



## Lower Beaver River Watershed (0415010111)

Water Index Number	Waterbody Segment	Category
Ont 19- 40 (portion 1)	Beaver River, Lower, and tribs (0801-0197)	Impaired Seg
Ont 19- 40 (portion 2)	Beaver River, Lower, and minor tribs (0801-0273)	Need Verific
Ont 19- 40 (portion 3)/P418	High Falls Pond (0801-0274)	Impaired Seg
Ont 19- 40 (portion 4)	Beaver River, Middle, and tribs (0801-0275)	UnAssessed
Ont 19- 40 (portion 4a)	Taylorville, Elmer Falls Ponds (0801-0276)	Impaired Seg
Ont 19- 40 (portion 5)/P426	Effley Falls Reservoir (0801-0172)	Impaired Seg
Ont 19- 40 (portion 6)	Beaver River, Middle, and tribs (0801-0277)	NoKnownImpct
Ont 19- 40 (portion 7)/P431,434	Soft Maple Pond, Soft Maple Reservoir (0801-0173)	Impaired Seg
Ont 19- 40 (portion 8)	Beaver River, Middle, and tribs (0801-0278)	UnAssessed
Ont 19- 40 (portion 9)/P449	Beaver Lake, Beaver Meadow Pond (0801-0174)	Impaired Seg
Ont 19- 40 (portion 10)	Beaver River, Upper, and tribs (0801-0210)	MinorImpacts
Ont 19- 40 (portion 11)/P478	Moshier Reservoir (0801-0194)	Impaired Seg
Ont 19- 40- 3	Black Creek and tribs (0801-0171)	NoKnownImpct
Ont 19- 40- 7	Murmur Creek and tribs (0801-0219)	NoKnownImpct
Ont 19- 40- 7- 3	Sandy Creek, Upper, and tribs (0801-0283)	UnAssessed
Ont 19- 40- 7-P416,P417	Lower, Upper West Pond (0801-0284)	Impaired Seg
Ont 19- 40-10	Balsam Creek and tribs (0801-0239)	NoKnownImpct
Ont 19- 40-10-P419,P420	Goose Pond, Meister Pond (0801-0286)	Impaired Seg
Ont 19- 40-12-P429	Snider Pond (0801-0287)	UnAssessed
Ont 19- 40-15- 4-P436	Sand Pond (0801-0055)	Impaired Seg
Ont 19- 40-18- 3-P441,442	Crooked Lake, McCabe Pond (0801-0144)	Impaired Seg
Ont 19- 40-18..P443 thru P448	Pepperbox Pond, Spring Ponds, Tied Lake (0801-0076)	Impaired Seg
Ont 19- 40-18a/P449..P451	Francis Lake (0801-0192)	Impaired Seg
Ont 19- 40-19-P456 thru P459	Minor Lakes Trib to Three Mile Cr Wshed (0801-0453)	Impaired Seg
Ont 19- 40-20-P473, P474	Sunday Lake, Sunday Creek Reservoir (0801-0195)	Impaired Seg
Ont 19- 40-22-P479 thru P492 (sel)	Minor Lakes Trib to Moshier Creek (0801-0039)	Impaired Seg
Ont 19- 40-22-P489	Lower Moshier Pond (0801-0049)	Impaired Seg

# Beaver River, Lower, and tribs (0801-0197)

Impaired Seg

## Waterbody Location Information

Revised: 04/16/2007

**Water Index No:** Ont 19- 40 (portion 1)      **Drain Basin:** Black River  
**Hydro Unit Code:** 04150101/150      **Str Class:** C      Black River  
**Waterbody Type:** River      **Reg/County:** 6/Lewis Co. (25)  
**Waterbody Size:** 56.5 Miles      **Quad Map:** CARTHAGE (F-18-2)  
**Seg Description:** stream and tribs, from mouth to Beaver Falls

## 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
AESTHETICS	Impaired	Known

### Type of Pollutant(s)

Known: AESTHETICS (odors, floatables)  
Suspected: D.O./OXYGEN DEMAND, PATHOGENS, Nutrients (Phosphorus)  
Possible: - - -

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

Known: FAILING ON-SITE SYST  
Suspected: Industrial (paper mills)  
Possible: - - -

## Resolution/Management Information

**Issue Resolvability:** 3 (Strategy Being Implemented)  
**Verification Status:** 5 (Management Strategy has been Developed)  
**Lead Agency/Office:** DOW/Reg6      **Resolution Potential:** High  
**TMDL/303d Status:** 1\*

## Further Details

Aquatic life support, recreational uses and aesthetics in this portion of the Beaver River in the vicinity of are impaired by the discharge of raw sewage and septic tank effluent from area residences. Nutrient enrichment from nonpoint sources may also be contributing to the loadings in the stream as well.

