remediation of the area.

In addition, continued monitoring of the area will be required to track progress of restoration efforts.

Outlook

The St. Clair River is a binational AOC, meaning that continued effort is required in both Canada and the

United States to achieve delisting. Environment Canada will continue to work with local and provincial partners to support restoration actions and the environmental monitoring and assessment studies needed to confirm that environmental quality objectives are met. Provided that these objectives are achieved, all actions identified to clean up the area are targeted for completion 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

PARTNERS

Aamjiwnaang First Nation

Binational Public Advisory Council

Department of Fisheries and Oceans

City of Sarnia

Lambton County

Municipality of Chatham-Kent

Ontario Ministry of Agriculture, Food and Rural Affairs

Ontario Ministry of the Environment

Ontario Ministry of Transportation

Rural Lambton Stewardship Network

Sarnia-Lambton Environmental Association

St. Clair Region Conservation Authority

St. Clair Township

Walpole Island First Nation

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