



## Little River Watershed (0415030403)

### Water Index Number

SL- 2-22  
 SL- 2-22  
 SL- 2-22- 1  
 SL- 2-22- 2

### Waterbody

Little River, Lower, and minor tribs (0904-0018)  
 Little River, Upper, and tribs (0904-0019)  
 Tracy Brook and tribs (0904-0020)  
 Grannis Brook and tribs (0904-0021)

### Category

UnAssessed  
 MinorImpacts  
 UnAssessed  
 NoKnownImpact

# Little River, Upper, and tribs ( 0904-0019)

# MinorImpacts

## Waterbody Location Information

Revised: 02/13/2009

**Water Index No:** SL- 2-22  
**Hydro Unit Code:** 04150304/060      **Str Class:** AA  
**Waterbody Type:** River  
**Waterbody Size:** 57.8 Miles  
**Seg Description:** stream and tribs, above North Russell

**Drain Basin:** Saint Lawrence River  
Grass River  
**Reg/County:** 6/St.Lawrence Co. (45)  
**Quad Map:** CANTON (C-20-4)

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Aquatic Life	Stressed	Suspected

### Type of Pollutant(s)

Known: ---  
Suspected: NUTRIENTS, Silt/Sediment  
Possible: ---

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

Known: ---  
Suspected: AGRICULTURE, Urban/Storm Runoff  
Possible: ---

## Resolution/Management Information

**Issue Resolvability:** 1 (Needs Verification/Study (see STATUS))  
**Verification Status:** 4 (Source Identified, Strategy Needed)  
**Lead Agency/Office:** ext/WQCC  
**TMDL/303d Status:** n/a

**Resolution Potential:** Medium

## Further Details

### Overview

Aquatic life support in this portion of the Little River is thought to experience minor impacts due to nutrient and silt/sediment loadings from agricultural and other nonpoint sources.

### Water Quality Sampling

NYSDEC Rotating Intensive Basin Studies (RIBS) Intensive Network monitoring of Little River in Canton, Saint Lawrence County, (at Pike Road) was conducted in 2005. Intensive Network sampling typically includes macroinvertebrate community analysis, water column chemistry, sediment and invertebrate tissues analysis and toxicity evaluation. During this sampling the biological (macroinvertebrate) sampling results indicated slightly impacted water quality conditions. The Nutrient Biotic Index indicated eutrophic conditions for phosphorus and nitrogen. Results of Impact Source Determination were inconclusive in identifying sources of water quality impact. The community was dominated by many facultative riffle beetles and non-biting midges as well as some clean-water mayflies. Macroinvertebrates collected at this site and chemically analyzed for selected metals, PAHs, PCBs, and organochlorine pesticides show an elevated level of both chromium and titanium. The source of these substances chromium is likely to be anthropogenic, but it has not been identified. Sediments were not found to contain any contaminants at levels of concern and, based on sediment quality guidelines developed for freshwater ecosystems, overall sediment quality is not likely to cause chronic toxicity to sediment-dwelling organisms. Chronic toxicity testing using water from this location showed no significant mortality or reproductive effects on the test organism. Based on the consensus of these

established assessment methods, overall water quality at this site shows that in spite of some concerns that should continue to be monitored (eutrophication, chromium), aquatic life is considered to be fully supported in the stream. (DEC/DOW, BWAM/RIBS, January 2009)

A biological (macroinvertebrate) assessment of the Little River, at Canton (at ) was also conducted in 2004 during the RIBS Biological Screening effort in the basin. The sample was assessed as slightly impacted. The macroinvertebrate community was dominated by the riffle beetle *Promoresia elegans*. The nutrient biotic index indicated highly eutrophic conditions. Results of impact source determination were inconclusive. (DEC/DOW, BWAM/SBU, December 2008)

#### Segment Description

This segment includes the portion of the stream and all tribs above Deer Lick Brook (-16) near North Russell. The waters of this portion of the stream are Class AA. Tribs to this reach/segment, including Van Rensselaer Creek (-19), are Class AA,AA(T). Lower Little River are listed separately.

# Grannis Brook and tribs ( 0904-0021)

NoKnownImpct

## Waterbody Location Information

Revised: 12/12/2008

**Water Index No:** SL- 2-22- 2  
**Hydro Unit Code:** 04150304/060      **Str Class:** C  
**Waterbody Type:** River  
**Waterbody Size:** 79.5 Miles  
**Seg Description:** entire stream and tribs

**Drain Basin:** Saint Lawrence River  
Grass River  
**Reg/County:** 6/St.Lawrence Co. (45)  
**Quad Map:** CANTON (C-20-4)

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
NO USE IMPAIRMNT		

### Type of Pollutant(s)

Known: ---  
Suspected: ---  
Possible: ---

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

Known: ---  
Suspected: ---  
Possible: ---

## Resolution/Management Information

**Issue Resolvability:** 8 (No Known Use Impairment)  
**Verification Status:** (Not Applicable for Selected RESOLVABILITY)  
**Lead Agency/Office:** n/a  
**TMDL/303d Status:** n/a

**Resolution Potential:** n/a

## Further Details

### Water Quality Sampling

A biological (macroinvertebrate) assessment of Grannis Brook at Crary Mills (at Church Road) was conducted in 2004 during the RIBS Biological Screening effort in the basin. Sampling results indicated non-impacted water quality conditions. The macroinvertebrate community contained many clean water mayflies, caddisflies, and stoneflies. The nutrient biotic index did indicate mesotrophic conditions for both phosphorus and nitrate. The sample was dominated by the facultative riffle beetle *Stenelmis crenata* which is common in slightly enriched environments. Impact source determination suggested a natural community. In spite of these minor impacts, aquatic life is considered to be fully supported in the stream. (DEC/DOW, BWAM/SBU, November 2008)

### Segment Description

This segment includes the entire stream and all tribs. The waters of the stream are Class C,C(T). Tribs to this reach/segment, including Boyden Brook (-2) and Leonard Brook (-6), are Class C,C(T),C(TS).