Raw sewage and septic tank effluent from approximately 55 homes in the hamlet of Beaver Falls are discharged directly to the river. The discharge of raw sewage from numerous pipes to the river is evident; some are part of a private sewer collection system and others are direct discharges of either sewage or grey water. Homeowners and passers-by report odors and sewage in the more sluggish areas of the Beaver River. The discharges affect recreation, and most likely the support of the fishery. A sewage collection system to serve the homes that are currently discharging to the river in the Town of Croghan is currently construction. The new system is expected to begin operating in June of 2007. (DEC/DOW, Region 6, March 2007)

Two paper mills, Omniafiltra (formerly Fiber Mark) and Interface Solutions (formerly Armstrong Paper), have separate wastewater treatment systems that also discharge to the Beaver River. These facilities discharge to the river below the

lower dam at Beaver Falls. Interface has recently upgraded their system to address BOD non-compliance issues and OmniaFiltru, which began operations in 2004 had sludge removed from their lagoon treatment system prior to startup. Both mills have phenolics and zinc limitations on their discharge permits. WSM Empire State, a cogeneration plant also discharges approximately 50 MGD of non-contact cooling water (permit temperature limit of 90 DegF) to the Beaver River in the Beaver Falls area. An additional discharge, Beaverite Products, has shutdown its manufacturing operation in Beaver Falls and now only discharges treated sanitary wastewater from its office building. (DEC/DOW Region 6, October 2004)

A biological (macroinvertebrate) assessment of the Beaver River in Naumburg (at Van Amber Road) was conducted in 2002. Sampling results indicated slightly impacted water quality conditions. Multiplate samples are dominated by filter-feeding black flies larvae, midges and caddisflies, indicating effects from nutrient enrichment. These findings are consistent with the known septic effluent and paper mill discharges upstream. Similar conditions have been documented at this site since 1976. (DEC/DOW, BWAM/SBU, June 2005)

This segment includes the portion of the stream and all tribs from the mouth to the Upper Dam in Beaver Falls. The waters of this portion of the stream are Class C. Tribs to this reach/segment, including Wydmeyer Creek (-1), are also Class C. Other portions of Beaver River are listed separately.

# Beaver River, Lower, and minor tribs (0801-0273)

Need Verific

## Waterbody Location Information

Revised: 01/08/2007

**Water Index No:** Ont 19- 40 (portion 2)      **Drain Basin:** Black River  
**Hydro Unit Code:** 04150101/150      **Str Class:** B      Black River  
**Waterbody Type:** River      **Reg/County:** 6/Lewis Co. (25)  
**Waterbody Size:** 25.2 Miles      **Quad Map:** CROGHAN (F-19-1)  
**Seg Description:** stream and select tribs, fr Beaver Falls to High Falls

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

### Type of Pollutant(s)

Known: ---  
Suspected: AESTHETICS (odors, floatables), D.O./OXYGEN DEMAND, PATHOGENS, Nutrients  
Possible: ---

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

Known: ---  
Suspected: FAILING ON-SITE SYST (Beaver Falls)  
Possible: ---

## Resolution/Management Information

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

## Further Details

Aquatic life support, recreational uses and aesthetics in this portion of the Beaver River in the vicinity of Beaver Falls may be impacted by the discharge of raw sewage and septic tank effluent from area residences. The reach of the Beaver River below this segment is listed as impaired. This segment is listed as Needing Verification to determine how far these impacts extend upstream into this segment.

Raw sewage and septic tank effluent from approximately 55 homes in the hamlet of Beaver Falls are discharged directly to the river. The discharge of raw sewage from numerous pipes to the river is evident; some are part of a private sewer collection system and others are direct discharges of either sewage or grey water. Homeowners and passers-by report odors and sewage in the more sluggish areas of the Beaver River. The discharges affect recreation, and most likely the support of the fishery. The discharges affect recreation, and most likely the support of the fishery.

A sewage collection system to serve the homes that are currently discharging to the river in the Town of Croghan is currently construction. The new system is expected to begin operating in June of 2007. (DEC/DOW, Region 6, March 2007)

Two paper mills, Omniafiltra (formerly Fiber Mark) and Interface Solutions (formerly Armstrong Paper), have separate wastewater treatment systems that also discharge to the Beaver River. These facilities discharge to the river below the lower dam at Beaver Falls. Interface has recently upgraded their system to address BOD non-compliance issues and OmniaFiltra, which began operations in 2004 had sludge removed from their lagoon treatment system prior to startup. Both mills have phenolics and zinc limitations on their discharge permits. WSM Empire State, a cogeneration plant also discharges approximately 50 MGD of non-contact cooling water (permit temperature limit of 90 DegF) to the Beaver River in the Beaver Falls area. An additional discharge, Beaverite Products, has shutdown its manufacturing operation in Beaver Falls and now only discharges treated sanitary wastewater from its office building. (DEC/DOW Region 6, October 2004)

This segment includes the portion of the stream and selected/smaller tribs from the Upper Dam in Beaver Falls to High Falls Pond. The waters of this portion of the stream are Class B. Tribs to this reach/segment are Class C,C(T),C(TS). Black Creek (-3), Murmur Creek (-7) and other portions of Beaver River are listed separately.

