



## Saint Lawrence/Sucker Brook Watershed (0415030102)

### Water Index Number

SL (portion 3)  
SL-10  
SL-11  
SL-12  
SL-13  
SL-14 thru 24

### Waterbody

Saint Lawrence River, Main Stem (0901-0015)  
Coles Creek and tribs (0901-0018)  
Brandy Brook and tribs (0901-0013)  
Little Sucker Brook and tribs (0901-0019)  
Sucker Brook and tribs (0901-0009)  
Minor Tribs to St. Lawrence River (0901-0020)

### Category

Impaired Seg  
UnAssessed  
Need Verific  
UnAssessed  
Need Verific  
UnAssessed

# Saint Lawrence River, Main Stem ( 0901-0015)

# Impaired Seg

## Waterbody Location Information

Revised: 12/29/2008

|                         |                               |                     |                            |
|-------------------------|-------------------------------|---------------------|----------------------------|
| <b>Water Index No:</b>  | SL (portion 3)                | <b>Drain Basin:</b> | Saint Lawrence River       |
| <b>Hydro Unit Code:</b> | 04150301/000                  | <b>Str Class:</b>   | A-Spcl                     |
| <b>Waterbody Type:</b>  | G.Lakes                       | <b>Reg/County:</b>  | 6/St.Lawrence Co. (45)     |
| <b>Waterbody Size:</b>  | 30.8 ShrMi                    | <b>Quad Map:</b>    | SPARROWHAWK POINT (B-19-3) |
| <b>Seg Description:</b> | from Waddington to Ogdensburg |                     |                            |

## 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             |

### Type of Pollutant(s)

Known: PRIORITY ORGANICS (PCBs, dioxin), PESTICIDES (mirex)  
Suspected: Water Level/Flow  
Possible: - - -

### Source(s) of Pollutant(s)

Known: TOX/CONTAM. SEDIMENT  
Suspected: Hydro Modification  
Possible: - - -

## Resolution/Management Information

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

### Segment Description

This segment includes the waters of the Saint Lawrence from Clark Point in Waddington to the Oswegatchie River in Ogdensburg.

# Brandy Brook and tribs ( 0901-0013)

Need Verific

## Waterbody Location Information

Revised: / /

|                         |                         |                     |                        |
|-------------------------|-------------------------|---------------------|------------------------|
| <b>Water Index No:</b>  | SL-11                   | <b>Drain Basin:</b> | Saint Lawrence River   |
| <b>Hydro Unit Code:</b> | 04150301/050            | <b>Str Class:</b>   | C                      |
| <b>Waterbody Type:</b>  | River                   | <b>Reg/County:</b>  | 6/St.Lawrence Co. (45) |
| <b>Waterbody Size:</b>  | 56.2 Miles              | <b>Quad Map:</b>    | WADDINGTON (B-20-4)    |
| <b>Seg Description:</b> | entire stream and tribs |                     |                        |

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

| Use(s) Impacted | Severity | Problem Documentation |
|-----------------|----------|-----------------------|
| Aquatic Life    | Stressed | Possible              |
| Aesthetics      | Stressed | Suspected             |

### Type of Pollutant(s)

Known: - - -  
Suspected: SILT/SEDIMENT  
Possible: Nutrients

### Source(s) of Pollutant(s)

Known: - - -  
Suspected: AGRICULTURE  
Possible: Streambank Erosion

## Resolution/Management Information

|                             |   |                              |     |
|-----------------------------|---|------------------------------|-----|
| <b>Issue Resolvability:</b> | ( )   | <b>Resolution Potential:</b> | n/a |
| <b>Verification Status:</b> | (Not Applicable for Selected RESOLVABILITY) |                              |     |
| <b>Lead Agency/Office:</b>  | ext/  |                              |     |
| <b>TMDL/303d Status:</b>    | n/a   |                              |     |

## Further Details

The fishery (particularly walleye) in Brandy Brook may be affected by silt and sedimentation resulting from agricultural activity in the watershed. The stream did at one time support walleye spawning, however significant sediment plumes (shown in New York Power Authority aerial photographs) raise concerns about current and/or future support of the fishery. (DEC/DFWMR Region 6)

The county reports there are 118 farms in the 24,250 acre watershed. Voluntary participation in currently funded programs to address agricultural sedimentation are effective in reducing sediment and nutrient loading to the stream. With water quality improvement, the stream could be a candidate for NYPA habitat improvement projects. (St. Lawrence Co. WQCC, May 1998) This segment includes the entire stream and all tribs. The waters of the stream are Class C. Tribs to this reach/segment are also Class C.

# Sucker Brook and tribs ( 0901-0009)

Need Verific

## Waterbody Location Information

Revised: / /

|                         |                         |                     |                        |
|-------------------------|-------------------------|---------------------|------------------------|
| <b>Water Index No:</b>  | SL-13                   | <b>Drain Basin:</b> | Saint Lawrence River   |
| <b>Hydro Unit Code:</b> | 04150301/050            | <b>Str Class:</b>   | C                      |
| <b>Waterbody Type:</b>  | River                   | <b>Reg/County:</b>  | 6/St.Lawrence Co. (45) |
| <b>Waterbody Size:</b>  | 66.2 Miles              | <b>Quad Map:</b>    | WADDINGTON (B-20-4)    |
| <b>Seg Description:</b> | entire stream and tribs |                     |                        |

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

| Use(s) Impacted | Severity | Problem Documentation |
|-----------------|----------|-----------------------|
| Aquatic Life    | Stressed | Possible              |

### Type of Pollutant(s)

Known: ---  
Suspected: ---  
Possible: SILT/SEDIMENT, Nutrients

### Source(s) of Pollutant(s)

Known: ---  
Suspected: ---  
Possible: AGRICULTURE, On-Site/Septic Syst

## Resolution/Management Information

|                             |   |                              |     |
|-----------------------------|---|------------------------------|-----|
| <b>Issue Resolvability:</b> | ()  | <b>Resolution Potential:</b> | n/a |
| <b>Verification Status:</b> | (Not Applicable for Selected RESOLVABILITY) |                              |     |
| <b>Lead Agency/Office:</b>  | DOW/  |                              |     |
| <b>TMDL/303d Status:</b>    | n/a   |                              |     |

## Further Details

DEC Regional Fisheries has noted high turbidity in the stream, most likely attributed to agricultural activity and runoff. The Sucker Brook watershed has a large concentration of dairy cattle, with dairy operations in generally close proximity to much of the creek and its tributaries. The St. Lawrence County SWCD reports a large number of beaver dams on the creek as well. (DEC/DOW, Region 6, July 1993)

One source of impairment was addressed when the Lisbon municipal wastewater treatment went on line in December 1996. (DEC/DOW, Region6, September 1998) This segment includes the entire stream and all tribs. The waters of the stream are Class C. Tribs to this reach/segment, including Squaw Brook (-2), are also Class C.