

Saint Lawrence River, Main Stem (0901-0004)

Impaired Seg

Waterbody Location Information

Revised: 12/29/2008

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|-------------------------|---------------------------------|---------------------|--------------------------|
| Water Index No: | SL (portion 4) | Drain Basin: | Saint Lawrence River |
| Hydro Unit Code: | 04150301/000 | Str Class: | A-Spcl |
| Waterbody Type: | G.Lakes | Reg/County: | 6/St.Lawrence Co. (45) |
| Waterbody Size: | 100.1 ShrMi | Quad Map: | OGDENSBURG WEST (C-18-2) |
| Seg Description: | from Ogdensburg to Lake Ontario | | |

Water Quality Problem/Issue Information (CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

| Use(s) Impacted | Severity | Problem Documentation |
|-------------------|----------|-----------------------|
| FISH CONSUMPTION | Impaired | Known |
| Recreation | Stressed | Known |
| Habitat/Hydrology | Stressed | Suspected |
| UnAssessed Water | | |

Type of Pollutant(s)

Known: PRIORITY ORGANICS (PCBs, dioxin), PESTICIDES (mirex)
Suspected: Algal/Weed Growth, Water Level/Flow
Possible: Pathogens

Source(s) of Pollutant(s)

Known: TOX/CONTAM. SEDIMENT
Suspected: Hydro Modification, On-Site/Septic Syst
Possible: - - -

Resolution/Management Information

| | | |
|-----------------------------|---|-------------------------------------|
| Issue Resolvability: | 1 (Needs Verification/Study (see STATUS)) | |
| Verification Status: | 4 (Source Identified, Strategy Needed) | |
| Lead Agency/Office: | ext/EPA | Resolution Potential: Medium |
| TMDL/303d Status: | n/a->2b* | |

Further Details

Overview

Fish consumption in this portion of the Saint Lawrence River is impaired by priority organics (PCBs, dioxin) and pesticides (mirex) in river sediments attributed to past discharges, continuing runoff from industrial waste sites and impacts from Lake Ontario sediments. Habitat/hydrological uses are also thought to experience minor impacts due to flow regulation to support commercial shipping in the river.

Fish Consumption

Fish consumption in the Saint Lawrence River is impaired due to a NYSDOH health advisory that recommends eating no American eel, channel catfish, carp, larger lake trout (over 25 inches) or larger brown trout (over 20 inches). The advisory also recommends that consumption of chinook salmon, white perch, white sucker, rainbow trout, smaller lake and brown trout, and coho salmon (over 25") be limited to no more than one meal per month. The fish consumption advisories, which apply to the entire length of the St. Lawrence (including tribs up to the first impassible barrier) are a result of PCB, mirex and dioxin contamination. An additional advisory prohibits consumption of any fish species from the bay at the St. Lawrence-Franklin County line due to PCB contamination. Advisories for the Saint Lawrence River were first issued prior

to 1998-99. (2008-09 NYSDOH Health Advisories and DEC/DFWMR, Habitat, December 2008)

Habitat/Hydrologic Impacts

The management of water levels and flows of the river to support commercial navigation also affects the fishery habitat. The International Joint Commission (IJC) recently called for a new management plan that supports more natural river flows that support fish and wildlife habitat and recreation benefits. The Moses-Saunders Dam was constructed in 1958 for hydropower and to aid commercial navigation on the St. Lawrence River. However the management plan to control water levels on the river and Lake Ontario was developed at a time when there was less consideration of environmental impacts. Research shows that the current plan, which severely limits natural water level fluctuations, has significantly reduced the diversity of plant species in river wetlands, which in turn has impacted populations of many fish and other wildlife. However, these conditions can be reversed by allowing the river to have a more natural flow. A revised management plan can significantly improve the health of the river while continuing to serve commercial interests. (International Joint Commission and American Rivers, December 2008)

Recreational Assessments

Excessive algal and aquatic weed growth in the shallow warmwater embayments along this length of the Saint Lawrence that affects recreational uses is also of concern. The excessive weed growth has been attributed to high nutrient loads resulting from extensive development around the bay. In the past NYSDOH and "Save The River" have documented the failure of on-site systems serving cottages along the bay shore. Goose Bay and Lake of the Isles have been noted in past assessments as having such impacts. (DEC/DOW, Region 6 and Save the River, 1998)

Segment Description

This segment includes the waters of the Saint Lawrence from the Oswegatchie River in Ogdensburg to the outlet of Lake Ontario. This segment also includes a number of embayments of the river.