# High Falls Pond (0801-0274)

# Impaired Seg

## Waterbody Location Information

Revised: 03/09/2006

**Water Index No:** Ont 19- 40 (portion 3)/P418      **Drain Basin:** Black River  
**Hydro Unit Code:** 04150101/150      **Str Class:** C(T)      Black River  
**Waterbody Type:** Lake      **Reg/County:** 6/Lewis Co. (25)  
**Waterbody Size:** 185.3 Acres      **Quad Map:** BELFORT (F-19-2)  
**Seg Description:** 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: ---

## 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:** Low  
**TMDL/303d Status:** 2b (Multiple Segment/Categorical Water, Fish Consumption)

## Further Details

Fish consumption in High Falls Pond is known to be impaired by mercury contamination, a result of atmospheric deposition.

Fish consumption in High Falls Pond is impaired due to a NYS DOH health advisory that recommends eating no more than one meal per month of larger (over 15 inches) smallmouth bass 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 NYS DOH Health Advisories and DEC/DFWMR, Habitat, December 2006).

High Falls Pond is included on the NYS 2006 Section 303(d) List of Impaired Waters. The lake is included on Part 2b of the List as a Fish Consumption Water.

# Taylorville, Elmer Falls Ponds (0801-0276)

Impaired Seg

## Waterbody Location Information

Revised: 03/09/2006

**Water Index No:** Ont 19- 40 (portion 4a)      **Drain Basin:** Black River  
**Hydro Unit Code:** 04150101/150      **Str Class:** C(T)      Black River  
**Waterbody Type:** Lake      **Reg/County:** 6/Lewis Co. (25)  
**Waterbody Size:** 146.5 Acres      **Quad Map:** BELFORT (F-19-2)  
**Seg Description:** total area of both lakes

## 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: ---

## 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:** Low  
**TMDL/303d Status:** 2b (Multiple Segment/Categorical Water, Fish Consumption)

## Further Details

Fish consumption in Elmer Falls Reservoir is known to be impaired by mercury contamination, a result of atmospheric deposition.

Fish consumption in Elmer Falls Reservoir is impaired due to a NYS DOH health advisory that recommends eating no more than one meal per month of smallmouth bass 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 NYS DOH Health Advisories and DEC/DFWMR, Habitat, December 2006).

Elmer Falls Reservoir is included on the NYS 2006 Section 303(d) List of Impaired Waters. The lake is included on Part 2b of the List as a Fish Consumption Water.

# Effley Falls Reservoir (0801-0172)

Impaired Seg

## Waterbody Location Information

Revised: 03/12/2007

**Water Index No:** Ont 19- 40 (portion 5)/P426      **Drain Basin:** Black River  
**Hydro Unit Code:** 04150101/150      **Str Class:** C(T)      Black River  
**Waterbody Type:** Lake(R) (Mesotrophic)      **Reg/County:** 6/Lewis Co. (25)  
**Waterbody Size:** 339.3 Acres      **Quad Map:** BELFORT (F-19-2)  
**Seg Description:** entire reservoir

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
FISH CONSUMPTION	Impaired	Known
Aquatic Life	Stressed	Suspected

### Type of Pollutant(s)

Known: METALS (mercury)  
Suspected: Acid/Base (pH)  
Possible: - - -

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

Known: - - -  
Suspected: ATMOSPH. DEPOSITION  
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:** Low  
**TMDL/303d Status:** 2b (Multiple Segment/Categorical Water, Fish Consumption)

## Further Details

Fish consumption in Effley Falls Reservoir is known to be impaired by mercury contamination, a result of atmospheric deposition. Slightly lower pH readings indicating lake acidity have also been documented and are considered to be stressing aquatic life support in the lake.

Fish consumption in Effley Falls Reservoir is impaired due to a NYS DOH health advisory that recommends eating no more than one meal per month of chain pickerel and smallmouth bass 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 2004-05. (2006-07 NYS DOH Health Advisories and DEC/DFWMR, Habitat, December 2006).

