

# Waterbody Inventory for Black Lake/Indian River Watershed

Water Index Number	Waterbody Segment	Category
<b>Black Lake/Black Creek Watershed</b>		
SL-25- 7/P1	Black Lake Outlet/Black Lake (0906-0001)	<b>Impaired Seg</b>
SL-25- 7/P1- 1 thru 9 (sel)	Minor Tribs to Black Lake (0906-0025)	UnAssessed
SL-25- 7/P1- 2	Fish Creek and minor tribs (0906-0026)	<b>Impaired Seg</b>
SL-25- 7/P1- 2- 2	Birch Creek and tribs (0906-0027)	UnAssessed
SL-25- 7/P1- 2- 4-P3	Mud Lake (0906-0028)	UnAssessed
SL-25- 7/P1- 2-P4	Hickory Lake (0906-0029)	UnAssessed
<b>Lower Indian River Watershed, Black Lake to Rivergate</b>		
SL-25- 7/P1- 3 (portion 1)	Indian River, Lower, and minor tribs (0906-0021)	<b>NoKnownImpact</b>
SL-25- 7/P1- 3- 3	Pleasant Lake Outlet and tribs (0906-0034)	UnAssessed
SL-25- 7/P1- 3- 3-P50a	Pleasant Lake (0906-0035)	UnAssessed
SL-25- 7/P1- 3- 4-P 5	Mud Lake (0906-0036)	UnAssessed
SL-25- 7/P1- 3-11-P 8	Muskellunge Lake (0906-0037)	UnAssessed
SL-25- 7/P1- 3-17-P 9	Lake of the Woods (0906-0038)	<b>NoKnownImpact</b>
SL-25- 7/P1- 3-19-P10	Red Lake (0906-0039)	<b>Impaired Seg</b>
SL-25- 7/P1- 3-22	Black Creek and tribs (0906-0040)	UnAssessed
<b>Middle Indian River Watershed, Rivergate to Indian Lake</b>		
SL-25- 7/P1- 3 (portion 2)	Indian River, Middle, and minor tribs (0906-0005)	<b>MinorImpacts</b>
SL-25- 7/P1- 3 (portion 3)	Indian River, Middle, and minor tribs (0906-0030)	UnAssessed
SL-25- 7/P1- 3 (portion 4)	Indian River, Middle, and minor tribs (0906-0031)	UnAssessed
SL-25- 7/P1- 3-23	Otter Creek and tribs (0906-0041)	<b>Need Verific</b>
SL-25- 7/P1- 3-25	Pleasant Creek and minor tribs (0906-0042)	UnAssessed
SL-25- 7/P1- 3-25- 1	West Creek, Upper, and tribs (0906-0043)	<b>MinorImpacts</b>
SL-25- 7/P1- 3-26-P14	Saint James Lake (0906-0044)	UnAssessed
SL-25- 7/P1- 3-30	Black Creek, Lower, and tribs (0906-0045)	<b>MinorImpacts</b>
SL-25- 7/P1- 3-30	Black Creek, Upper, and tribs (0906-0046)	UnAssessed
SL-25- 7/P1- 3-42	Rockwell Creek and tribs (0906-0047)	UnAssessed
SL-25- 7/P1- 3-46-P20	Dority Pond (0906-0048)	UnAssessed
SL-25- 7/P1- 3-55	Bonaparte Creek and tribs (0906-0049)	UnAssessed
SL-25- 7/P1- 3-55-P23	Mud Lake (0906-0050)	UnAssessed
SL-25- 7/P1- 3-55-P24	Lake Bonaparte (0906-0016)	<b>MinorImpacts</b>
SL-25- 7/P1- 3-55-P24-	Tribs to Lake Bonaparte (0906-0051)	UnAssessed
SL-25- 7/P1- 3-55-P24..P30	Bullhead Pond (0906-0052)	UnAssessed
SL-25- 7/P1- 3-55-P24..P30a	Burnt Pond (0906-0053)	UnAssessed
<b>Upper Indian River/Indain Lake Watershed</b>		
SL-25- 7/P1- 3 (portion 5)/P37,P38	Narrow Lake, Indian Lake (0906-0003)	<b>Impaired Seg</b>
SL-25- 7/P1- 3 (portion 6)	Indian River, Middle, and minor tribs (0906-0032)	UnAssessed

# ...Black Lake/Indian River Watershed

Water Index Number	Waterbody Segment	Category
<b>Upper Indian River/Indain Lake Watershed (con't)</b>		
SL-25- 7/P1- 3 (portion 7)	Indian River, Upper, and tribs (0906-0033)	UnAssessed
SL-25- 7/P1- 3-58-P40,P42	Indian Pond, Crooked Pond (0906-0054)	UnAssessed
SL-25- 7/P1- 3-59-P44	Onjebonge Pond (0906-0055)	UnAssessed
SL-25- 7/P1- 3-63	Blanchard Creek and tribs (0906-0056)	UnAssessed
SL-25- 7/P1- 3-63-P47	Blanchard Pond (0906-0057)	UnAssessed
SL-25- 7/P1- 3-66-P47a,P47b	Ashcraft Pond, Beaver Pond (0906-0058)	UnAssessed
<b>Black Lake/Black Creek Watershed (northwestern shore tribs)</b>		
SL-25- 7/P1- 5	Grass Creek and tribs (0906-0059)	UnAssessed
SL-25- 7/P1- 5-P51	Grass Lake (0906-0060)	MinorImpacts
SL-25- 7/P1- 8	Black Creek and minor tribs (0906-0061)	UnAssessed
SL-25- 7/P1- 8- 4	Jewett Creek and tribs (0906-0062)	Need Verific
SL-25- 7/P1- 8- P54	Butterfield Lake (0906-0020)	MinorImpacts
SL-25- 7/P1- 8- P54-	Minor Tribs to Butterfield Lake (0906-0063)	UnAssessed
SL-25- 7/P1- 8- P54..P55	Millsite Lake (0906-0064)	NoKnownImpct
SL-25- 7/P1- 8- P54..P56	Sixberry Lake (0906-0065)	NoKnownImpct
SL-25- 7/P1- 8-P54..P57	Mud Lake (0906-0007)	UnAssessed
SL-25- 7/P1- 8-P54..P58	Crystal Lake (0906-0008)	UnAssessed
SL-25- 7/P1- 8-P54..P59	Clear Lake (0906-0006)	UnAssessed