Effley Falls Reservoir has been sampled as part of the NYSDEC Citizen Statewide Lake Assessment Program (CSLAP) beginning in 1997 thru 2001 and from 2004 continuing through the present. 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 mesoligotrophic, or moderately unproductive. Phosphorus levels in the lake do not typically exceed the state guidance values indicating impacted/stressed recreational uses. Corresponding transparency measurements

typically exceed what is recommended for swimming beaches. Measurements of pH regularly fall below the state water quality range of 6.5 to 8.5 indicating acidity. The lake water is moderately to highly colored, which is also typical of northwestern Adirondack Lakes and considered to be normal. (DEC/DOW, BWAM/CSLAP, July 2006)

Public perception of the lake and its uses is also evaluated as part of the CSLAP program. These assessment indicate recreational suitability of the lake to be very favorable. The recreational suitability of the lake is described most frequently as either "cold not be nicer" or "excellent." The lake itself is most often described as "crystal clear" or "not quite crystal clear," an assessment that is somewhat higher than expected based on water clarity measurements in the lake but likely reflects recognition of natural color of the lake. Assessments have noted that aquatic plants rarely grows to the lake surface. Aquatic plants that are present are native species and have not been cited as impacting recreational uses. (DEC/DOW, BWAM/CSLAP, July 2006)

This lake waterbody is designated class C(T), suitable for general recreation use and aquatic life support, but not as a water supply, public bathing beach. Water quality monitoring by NYSDEC focuses primarily on support of general recreation and aquatic life.

Effley Falls Reservoir is included on the NYS 2006 Section 303(d) List of Impaired Waters. The lake is included on Part 2b of the List as a Fish Consumption Water.

Operation of the hydroelectric facility and dam cause water level and flow fluctuations in the reservoir. However, requirements of the most recent FERC relicensing of this operation in August 1996 include limiting the water level fluctuations in the reservoir to protect the fishery. The relicensing also requires the maintenance of a minimum flow downstream of the reservoir which may enhance the fishery in the Beaver River. (DEC/Reg 6 Fisheries, August 1998)

Smaller unnamed ponds (P427,P428) are also included in this segment.

# Beaver River, Middle, and tribs (0801-0277)

NoKnownImpct

## Waterbody Location Information

Revised: 01/08/2007

**Water Index No:** Ont 19- 40 (portion 6)      **Drain Basin:** Black River  
**Hydro Unit Code:** 04150101/150      **Str Class:** C(T)      Black River  
**Waterbody Type:** River      **Reg/County:** 6/Lewis Co. (25)  
**Waterbody Size:** 31.3 Miles      **Quad Map:** NUMBER FOUR (F-20-0)  
**Seg Description:** stream and tribs, fr Effley Falls Res to Soft Maple Res

## 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

A biological (macroinvertebrate) assessment of Fish Creek, a trib to this portion of Beaver River, near Eagle Falls (near Fish Creek Road) was conducted in 2002. Sampling results indicated slightly impacted water quality conditions, but these results may have been influenced at least in part by poor sampling habitat (slow current speed and sandy substrate). The fauna was dominated by filter-feeding caddisflies, and nutrient enrichment was suggested as the primary stressor. In spite of some minor effects on the fauna, aquatic life support is considered to be fully supported in the river, and there are no other apparent water quality impacts. (DEC/DOW, BWAM/SBU, June 2005)

The assessment for this site is considered to be "evaluated" rather than "monitored" because it is based on the sampling results at a trib to the primary stream (Beaver River).

This segment includes the portion of the stream and all tribs from Effley Falls Reservoir to Soft Maple Reservoir. The waters of this portion of the stream are Class C(T). Tribs to this reach/segment, including Sammys Creek (-12), Soft Maple Pond Outlet (-13), Fish Creek (-15), Silver Mine Creek (-16) and other tribs to Soft Maple Reservoir, are Class C,C(T). Other portions of Beaver River, including larger reservoirs, are listed separately.

# Soft Maple Pond, Soft Maple Reservoir (0801-0173)

Impaired Seg

## Waterbody Location Information

Revised: / /

**Water Index No:** Ont 19- 40 (portion 7)/P431,434      **Drain Basin:** Black River  
**Hydro Unit Code:** 04150101/150      **Str Class:** C(T)      Black River  
**Waterbody Type:** Lake(R)      **Reg/County:** 6/Lewis Co. (25)  
**Waterbody Size:** 425.0 Acres      **Quad Map:** NUMBER FOUR (F-20-0)  
**Seg Description:** total area of both reservoir and lake

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

### Type of Pollutant(s)

Known: METALS (mercury)  
Suspected: Acid/Base (pH)  
Possible: D.O./Oxygen Demand, Nutrients, Pathogens

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

Known: - - -  
Suspected: Atmosph. Deposition  
Possible: FAILING ON-SITE SYST

## 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:** Low  
**TMDL/303d Status:** 2a,2b (Multiple Segment/Categorical Water, Atmosph Dep, more)

## Further Details

Fish consumption and aquatic life support in Soft Maple Pond/Reservoir and other waters of this segment are known to be impaired by mercury contamination and low pH/acid rain, both a result of atmospheric deposition.