# Black Lake Outlet/Black Lake ( 0906-0001)

Impaired Seg

## Waterbody Location Information

Revised: 12/08/2008

**Water Index No:** SL-25- 7/P1  
**Hydro Unit Code:** 04150303/080      **Str Class:** B  
**Waterbody Type:** Lake  
**Waterbody Size:** 7753.5 Acres  
**Seg Description:** entire lake and outlet

**Drain Basin:** Saint Lawrence River  
Indian River  
**Reg/County:** 6/St.Lawrence Co. (45)  
**Quad Map:** HEUVELTON (C-19-4)

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

Use(s) Impacted	Severity	Problem Documentation
PUBLIC BATHING	Impaired	Known
RECREATION	Impaired	Known
Aesthetics	Stressed	Known

### Type of Pollutant(s)

Known: ALGAL/WEED GROWTH, NUTRIENTS (phosphorus)  
Suspected: ---  
Possible: ---

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

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

## 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:** 3a->1\*      **Resolution Potential:** Medium

## Further Details

### Overview

Public bathing and recreational uses in Black Lake are impaired due to aquatic weed growth and elevated nutrient loadings from nonpoint sources in the watershed. Water Quality Sampling Black Lake has been sampled as part of the NYSDEC Citizen Statewide Lake Assessment Program (CSLAP) beginning in 1988 and continuing through 2006. An Interpretive Summary report of the findings of this sampling was published in 2007. These data indicate that the lake continues to be best characterized as eutrophic, or highly productive. However in more recent years the lake reflected improved mesoeutrophic conditions. Lake productivity generally increases as the summer progresses, driven primarily by a seasonal increase in phosphorus readings. Phosphorus levels in the lake consistently exceed the state guidance values indicating impacted/stressed recreational uses. Corresponding transparency measurements rarely meet what is the recommended minimum for swimming beaches. Measurements of pH typically fall within the state water quality range of 6.5 to 8.5, though high pH values occasionally occur. The lake water is highly colored, but this is considered to be reflective of natural conditions for this waterbody. Color does not limit water transparency, as algae and water depth are more limiting. (DEC/DOW, BWAM/CSLAP, May 2007)

### Recreational Assessment

Public perception of the lake and its uses is also evaluated as part of the CSLAP program. This assessment indicates recreational suitability of the lake continues to be unfavorable in spite of improved water clarity in recent years. The recreational suitability of the lake is described most frequently as "excellent." The lake itself is most often described as "not quite crystal clear," an assessment that is much more favorable than lakes with similar water quality characteristics. Assessments have noted that aquatic plants regularly grow to the lake surface and are typically dense. Aquatic weed harvesting effort had been used in the lake in the past but have been discontinued. The lake is reported to be a productive warmwater fishery. (DEC/DOW, BWAM/CSLAP, May 2007)

### Lake Uses

This lake waterbody is designated class B, suitable for use as a public bathing beach, general recreation and aquatic life support, but not as a water supply. Water quality monitoring by NYSDEC focuses primarily on support of general recreation and aquatic life. Samples to evaluate the bacteriological condition and bathing use of the lake or to evaluate contamination from organic compounds, metals or other inorganic pollutants have not been collected as part of the CSLAP monitoring program. Monitoring to assess potable water supply and public bathing use is generally the responsibility of state and/or local health departments.

### Section 303d Listing

Lake Lake is included on the NYS 2008 Section 303(d) List of Impaired Waters. The lake is included on Part 3a of the List as an Impaired Water for which TMDL Development May be Deferred due to the need to verify the impairment. However this updated assessment suggests that the suspected impairments are confirmed and the lake be moved to Part 1 of the List as Waterbody Requiring TMDL Development (or other strategy to attain water quality standards). This waterbody was first listed on the 1998 Section 303(d) List.

# Fish Creek and minor tribs ( 0906-0026)

Impaired Seg

## Waterbody Location Information

Revised: 01/05/2009

**Water Index No:** SL-25- 7/P1- 2  
**Hydro Unit Code:** 04150303/070      **Str Class:** C  
**Waterbody Type:** River  
**Waterbody Size:** 56.0 Miles  
**Seg Description:** entire stream and select tribs

**Drain Basin:** Saint Lawrence River  
Indian River  
**Reg/County:** 6/St.Lawrence Co. (45)  
**Quad Map:** EDWARDS (D-19-3)

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

Use(s) Impacted	Severity	Problem Documentation
AQUATIC LIFE	Impaired	Known
RECREATION	Impaired	Known

### Type of Pollutant(s)

Known: NUTRIENTS (phosphorus), Algal/Weed Growth  
Suspected: ---  
Possible: Pathogens

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

Known: ---  
Suspected: OTHER SANITARY DISCH, Agriculture  
Possible: ---

## Resolution/Management Information

**Issue Resolvability:** 1 (Needs Verification/Study (see STATUS))  
**Verification Status:** 3 (Cause Identified, Source Unknown)  
**Lead Agency/Office:** DOW/Reg6  
**TMDL/303d Status:** n/a->1\*

**Resolution Potential:** Medium

## Further Details

### Overview

Aquatic life support and recreational uses in Fish Creek are impaired by excessive nutrient loading and algal growth thought to be attributed to sewage effluent. Agricultural and other nonpoint sources may also be contributing to the impairment.

### Water Quality Sampling

A biological (macroinvertebrate) assessment of Fish Creek at Pope Mills (at Dam Road) was conducted in 2004 during the RIBS Biological Screening effort in the basin. Sampling results indicated moderately impacted water quality. Habitat upstream and at the sampling location was adequate for kick sampling, however the stream was choked with filamentous green algae. Only caddisflies and scuds were noted in the field. When processed in the laboratory the sample was found to be dominated by the tolerant crustacean *Caecidotea racovitzai*, facultative filter feeding caddisflies and non-biting midges. The nutrient biotic index indicated eutrophic conditions due to phosphorus. Impact source determination suggested a community affected by sewage effluent. (DEC/DOW, BWAM/SBU, December 2008)

#### Section 303d Listing

Fish Creek is not currently included on the NYS 2008 Section 303(d) List of Impaired Waters. However this updated assessment suggests it is appropriate to include this waterbody on the 2010 List. It is recommended that the listing reflect phosphorus as the pollutant and the listing be added to Part 1 of the List as a waterbody for which TMDL development (or other restoration measure) is required. (DEC/DOW, BWAM, WQAS, December 2008)

#### Segment Description

This segment includes the entire stream and selected/smaller tribs. The waters of the stream are Class C. Tribs to this reach/segment, including Mud Lake Outlet (-4), are also Class C. Birch Creek (-2) is listed separately.

# Indian River, Lower, and minor tribs ( 0906-0021)

NoKnownImpet

## Waterbody Location Information

Revised: 12/12/2008

**Water Index No:** SL-25- 7/P1- 3 (portion 1)      **Drain Basin:** Saint Lawrence River  
**Hydro Unit Code:** 04150303/060      **Str Class:** C      Indian River  
**Waterbody Type:** River      **Reg/County:** 6/St.Lawrence Co. (45)  
**Waterbody Size:** 114.7 Miles      **Quad Map:** HAMMOND (D-18-1)  
**Seg Description:** stream and select tribs, from mouth to Rivergate

## 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      **Resolution Potential:** n/a  
**TMDL/303d Status:** n/a

## Further Details

### Water Quality Sampling

A biological (macroinvertebrate) assessment of the Indian River at Rossie (at Mill Road) was conducted in 2004 during the RIBS Biological Screening effort in the basin. Sampling results indicated non-impacted water quality conditions. Impact source determination did indicate some influence on the community from siltation and non-point source nutrient enrichment. In spite of these minor impacts aquatic life is considered to be fully supporting in the stream. (DEC/DOW, BWAM/SBU, November 2008)

### Previous Assessments

Previously reported impacts to recreational uses (boating, etc) and aesthetics of the Indian River were related to a sewage discharge from a failed municipal WWTP serving the Village of Theresa. However the failed system was replaced by a RBC treatment system which went on line in September 1998. Other previously listed water quality concerns in the river includes agricultural activities. However, the Jefferson County SWCD reported that agriculture-related problems are not significant and as a result this source is no longer listed. Hydrologic modification was also a previous concern, but new FERC licenses, which impose minimum flow requirements at Theresa, appear to have addressed this problem. (DEC/DOW Region 6 and Bureau of Habitat, April 1998)

### Segment Description

This segment includes the portion of the stream and selected/smaller tribs from the mouth to Otter Creek (-23) in Rivergate. The waters of this portion of the stream are Class C. Tribs to this reach/segment, including Bostwick Creek (-1), Dodds Creek (-6), Muskellunge Lake Outlet (-11) and Red Lake Outlet (-19), are also Class C. Pleasant Lake Outlet (-3), Black Creek (-22) and Otter Creek (-23) are listed separately.

# Lake of the Woods ( 0906-0038)

NoKnownImpet

## Waterbody Location Information

Revised: 11/13/2008

<b>Water Index No:</b>	SL-25- 7/P1- 3-17-P 9	<b>Drain Basin:</b>	Saint Lawrence River
<b>Hydro Unit Code:</b>	04150303/060	<b>Str Class:</b>	C
<b>Waterbody Type:</b>	Lake	<b>Reg/County:</b>	6/Jefferson Co. (23)
<b>Waterbody Size:</b>	168.4 Acres	<b>Quad Map:</b>	FORESTPORT (H-20-1)
<b>Seg Description:</b>	entire lake		

## 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

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

## Further Details

### Water Quality Sampling

Lake of the Woods has been sampled as part of the NYSDEC Citizen Statewide Lake Assessment Program (CSLAP) beginning in 1994 and most recently from 1999 through 2005. An Interpretive Summary report of the findings of this sampling was published in 2006. These data indicate that the lake continues to be best characterized as oligotrophic, or highly unproductive. Indications of higher productivity in the most recent sampling year is likely within the range of natural variability. Phosphorus levels in the lake fall well below the state guidance values indicating impacted/stressed recreational uses. Corresponding transparency measurements significantly exceed what is the recommended minimum for swimming beaches. Measurements of pH typically fall within the state water quality range of 6.5 to 8.5. The lake water is weakly colored, but color does not limit water transparency. (DEC/DOW, BWAM/CSLAP, June 2006)

### Recreational Assessment

Public perception of the lake and its uses is also evaluated as part of the CSLAP program. This assessment indicates recreational suitability of the lake to be very favorable since the lake was first evaluated and continuing through the most recent assessment. The recreational suitability of the lake is described most frequently as "could not be nicer" and "excellent." The lake itself is most often described as "not quite crystal clear," an assessment that is slightly less favorable than expected given the measured water quality characteristics. Assessments have noted that aquatic plants

grow to the lake surface, but not densely. Aquatic plants are dominated by a mix of native and non-native species, including Eurasian milfoil and have been occasionally cited as impacting recreational uses. (DEC/DOW, BWAM/CSLAP, June 2006)

#### Lake Uses

This lake waterbody is designated class C, suitable for general recreation use and aquatic life support, but not as a drinking water supply or public bathing beach. Water quality monitoring by NYSDEC focuses primarily on support of general recreation and aquatic life. Samples to evaluate the bacteriological condition and bathing use of the lake or to evaluate contamination from organic compounds, metals or other inorganic pollutants have not been collected as part of the CSLAP monitoring program. Monitoring to assess potable water supply and public bathing use is generally the responsibility of state and/or local health departments.

# Red Lake ( 0906-0039)

Impaired Seg

## Waterbody Location Information

Revised: 12/08/2008

<b>Water Index No:</b>	SL-25- 7/P1- 3-19-P10	<b>Drain Basin:</b>	Saint Lawrence River
<b>Hydro Unit Code:</b>	04150303/060	<b>Str Class:</b>	C
<b>Waterbody Type:</b>	Lake	<b>Reg/County:</b>	6/Jefferson Co. (23)
<b>Waterbody Size:</b>	360.6 Acres	<b>Quad Map:</b>	MUSKELLUNGE LAKE (D-18-4)
<b>Seg Description:</b>	entire lake		

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

Use(s) Impacted	Severity	Problem Documentation
FISH CONSUMPTION	Impaired	Known

### Type of Pollutant(s)

Known: METALS (mercury)  
Suspected: ---  
Possible: ---

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

Known: ---  
Suspected: ATMOSPH. DEPOSITION  
Possible: Tox/Contam. Sediment

## Resolution/Management Information

<b>Issue Resolvability:</b>	1 (Needs Verification/Study (see STATUS))	
<b>Verification Status:</b>	4 (Source Identified, Strategy Needed)	
<b>Lead Agency/Office:</b>	ext/EPA	<b>Resolution Potential:</b> Medium
<b>TMDL/303d Status:</b>	4a (TMDL Complete, Being Implemented, Not Listed)	

## Further Details

### Overview

Fish consumption in Red Lake is impaired by health advisories that recommend restricting the consumption of fish from the lake. Mercury contamination from atmospheric deposition is the suspected source of the impairment.