Fish consumption in Soft Maple Pond and Reservoir is impaired due to a NYS DOH health advisory that recommends eating no more than one meal per month of rock bass and smallmouth bass 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 2006-07. Soft Maple Pond/Reservoir is included on the NYS 2006 Section 303(d) List of Impaired Waters; it is listed on Part 2b of the List as a Fish Consumption Water. (2006-07 NYS DOH Health Advisories and DEC/DFWMR, Habitat, December 2006).

Historical surveys of these waters indicate that low pH due to acid deposition is limiting the fishery. Monitoring by DFW (1979) revealed a pH <6.0. Aquatic life in this segment is considered to be impaired. The waters of this segment are included on the NYS 2006 Section 303(d) List of Impaired Waters. Soft Maple Pond is included on Part 2a of the List as an Atmospheric Deposition (Acid Rain) Water. Unnamed pond (P432) is also included on the 2006 Section 303(d) List in Appendix A as a Smaller Lake Impaired by Acid Rain. (DEC/DOW, BWAM, 2006)

Efforts are underway on a national level to address problems caused by acid rain by reducing pollutant emissions, as required by the Clean Air Act. New York State (and other northeastern states) have taken legal action against USEPA to accelerate implementation of controls. Monitoring of these waters will continue, in order to assess changes in water quality resulting from implementation of the Clean Air Act. However, these changes are expected to occur only slowly over time.

The small pond Engle Pond (433), and unnamed ponds P432 and P435 are included in this segment.

# Beaver Lake, Beaver Meadow Pond (0801-0174)

Impaired Seg

## Waterbody Location Information

Revised: 04/17/2007

**Water Index No:** Ont 19- 40 (portion 9)/P449      **Drain Basin:** Black River  
**Hydro Unit Code:** 04150101/150      **Str Class:** B(T)      Black River  
**Waterbody Type:** Lake      **Reg/County:** 6/Lewis Co. (25)  
**Waterbody Size:** 326.4 Acres      **Quad Map:** NUMBER FOUR (F-20-0)  
**Seg Description:** total area of both lakes

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

### Type of Pollutant(s)

Known: METALS (mercury)  
Suspected: - - -  
Possible: D.O./Oxygen Demand, Nutrients, Acid/Base (pH), Pathogens

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

Known: ATMOSPH. DEPOSITION  
Suspected: - - -  
Possible: Failing On-Site Syst

## 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:** Low  
**TMDL/303d Status:** 2b (Multiple Segment/Categorical Water, Fish Consumption)

## Further Details

Fish consumption in Beaver Lake is known to be impaired by mercury contamination, a result of atmospheric deposition.

Fish consumption in Beaver Lake is impaired due to a NYS DOH health advisory that recommends eating no more than one meal per month of chain pickerel because of elevated mercury levels. The source of mercury is considered to be atmospheric deposition, as there are not other apparent sources of mercury in the lake watershed. The advisory for this lake was first issued in 2000-01. (2006-07 NYS DOH Health Advisories and DEC/DFWMR, Habitat, December 2006).

Other water quality concerns have also been noted regarding the lake. Impacts from camps on the lake as well as acid rain have been cited. DEC Regional fisheries staff has noted that the lake has fairly low productivity. (DEC/DOW, Region 6, March 2007)

Beaver Lake is included on the NYS 2006 Section 303(d) List of Impaired Waters. The lake is included on Part 2b of the List as a Fish Consumption Water.

# Beaver River, Upper, and tribs (0801-0210)

# MinorImpacts

## Waterbody Location Information

Revised: 01/18/2007

**Water Index No:** Ont 19- 40 (portion 10)      **Drain Basin:** Black River  
**Hydro Unit Code:** 04150101/150      **Str Class:** C      Black River  
**Waterbody Type:** River      **Reg/County:** 6/Oneida Co. (33)  
**Waterbody Size:** 108.6 Miles      **Quad Map:** NUMBER FOUR (F-20-0)  
**Seg Description:** stream and tribs, from Beaver Lake to Moshier Reservoir

## 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: ACID/BASE (PH), Metals (Aluminum)  
Suspected: ---  
Possible: ---

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

Known: ATMOSPH. DEPOSITION  
Suspected: ---  
Possible: ---

## 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:** 2a\*

**Resolution Potential:** Low

## Further Details

Aquatic life support in the tributary waters of Beaver River is known to experience impacts due to acidification from acid rain. In some smaller tributaries, these impacts can be quite significant.

Considerable monitoring and study over the past 20 years by NYSDEC DFWMR staff, in conjunction with the USGS, ALSA and others has found that low pH due to acid deposition limits the fishery in the small headwater streams of this watershed. Monitoring of Sunday Creek found episodic acidification of the streams during spring runoff that causes the pH to fall below 5.0. Caged bioassays have documented high mortality to brook trout and blacknose dace. Stream electrofishing reveals a small fish population with little evidence of successful reproduction. High aluminum levels were also noted. (DEC/DFWMR, Rome Field Station, December 2006)

Efforts are underway on a national level to address problems caused by acid rain by reducing pollutant emissions, as required by the Clean Air Act. New York State (and other northeastern states) have taken legal action against USEPA to accelerate implementation of controls. Monitoring of these waters will continue, in order to assess changes in water quality resulting from implementation of the Clean Air Act. However, these changes are expected to occur only slowly over time.