### Fish Consumption

Fish consumption in Red Lake is impaired due to a NYSDOH health advisory that recommends eating no more than one meal per month of walleye because of elevated mercury levels. The source of mercury is considered to be atmospheric deposition, as there are not other apparent sources in the lake watershed. The advisory for this lake was first issued in 2005-06. (2006-07 NYSDOH Health Advisories and DEC/DFWMR, Habitat, January 2008).

### Total Maximum Daily Load

In 2007, The New England Interstate Water Pollution Control Commission (NEIWPC), on behalf of its member states including New York, submitted and USEPA approved a TMDL to address mercury deposition in lakes throughout the Northeastern United States, including Red Lake. The Northeast Regional Mercury TMDL notes that between 1998 and 2002 the Northeast states reduced in-region deposition of mercury by more than 70 percent. In addition these state have enforceable controls in place to meet the remaining reduction goals. Despite these reductions water quality impairment

due to mercury still exists and elevated mercury levels in certain fish species remain great concern. The TMDL shows the demonstrates that the need for significant reductions in the mercury reaching waters of the Northeast from sources outside the region by way of atmospheric deposition is essential to restoring these waters. (Northeast Regional Mercury TMDL, NEIWPC, 2007)

#### Section 303(d) Listing

Red Lake was included on the NYS 2006 Section 303(d) List of Impaired Waters, but is not included on the 2008 List. The lake was delisted in 2008 due to the completion of the Northeast Regional Mercury TMDL which was approved in 2007. (DEC/DOW, BWAM, December 2008)

# Indian River, Middle, and minor tribs ( 0906-0005)

# MinorImpacts

## Waterbody Location Information

Revised: 01/05/2009

**Water Index No:** SL-25- 7/P1- 3 (portion 2)      **Drain Basin:** Saint Lawrence River  
**Hydro Unit Code:** 04150303/040      **Str Class:** C      Indian River  
**Waterbody Type:** River      **Reg/County:** 6/Jefferson Co. (23)  
**Waterbody Size:** 129.1 Miles      **Quad Map:** PHILADELPHIA (E-18-1)  
**Seg Description:** stream and select tribs, from Rivergate to Antwerp

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

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

### Type of Pollutant(s)

Known: NUTRIENTS (phosphorus)  
Suspected: Silt/Sediment  
Possible: - - -

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

Known: Construction  
Suspected: AGRICULTURE, URBAN/STORM RUNOFF (Fort Drum Military Reserv), Streambank Erosion  
Possible: - - -

## Resolution/Management Information

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

## Further Details

### Overview

Aquatic life support in this reach of Indian River are known to experience minor impacts due to excessive nutrient loading thought to be from agricultural and other nonpoint sources. Silt and sediment loads may also contribute to impacts. Activities at nearby Fort Drum Military Reservation may be have impacts on the stream.

### Water Quality Sampling

A biological (macroinvertebrate) assessment of the Indian River at Hall Corners (at Elm Ridge Road) was conducted in 2004 during the RIBS Biological Screening effort in the basin. Sampling results indicated slightly impacted water quality conditions. The macroinvertebrate community was dominated by filter feeding caddisflies including *Hydropsyche sparna*, *H. bronta*, *Macrostemum carolina*, and *Chimarra obscurra*. The nutrient biotic index suggested eutrophic conditions due to phosphorus. Impact source determination and nutrient biotic index indicated non-point source nutrient enrichment at the site. In spite of these minor impacts, aquatic life is considered to be fully supported in the stream. (DEC/DOW, BWAM/SBU, December 2008)

### Segment Description

This segment includes the portion of the stream and selected/smaller tribs from Otter Creek (-23) in Rivergate to Old

Route 26 bridge in Antwerp. The waters of this portion of the stream are Class C. Tribs to this reach/segment, including Trout Creek (-26) and Hunter Creek (-32), are also Class C,C(T) and D. Otter Creek (-23), Pleasant Creek (-25) and Black Creek (-30) are listed separately.

# Otter Creek and tribs ( 0906-0041)

Need Verific

## Waterbody Location Information

Revised: 01/16/2009

**Water Index No:** SL-25- 7/P1- 3-23  
**Hydro Unit Code:** 04150303/050      **Str Class:** C  
**Waterbody Type:** River  
**Waterbody Size:** 82.1 Miles  
**Seg Description:** entire stream and tribs

**Drain Basin:** Saint Lawrence River  
Indian River  
**Reg/County:** 6/Jefferson Co. (23)  
**Quad Map:** THERESA (E-17-2)

## 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: OTHER POLLUTANTS

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

Known: ---  
Suspected: ---  
Possible: UNKNOWN SOURCE

## Resolution/Management Information

**Issue Resolvability:** 1 (Needs Verification/Study (see STATUS))  
**Verification Status:** 1 (Waterbody Nominated, Problem Not Verified)  
**Lead Agency/Office:** DOW/BWAM  
**TMDL/303d Status:** n/a

**Resolution Potential:** Medium

## Further Details

### Overview

Aquatic life support in Otter Creek may experience impacts. Sampling is inconclusive and possible sources of impact have not been identified.

### Water Quality Sampling

A biological (macroinvertebrate) assessment of Otter Creek at Theresa (at Elm Ridge Rd.) was conducted in 2004 during the RIBS Biological Screening effort in the basin. The sample was collected using a net jab due to soft bottom sediments and absence of riffle habitat. Sampling results indicated slightly impacted water quality conditions. The slight impact at this station is likely the result of poor habitat as indicated on the field sheet. Several invertebrate taxa indicative of slow moving surface waters were present including dragonflies and damselflies. However, due to the less than suitable sampling habitat, additional sampling to verify conditions are recommended. (DEC/DOW, BWAM/SBU, December 2008)

### Segment Description

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.

# West Creek, Upper, and tribs ( 0906-0043)

# MinorImpacts

## Waterbody Location Information

Revised: 03/18/2009

**Water Index No:** SL-25- 7/P1- 3-25- 1  
**Hydro Unit Code:** 04150303/040      **Str Class:** A(T)  
**Waterbody Type:** River  
**Waterbody Size:** 14.2 Miles  
**Seg Description:** stream and tribs, above Evans Mills

**Drain Basin:** Saint Lawrence River  
Indian River  
**Reg/County:** 6/Jefferson Co. (23)  
**Quad Map:** BLACK RIVER (E-17-3)

## 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, Construction (Fort Dumm expansion)  
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 West Creek is thought to experience minor impacts due to nutrient loadings from agricultural and other nonpoint sources. Other sources of threat to water quality include construction and other extensive development of the watershed in support of the Fort Drum military base expansion.