This segment includes the portion of the stream and all tribs from Beaver Lake to Moshier Reservoir. The waters of

this portion of the stream are Class C,C(T). Tribs to this reach/segment, including Three Mile Creek (-19), Sunday Creek (-20) and Moshier Creek (-22), are Class C,C(T),C(TS). Other portions of Beaver River, including larger reservoirs, are listed separately.

# Moshier Reservoir (0801-0194)

# Impaired Seg

## Waterbody Location Information

Revised: 03/09/2006

**Water Index No:** Ont 19- 40 (portion 11)/P478      **Drain Basin:** Black River  
**Hydro Unit Code:** 04150101/150      **Str Class:** C(T)      Black River  
**Waterbody Type:** Lake(R)      **Reg/County:** 6/Oneida Co. (33)  
**Waterbody Size:** 281.1 Acres      **Quad Map:** NUMBER FOUR (F-20-0)  
**Seg Description:** entire reservoir

## 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: ATMOSPH. DEPOSITION  
Suspected: - - -  
Possible: 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      **Resolution Potential:** Low  
**TMDL/303d Status:** 2b (Multiple Segment/Categorical Water, Fish Consumption)

## Further Details

Fish consumption in Moshier Reservoir is known to be impaired by mercury contamination, a result of atmospheric deposition.

Fish consumption in Francis Lake is impaired due to a NYS DOH health advisory that recommends eating no more than one meal per month of larger (over 9 inches) yellow perch and chain pickerel 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 issued prior to 1998-99. (2006-07 NYS DOH Health Advisories and DEC/DFWMR, Habitat, December 2006).

Moshier Reservoir is included on the NYS 2006 Section 303(d) List of Impaired Waters. The lake is included on Part 2b of the List as a Fish Consumption Water.

# Black Creek and tribs (0801-0171)

NoKnownImpct

## Waterbody Location Information

Revised: 03/13/2007

**Water Index No:** Ont 19- 40- 3  
**Hydro Unit Code:** 04150101/150      **Str Class:** C(T)\*  
**Waterbody Type:** River  
**Waterbody Size:** 61.7 Miles  
**Seg Description:** entire stream and tribs

**Drain Basin:** Black River  
**Reg/County:** 6/Lewis Co. (25)  
**Quad Map:** BELFORT (F-19-2)

## 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

A biological (macroinvertebrate) survey/assessment of Black Creek in Croghan (at Route 126) was conducted in 2002. Sampling results indicated slightly impacted water quality conditions, however the metrics were close to non-impacted. Slightly impacted conditions were also found during 1996 sampling. Agricultural enrichment and siltation are considered the major sources influencing water quality; Lewis County SWCD has conducted sampling to document nutrient loads from agricultural areas. However, nutrient biotic evaluation determined these effects on the fauna to be minor. Aquatic life support is considered to be fully supported in the stream, and there are no other apparent water quality impacts to designated uses. Analysis of crayfish from the site in 1996 found elevated levels of PAHs. No tissue sampling was conducted in 2002. (DEC/DOW, BWAM/SBU, June 2005)

This segment includes the entire stream and all tribs. The waters of the stream are Class C(T) from the mouth to Brewery Road, Class B from there to Erie Canal Road, and Class C(T) for the remainder of the reach. Tribs to this reach/segment are Class C,C(T),C(TS).

# Murmur Creek and tribs (0801-0219)

NoKnownImpct

## Waterbody Location Information

Revised: 01/08/2007

**Water Index No:** Ont 19- 40- 7  
**Hydro Unit Code:** 04150101/150      **Str Class:** C(T)  
**Waterbody Type:** River  
**Waterbody Size:** 44.4 Miles  
**Seg Description:** entire stream and tribs

**Drain Basin:** Black River  
**Reg/County:** 6/Lewis Co. (25)  
**Quad Map:** BELFORT (F-19-2)

## 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

Biological (macroinvertebrate) assessment of Murmur Creek near the mouth near High Falls (Belfort Road bridge) was conducted in 2002 and 1996. Sampling results indicated non-impacted conditions. The stream was slow-moving, and the bottom consisted mostly of gravel, sand, and rubble. A diverse fauna was found, including mayflies, stoneflies, caddisflies, beetles, and hellgrammites. Analysis of crayfish collected in 1996 found no pesticides or PCBs above detection levels, and no heavy metals or PAHs above levels of concern. (DEC/DOW, BWAM/SBU, June 2004)

This segment includes the entire stream and selected/smaller tribs. The waters of the stream are Class C(T),C(TS). Tribs to this reach/segment, including Lower Sandy Creek (-3), are also Class C(T),C(TS). Upper Sandy Creek, including Croghan Reservoir (P413), is listed separately.