### Water Quality Sampling

A biological (macroinvertebrate) assessment of West Creek at Evans Mills (at Noble Road) was conducted in 2004 during the RIBS Biological Screening effort in the basin. Sampling results indicated slightly impacted water quality conditions. The macroinvertebrate fauna was dominated by both facultative and tolerant organisms including scuds of the genus *Gammarus sp.*. In spite of these minor impacts, aquatic life is considered to be fully supported in the stream. (DEC/DOW, BWAM/SBU, December 2008)

### Source Assessment

The nearby Fort Drum military base has undergone considerable expansion over the past number of years. Residential and other development to support the increasing number of military families at the base is occurring in the watershed, and along the route 11 corridor. This corridor lies along this stream and the impact of construction and other

development activities are likely to impact water quality in the creek. (DEC/DOW, Region 6, March 2009)

#### Segment Description

This segment includes the portion of the stream and all tribs above the Route 11 bridge above Evans Mills. The waters of the stream are Class A(T). Tribs to this reach/segment are also Class C.

# Black Creek, Lower, and tribs ( 0906-0045)

MinorImpacts

## Waterbody Location Information

Revised: 02/13/2009

**Water Index No:** SL-25- 7/P1- 3-30  
**Hydro Unit Code:** 04150303/030      **Str Class:** C  
**Waterbody Type:** River  
**Waterbody Size:** 38.8 Miles  
**Seg Description:** stream and tribs, from mouth to Reedville

**Drain Basin:** Saint Lawrence River  
Indian River  
**Reg/County:** 6/Jefferson Co. (23)  
**Quad Map:** PHILADELPHIA (E-18-1)

## 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      **Resolution Potential:** Medium  
**TMDL/303d Status:** n/a

## Further Details

### Overview

Aquatic life support in this portion of Black Creek 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 Black Creek in Philadelphia, Jefferson County, (at Garden of Eden 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 non- to slightly impacted water quality conditions. Mayflies and stoneflies were not observed in the sample in the field. However an impoundment was located immediately upstream of this site and may have affected sampling results. This sample was dominated by the facultative midge larvae *Polypedilum flavum*. The nutrient biotic index indicated eutrophic conditions due to phosphorus at both sites. Water column sampling revealed water temperature to be a parameter of concern. Macroinvertebrates collected at this site and chemically analyzed for selected metals, PAHs, PCBs, and organochlorine pesticides show an elevated level of chromium. The source of chromium is likely to be anthropogenic, but it has not been identified. Screening for acute toxicity indicated no sediment or porewater toxicity to be present, and chronic toxicity

testing using water from this location showed no significant mortality or reproductive effects on the test organism. 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, temperature, chromium), aquatic life is considered to be fully supported in the stream. (DEC/DOW, BWAM/RIBS, January 2009)

A biological (macroinvertebrate) assessment of the Black River, at Philadelphia (at Belile Road) was also conducted in 2004 during the RIBS Biological Screening effort in the basin. The sample revealed many clean water mayflies, caddisflies and stoneflies. (DEC/DOW, BWAM/SBU, December 2008)

#### Segment Description

This segment includes the portion of the stream and all tribs from the mouth to West Branch (-6) in Reedville. The waters of this portion of the stream are Class C,C(T). Tribs to this reach/segment are primarily Class C. Upper Black Creek including West Branch is listed separately.

# Lake Bonaparte (0906-0016)

# Minor Impacts

## Waterbody Location Information

Revised: 11/21/2008

**Water Index No:** SL-25- 7/P1- 3-55-P24  
**Hydro Unit Code:** 04150303/010      **Str Class:** B  
**Waterbody Type:** Lake  
**Waterbody Size:** 1274.7 Acres  
**Seg Description:** entire lake

**Drain Basin:** Saint Lawrence River  
Indian River  
**Reg/County:** 6/Lewis Co. (25)  
**Quad Map:** LAKE BONAPARTE (E-19-1)

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

Use(s) Impacted	Severity	Problem Documentation
Public Bathing	Stressed	Suspected
Recreation	Stressed	Suspected
Habitat/Hydrology	Stressed	Suspected

### Type of Pollutant(s)

Known: ALGAL/WEED GROWTH (Eurasian milfoil)  
Suspected: ---  
Possible: ---

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

Known: ---  
Suspected: HABITAT MODIFICATION (invasive plants)  
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

Recreational uses (swimming, boating, etc) in Lake Bonaparte are thought to experience minor impacts/threats due to excessive aquatic weed growth. Invasive aquatic plants (Eurasian milfoil) have been identified in the lake.

### Water Quality Sampling

Lake Bonaparte has been sampled as part of the NYSDEC Citizen Statewide Lake Assessment Program (CSLAP) beginning in 1986 and continuing through 2001. An Interpretive Summary report of the findings of this sampling was published in 2002. These data indicate that the lake continues to be best characterized as oligotrophic, or highly unproductive. This level of productivity is somewhat lower than was found in previous year sampling. Phosphorus levels in the lake fall well below the state guidance values indicating impacted/stressed recreational uses. Corresponding transparency measurements meet what is the recommended minimum for swimming beaches. Measurements of pH typically fall within the state water quality range of 6.5 to 8.5, with occasionally high pH readings. The lake water is weakly colored and color does not limit water transparency. (DEC/DOW, BWAM/CSLAP, September 2002)

### Recreational Assessment

Public perception of the lake and its uses is also evaluated as part of the CSLAP program. This assessment indicates recreational suitability of the lake to be somewhat favorable, but less so in more recent years. The recreational suitability of the lake is described most frequently as "excellent," though more recently descriptions of "slightly" impacted appear. The lake itself is most often described as "not quite crystal clear," an assessment that is slightly less favorable than expected given measured water quality characteristics. Assessments have noted that aquatic plants grow to the lake surface and at times at dense. In fact "excessive weed growth" is the most frequently cited reason for recreational impacts. It is suspected that the aquatic plant community, and impacts associated with invasive plant growth, is dominated by Eurasian watermilfoil. (DEC/DOW, BWAM/CSLAP, September 2002)

### Lake Uses

This lake waterbody is designated class B, suitable for use as a public bathing beach, general recreation and aquatic life support, but not as a public water supply. Water quality monitoring by NYSDEC focuses primarily on support of general recreation and aquatic life. Samples to evaluate the bacteriological condition and bathing use of the lake or to evaluate contamination from organic compounds, metals or other inorganic pollutants have not been collected as part of the CSLAP monitoring program. Monitoring to assess potable water supply and public bathing use is generally the responsibility of state and/or local health departments.

# Narrow Lake, Indian Lake ( 0906-0003)

Impaired Seg

## Waterbody Location Information

Revised: 12/08/2008

**Water Index No:** SL-25- 7/P1- 3 (portion 5)/P37,P38  
**Hydro Unit Code:** 04150303/010      **Str Class:** C  
**Waterbody Type:** Lake  
**Waterbody Size:** 372.9 Acres  
**Seg Description:** total area of both lakes

**Drain Basin:** Saint Lawrence River  
Indian River  
**Reg/County:** 6/Lewis Co. (25)  
**Quad Map:** LAKE BONAPARTE (E-19-1)

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

Use(s) Impacted	Severity	Problem Documentation
FISH CONSUMPTION	Impaired	Known

### Type of Pollutant(s)

Known: METALS (mercury)  
Suspected: ---  
Possible: ---

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

Known: ---  
Suspected: ATMOSPHERIC DEPOSITION  
Possible: Industrial (Fort Drum), Tox/Contam. Sediment

## Resolution/Management Information

**Issue Resolvability:** 1 (Needs Verification/Study (see STATUS))  
**Verification Status:** 4 (Source Identified, Strategy Needed)  
**Lead Agency/Office:** ext/EPA  
**TMDL/303d Status:** 4a (TMDL Complete, Being Implemented, Not Listed)

**Resolution Potential:** Medium

## Further Details

### Overview

Fish consumption in Indian Lake is impaired by health advisories that recommend restricting the consumption of fish from the lake. Mercury contamination from atmospheric deposition is the suspected source of the impairment. Activities on the Fort Drum Military Reservation (where the lake is located) are an additional possible source.

### Fish Consumption

Fish consumption in Indian Lake is impaired due to a NYSDOH health advisory that recommends eating no more than one meal per month of all species of fish because of elevated mercury levels. The source of mercury is considered to be atmospheric deposition, as there are not other apparent sources in the lake watershed. The advisory for this lake was first issued prior to 1998-99. (2006-07 NYSDOH Health Advisories and DEC/DFWMR, Habitat, January 2008).

### Total Maximum Daily Load

In 2007, The New England Interstate Water Pollution Control Commission (NEIWPPC), on behalf of its member states including New York, submitted and USEPA approved a TMDL to address mercury deposition in lakes throughout the Northeastern United States, including Indian Lake. The Northeast Regional Mercury TMDL notes that between 1998 and 2002 the Northeast states reduced in-region deposition of mercury by more than 70 percent. In addition these state

have enforceable controls in place to meet the remaining reduction goals. Despite these reductions water quality impairment due to mercury still exists and elevated mercury levels in certain fish species remain great concern. The TMDL shows the demonstrates that the need for significant reductions in the mercury reaching waters of the Northeast from sources outside the region by way of atmospheric deposition is essential to restoring these waters. (Northeast Regional Mercury TMDL, NEIWPCC, 2007)

#### Section 303(d) Listing

Indian Lake was included on the NYS 2006 Section 303(d) List of Impaired Waters, but is not included on the 2008 List. The lake was delisted in 2008 due to the completion of the Northeast Regional Mercury TMDL which was approved in 2007. (DEC/DOW, BWAM, December 2008)

# Grass Lake ( 0906-0060)

# MinorImpacts

## Waterbody Location Information

Revised: 11/13/2008

**Water Index No:** SL-25- 7/P1- 5-P51  
**Hydro Unit Code:** 04150303/080      **Str Class:** C  
**Waterbody Type:** Lake  
**Waterbody Size:** 18.4 Acres  
**Seg Description:** entire lake  
**Drain Basin:** Saint Lawrence River  
Indian River  
**Reg/County:** 6/Jefferson Co. (23)  
**Quad Map:** MUSKELLUNGE LAKE (D-18-4)

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

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

### Type of Pollutant(s)

Known: ---  
Suspected: NUTRIENTS (phosphorus)  
Possible: D.O./Oxygen Demand

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

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

## Resolution/Management Information

**Issue Resolvability:** 1 (Needs Verification/Study (see STATUS))  
**Verification Status:** 3 (Cause Identified, Source Unknown)  
**Lead Agency/Office:** ext/WQCC      **Resolution Potential:** Medium  
**TMDL/303d Status:** n/a

## Further Details

### Overview

Aquatic life support and recreational uses in Grass Lake are thought to experience minor impacts due to nutrient loadings from nonpoint sources in the watershed.

### Water Quality Sampling

Grass Lake has been sampled as part of the NYSDEC Citizen Statewide Lake Assessment Program (CSLAP) beginning in 2004 and continuing through the present. An Interpretive Summary report of the findings of this sampling was published in 2008. These data indicate that the lake continues to be best characterized as mesotrophic, or moderately productive. This level of productivity is typical of lakes with intermediate water transparency, nutrient (primarily phosphorus) levels, and moderate susceptibility to algal blooms. Water quality conditions in the lake have been fairly stable over the last four years. Phosphorus levels in the lake occasionally exceed the state guidance values indicating impacted/stressed recreational uses. Corresponding transparency measurements typically exceed what is recommended minimum for swimming beaches. Measurements of pH typically fall within the state water quality range of 6.5 to 8.5, but with occasional values falling both above and below this range. The lake water is weakly colored, but color does not limit water transparency. (DEC/DOW, BWAM/CSLAP, February 2008)

### Recreational Assessment

Public perception of the lake and its uses is also evaluated as part of the CSLAP program. This assessment indicates recreational suitability of the lake to be very favorable in recent years. The recreational suitability of the lake is described most frequently as "excellent." The lake itself is most often described as "not quite crystal clear" or "having a definite algal greenness," an assessment that is somewhat less favorable than expected given the water quality measurements. Assessments have noted that aquatic plants typically grow to the lake surface, but not densely, and "excessive weed growth" and "poor water clarity" are only occasionally identified as impacting recreational uses of the lake. (DEC/DOW, BWAM/CSLAP, February 2008)

### Lake Uses

This lake waterbody is designated class C, suitable for general recreation and aquatic life support, but not as a drinking water supply or public bathing. Water quality monitoring by NYSDEC focuses primarily on support of general recreation and aquatic life. Samples to evaluate the bacteriological condition and bathing use of the lake or to evaluate contamination from organic compounds, metals or other inorganic pollutants have not been collected as part of the CSLAP monitoring program. Monitoring to assess potable water supply and public bathing use is generally the responsibility of state and/or local health departments.