# Lower, Upper West Pond (0801-0284)

Impaired Seg

## Waterbody Location Information

Revised: 12/24/2004

**Water Index No:** Ont 19- 40- 7-P416,P417      **Drain Basin:** Black River  
**Hydro Unit Code:** 04150101/150      **Str Class:** C(T)      Black River  
**Waterbody Type:** Lake      **Reg/County:** 6/Lewis Co. (25)  
**Waterbody Size:** 12.8 Acres      **Quad Map:** NUMBER FOUR (F-20-0)  
**Seg Description:** entire lake

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

### Type of Pollutant(s)

Known: ACID/BASE (PH)  
Suspected: ---  
Possible: ---

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

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

## 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:** 2a\*

**Resolution Potential:** Low

## Further Details

Aquatic life support in the waters of this segment are known to be impaired by low pH, a result of atmospheric deposition (acid rain).

Historical surveys of these waters indicate that low pH due to acid deposition is limiting the fishery. Monitoring by ALSC (1986) revealed a pH <5.0 and no presence of fish. Aquatic life in this segment is considered to be impaired. The waters of this segment are included on the NYS 2006 Section 303(d) List of Impaired Waters. Upper West Pond is included on Part 2a of the List as an Atmospheric Deposition (Acid Rain) Water in Appendix A as a Smaller Lake Impaired by Acid Rain. (DEC/DOW, BWAM, 2006)

Efforts are underway on a national level to address problems caused by acid rain by reducing pollutant emissions, as required by the Clean Air Act. New York State (and other northeastern states) have taken legal action against USEPA to accelerate implementation of controls. Monitoring of these waters will continue, in order to assess changes in water quality resulting from implementation of the Clean Air Act. However, these changes are expected to occur only slowly over time.

# Balsam Creek and tribs (0801-0239)

NoKnownImpct

## Waterbody Location Information

Revised: 01/08/2007

**Water Index No:** Ont 19- 40-10  
**Hydro Unit Code:** 04150101/150      **Str Class:** C(T)  
**Waterbody Type:** River  
**Waterbody Size:** 23.1 Miles  
**Seg Description:** entire stream and tribs

**Drain Basin:** Black River  
**Reg/County:** 6/Lewis Co. (25)  
**Quad Map:** BELFORT (F-19-2)

## 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

Biological (macroinvertebrate) assessment of Balsam Creek near Belfort (at Erie Canal Road) was conducted in 1996. Sampling results indicated slightly impacted conditions, however habitat effects are a contributing factor in this assessment. The sampling habitat was mostly sand except for a "swimmer's dam" of rubble where a kick sample was taken. The resident invertebrate fauna consisted mostly of clean-water organisms dominated by caddisflies and midges. Filamentous algae and moss were also noted on rocks. In spite of some minor effects on the fauna, aquatic life support is considered to be fully supported in the river, and there are no other apparent water quality impacts. (DEC/DOW, BWAM/SBU, June 2004)

This segment includes the entire stream and all tribs. The waters of the stream are Class C(T). Tribs to this reach/segment, including Warner Creek (-4), are also Class C(T).

# Goose Pond, Meister Pond (0801-0286)

Impaired Seg

## Waterbody Location Information

Revised: 12/24/2004

**Water Index No:** Ont 19- 40-10-P419,P420      **Drain Basin:** Black River  
**Hydro Unit Code:** 04150101/150      **Str Class:** C      Black River  
**Waterbody Type:** Lake      **Reg/County:** 6/Lewis Co. (25)  
**Waterbody Size:** 6.4 Acres      **Quad Map:** NUMBER FOUR (F-20-0)  
**Seg Description:** entire lake

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
AQUATIC LIFE	Impaired	Suspected

### Type of Pollutant(s)

Known: ACID/BASE (PH)  
Suspected: ---  
Possible: ---

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

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

## 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:** 2a\*

**Resolution Potential:** Low

## Further Details

Aquatic life support in the waters of this segment are thought to be impaired by low pH, a result of atmospheric deposition (acid rain).

Historical surveys of some of these waters indicate that low pH due to acid deposition is limiting the fishery. Monitoring by ALSC (1985) revealed a pH <5.0 and no presence of fish. Aquatic life in this segment is considered to be impaired. The waters of this segment are included on the NYS 2006 Section 303(d) List of Impaired Waters. Goose Pond is included on Part 2a of the List as an Atmospheric Deposition (Acid Rain) Water. Because there is no data indicating impact on the larger Meister Pond, impairment to this segment is listed as suspected. (DEC/DOW, BWAM, 2006)

Efforts are underway on a national level to address problems caused by acid rain by reducing pollutant emissions, as required by the Clean Air Act. New York State (and other northeastern states) have taken legal action against USEPA to accelerate implementation of controls. Monitoring of these waters will continue, in order to assess changes in water quality resulting from implementation of the Clean Air Act. However, these changes are expected to occur only slowly over time.