# Jewett Creek and tribs ( 0906-0062)

**Need Verific**

## Waterbody Location Information

Revised: 01/16/2009

<b>Water Index No:</b>	SL-25- 7/P1- 8- 4	<b>Drain Basin:</b>	Saint Lawrence River
<b>Hydro Unit Code:</b>	04150303/080	<b>Str Class:</b>	C
<b>Waterbody Type:</b>	River	<b>Reg/County:</b>	6/Jefferson Co. (23)
<b>Waterbody Size:</b>	41.0 Miles	<b>Quad Map:</b>	HAMMOND (D-18-1)
<b>Seg Description:</b>	entire stream and tribs		

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

<b>Use(s) Impacted</b>	<b>Severity</b>	<b>Problem Documentation</b>
Aquatic Life	Stressed	Possible

### Type of Pollutant(s)

Known: ---  
Suspected: ---  
Possible: OTHER POLLUTANTS

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

Known: ---  
Suspected: ---  
Possible: UNKNOWN SOURCE

## Resolution/Management Information

<b>Issue Resolvability:</b>	1 (Needs Verification/Study (see STATUS))	
<b>Verification Status:</b>	1 (Waterbody Nominated, Problem Not Verified)	
<b>Lead Agency/Office:</b>	DOW/BWAM	<b>Resolution Potential:</b> Medium
<b>TMDL/303d Status:</b>	n/a	

## Further Details

### Overview

Aquatic life support in Jewett Creek may experience impacts. Sampling is inconclusive and possible sources of impact have not been identified.

### Water Quality Sampling

A biological (macroinvertebrate) assessment of Jewett Creek, north of Redwood (at Stone Rd.) was conducted in 2004 during the RIBS Biological Screening effort in the basin. The sample was collected using a net jab due to soft bottom sediments and absence of riffle habitat. Sampling results indicated poor water quality conditions. The sample was dominated by pollution tolerant crustaceans and midges. However, due to the less than suitable sampling habitat, additional sampling to verify conditions are recommended. (DEC/DOW, BWAM/SBU, December 2008)

### Segment Description

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.

# Butterfield Lake ( 0906-0020)

# MinorImpacts

## Waterbody Location Information

Revised: 11/13/2008

<b>Water Index No:</b>	SL-25- 7/P1- 8- P54	<b>Drain Basin:</b>	Saint Lawrence River
<b>Hydro Unit Code:</b>	04150303/080	<b>Str Class:</b>	B
<b>Waterbody Type:</b>	Lake	<b>Reg/County:</b>	6/Jefferson Co. (23)
<b>Waterbody Size:</b>	969.6 Acres	<b>Quad Map:</b>	REDWOOD (D-17-3)
<b>Seg Description:</b>	entire lake		

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

Use(s) Impacted	Severity	Problem Documentation
Public Bathing	Stressed	Suspected
Recreation	Stressed	Suspected
Habitat/Hydrology	Stressed	Known

### Type of Pollutant(s)

Known: ALGAL/WEED GROWTH  
 Suspected: NUTRIENTS (phosphorus)  
 Possible: - - -

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

Known: HABITAT MODIFICATION  
 Suspected: On-Site/Septic Syst  
 Possible: Agriculture

## Resolution/Management Information

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

## Further Details

### Overview

Public Bathing and other recreational uses in Butterfield Lake are known to experience minor impacts due to excessive aquatic weed and algal growth, including rooted invasive plants (Eurasian milfoil). Excessive nutrient loading may also be contributing to the plant growth.

### Water Quality Sampling

Butterfield Lake has been sampled as part of the NYSDEC Citizen Statewide Lake Assessment Program (CSLAP) beginning in 1986 and continuing through the present. An Interpretive Summary report of the findings of this sampling was published in 2007. These data indicate that the lake continues to be best characterized as mesotrophic, or somewhat productive. The lake was more productive in 2006, although the drop in water transparency may have also been attributable to the higher water color readings in 2006. Phosphorus levels in the lake occasionally exceed the state guidance values indicating impacted/stressed recreational uses. However, corresponding transparency measurements consistently meet and exceed what is the recommended minimum for swimming beaches. Measurements of pH typically fall within the state water quality range of 6.5 to 8.5. The lake water is moderately colored and reflect the natural soil

and vegetation characteristics of the watershed. Color does not typically limit water transparency, although in the most recent sampling year (2006) color may have had impact of lake transparency. (DEC/DOW, BWAM/CSLAP, March 2007)

#### Recreational Assessment

Public perception of the lake and its uses is also evaluated as part of the CSLAP program. This assessment indicates recreational suitability of the lake to be highly variable, dependent upon water quality and aquatic plant densities. The recreational suitability of the lake is described along a range of "excellent" to "slightly impacted." The description of the lake itself varies from "not quite crystal clear" to having "definite algal greenness" throughout the summer. The measured water quality characteristics are consistent with some level of slight impacts. Aquatic plants occasionally grow to the lake surface, and are probably controlled by Eurasian watermilfoil. Recreational assessments at Butterfield Lake appear to be sensitive to changes in both water quality and aquatic plant coverage, while water quality assessments are closely aligned to water clarity readings. These assessments were slightly less favorable later in the summer, consistent with the seasonal increase in lake (algae) productivity and weed growth. (DEC/DOW, BWAM/CSLAP, May 2006)

#### Lake Uses

This lake waterbody is designated class B, suitable for use as a public bathing beach, general recreation and aquatic life support, but not as a water supply. Water quality monitoring by NYSDEC focuses primarily on support of general recreation and aquatic life. Samples to evaluate the bacteriological condition and bathing use of the lake or to evaluate contamination from organic compounds, metals or other inorganic pollutants have not been collected as part of the CSLAP monitoring program. Monitoring to assess potable water supply and public bathing use is generally the responsibility of state and/or local health departments.

#### Previous Assessment

Rooted aquatic vegetation (Eurasian milfoil) and algae is generally limited to shallow portions of the lake. Regional DOW staff reports the growth is not evident over entire shoreline. Nonetheless, the spread and control of milfoil is of considerable concern to local residents/lake association. There is also local concern that failing and/or inadequate on-site septic system serving residences along the shore may be contributing excess nutrients to the lake. The Jefferson County WQCC has maintained a monitoring site for conventional pollutants on the lake. The WQCC was considering the development and implementation of a Lake Management Plan. (Jefferson Co. WQCC, April 1998)

# Millsite Lake ( 0906-0064)

**Threatened**

## Waterbody Location Information

Revised: 03/18/2009

<b>Water Index No:</b>	SL-25- 7/P1- 8- P54..P55	<b>Drain Basin:</b>	Saint Lawrence River
<b>Hydro Unit Code:</b>	04150303/080	<b>Str Class:</b>	B
<b>Waterbody Type:</b>	Lake	<b>Reg/County:</b>	6/Jefferson Co. (23)
<b>Waterbody Size:</b>	473.9 Acres	<b>Quad Map:</b>	REDWOOD (D-17-3)
<b>Seg Description:</b>	entire lake		

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

Use(s) Impacted	Severity	Problem Documentation
Recreation	Threatened	Known
Habitat/Hydrology	Threatened	Known

### Type of Pollutant(s)

Known: ALGAL/WEED GROWTH, PROBLEM SPECIES (Eurasian milfoil)  
Suspected: ---  
Possible: ---

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

Known: HABITAT MODIFICATION  
Suspected: ---  
Possible: ---

## Resolution/Management Information

<b>Issue Resolvability:</b>	2 (Strategy Exists, Needs Funding/Resources)	
<b>Verification Status:</b>	5 (Management Strategy has been Developed)	
<b>Lead Agency/Office:</b>	ext/WQCC	<b>Resolution Potential:</b> Medium
<b>TMDL/303d Status:</b>	n/a	

## Further Details

### Overview

Recreational uses and habitat of Millsite Lake are know to experience threats from invasive plants. Eurasian watermilfoil has been documented on the lake and control strategies (heerbicide treatments and weed harvesting) have been implemented by lake residents in the past.

### Water Quality Sampling

Millsite Lake has been sampled as part of the NYSDEC Citizen Statewide Lake Assessment Program (CSLAP) beginning in 1997 and continuing through 2006. An Interpretive Summary report of the findings of this sampling was published in 2007. These data indicate that the lake continues to be best characterized as oligotrophic, or highly unproductive. Phosphorus levels in the lake typically fall well below the state guidance values indicating impacted/stressed recreational uses. Corresponding transparency measurements easily meet what is the recommended minimum for swimming beaches. Measurements of pH typically fall within the state water quality range of 6.5 to 8.5. The lake water is weakly colored, but color does not limit water transparency. (DEC/DOW, BWAM/CSLAP, June 2007)

### Recreational Assessment

Public perception of the lake and its uses is also evaluated as part of the CSLAP program. This assessment indicates recreational suitability of the lake to be highly favorable since the lake was first evaluated and continuing through the most recent assessment. The recreational suitability of the lake is described most frequently as "could not be nicer" for most uses. The lake itself is most often described as "crystal clear," an assessment that is consistent with measured water quality characteristics. Assessments have noted that aquatic plants rarely grow to the lake surface, although Eurasian milfoil has some impacts on portions of the lake. (DEC/DOW, BWAM/CSLAP, June 2007)

### Lake Uses

This lake waterbody is designated class B, suitable for use as a public bathing beach, general recreation and aquatic life support, but not as a water supply. Water quality monitoring by NYSDEC focuses primarily on support of general recreation and aquatic life. Samples to evaluate the bacteriological condition and bathing use of the lake or to evaluate contamination from organic compounds, metals or other inorganic pollutants have not been collected as part of the CSLAP monitoring program. Monitoring to assess potable water supply and public bathing use is generally the responsibility of state and/or local health departments.

# Sixberry Lake ( 0906-0065)

NoKnownImpct

## Waterbody Location Information

Revised: 11/13/2008

<b>Water Index No:</b>	SL-25- 7/P1- 8- P54..P56	<b>Drain Basin:</b>	Saint Lawrence River
<b>Hydro Unit Code:</b>	04150303/080	<b>Str Class:</b>	B
<b>Waterbody Type:</b>	Lake	<b>Reg/County:</b>	6/Jefferson Co. (23)
<b>Waterbody Size:</b>	123.8 Acres	<b>Quad Map:</b>	REDWOOD (D-17-3)
<b>Seg Description:</b>	entire lake		

## 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

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

## Further Details

### Water Quality Sampling

Sixberry Lake has been sampled as part of the NYSDEC Citizen Statewide Lake Assessment Program (CSLAP) beginning in 2001 and continuing through 2004. An Interpretive Summary report of the findings of this sampling was published in 2005. These data indicate that the lake continues to be best characterized as oligotrophic, or highly unproductive. Phosphorus levels in the lake fall well below the state guidance value indicating impacted/stressed recreational uses. Corresponding transparency measurements significantly exceed what is the recommended minimum for swimming beaches. Measurements of pH typically fall within the state water quality range of 6.5 to 8.5. The lake water is weakly colored, but color does not limit water transparency. (DEC/DOW, BWAM/CSLAP, September 2005)

### Recreational Assessment

Public perception of the lake and its uses is also evaluated as part of the CSLAP program. This assessment indicates recreational suitability of the lake to be very favorable since the lake was first evaluated and continuing through the most recent assessment. The recreational suitability of the lake is described most frequently as "could not be nicer" and "excellent." The lake itself is most often described as "not quite crystal clear," an assessment that is slightly less favorable than expected given measured water quality characteristics. Assessments have noted that aquatic plants rarely grow to the lake surface and are not cited as having an impact on uses. Aquatic plants are assumed to be dominated by

native species however a plant survey has not been conducted on the lake. (DEC/DOW, BWAM/CSLAP, September 2005)

#### Lake Uses

This lake waterbody is designated class B, suitable for use as a public bathing beach, general recreation and aquatic life support, but not as a drinking water supply. Water quality monitoring by NYSDEC focuses primarily on support of general recreation and aquatic life. Samples to evaluate the bacteriological condition and bathing use of the lake or to evaluate contamination from organic compounds, metals or other inorganic pollutants have not been collected as part of the CSLAP monitoring program. Monitoring to assess potable water supply and public bathing use is generally the responsibility of state and/or local health departments.