This segment also includes the smaller unnamed ponds P421 and P422.

# Sand Pond (0801-0055)

# Impaired Seg

## Waterbody Location Information

Revised: / /

**Water Index No:** Ont 19- 40-15- 4-P436      **Drain Basin:** Black River  
**Hydro Unit Code:** 04150101/150      **Str Class:** C(T)      Black River  
**Waterbody Type:** Lake      **Reg/County:** 6/Lewis Co. (25)  
**Waterbody Size:** 74.6 Acres      **Quad Map:** NUMBER FOUR (F-20-0)  
**Seg Description:** entire lake

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

### Type of Pollutant(s)

Known: ACID/BASE (PH)  
Suspected: ---  
Possible: ---

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

Known: ATMOSPH. DEPOSITION  
Suspected: ---  
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:** Low  
**TMDL/303d Status:** 2a (Multiple Segment/Categorical Water, Atmosph Dep)

## Further Details

Aquatic life support in the waters of this segment are impaired by low pH, a result of atmospheric deposition (acid rain).

Historical surveys of these waters Pond indicate that low pH due to acid deposition is limiting the fishery. Monitoring by ALSC (1979) revealed a pH <5.0. Aquatic life in this segment is considered to be impaired. The waters of this segment are included on the NYS 2006 Section 303(d) List of Impaired Waters. Sand Pond is included on Part 2a of the List as an Atmospheric Deposition (Acid Rain) Water. (DEC/DOW, BWAM, 2006)

Efforts are underway on a national level to address problems caused by acid rain by reducing pollutant emissions, as required by the Clean Air Act. New York State (and other northeastern states) have taken legal action against USEPA to accelerate implementation of controls. Monitoring of these waters will continue, in order to assess changes in water quality resulting from implementation of the Clean Air Act. However, these changes are expected to occur only slowly over time.

# Crooked Lake, McCabe Pond (0801-0144)

Impaired Seg

## Waterbody Location Information

Revised: / /

**Water Index No:** Ont 19- 40-18- 3-P441,442      **Drain Basin:** Black River  
**Hydro Unit Code:** 04150101/150      **Str Class:** C(T)      Black River  
**Waterbody Type:** Lake      **Reg/County:** 6/Lewis Co. (25)  
**Waterbody Size:** 44.7 Acres      **Quad Map:** NUMBER FOUR (F-20-0)  
**Seg Description:** entire lake

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

### Type of Pollutant(s)

Known: ACID/BASE (PH)  
Suspected: ---  
Possible: ---

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

Known: ATMOSPH. DEPOSITION  
Suspected: ---  
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:** Low  
**TMDL/303d Status:** 2a (Multiple Segment/Categorical Water, Atmosph Dep)

## Further Details

Aquatic life support in Crooked Lake, McCabe Pond, Ikeis Pond and other waters of this segment are known to be impaired by low pH, a result of atmospheric deposition (acid rain).

Historical surveys of these waters indicate that low pH due to acid deposition is limiting the fishery. Monitoring by ALSC (1984-86) revealed a pH <5.0 and no presence of fish. Aquatic life in this segment is considered to be impaired.

The waters of this segment are included on the NYS 2006 Section 303(d) List of Impaired Waters. Ikeis Pond is included on Part 2a of the List as an Atmospheric Deposition (Acid Rain) Water. Crooked Lake, McCabe Pond and unnamed ponds (P439, P440) are also included on the 2006 Section 303(d) List in Appendix A as a Smaller Lake Impaired by Acid Rain. (DEC/DOW, BWAM, 2006)

Efforts are underway on a national level to address problems caused by acid rain by reducing pollutant emissions, as required by the Clean Air Act. New York State (and other northeastern states) have taken legal action against USEPA to accelerate implementation of controls. Monitoring of these waters will continue, in order to assess changes in water quality resulting from implementation of the Clean Air Act. However, these changes are expected to occur only slowly over time.

In 2006, NYSDEC established and USEPA approved a TMDL to address acid rain impairment to 143 Adirondack

lakes that are located in NYS Forest Preserve lands, including unnamed ponds (P439, P440). Recognizing that the available pH data for many of these lakes is 20-30 years old, the TMDL outlines a phased/adaptive management approach, that initially relies heavily on monitoring and assessment to determine current conditions, modeling refinements to estimate future conditions, and the implementation of statewide, regional and national efforts to reduce atmospheric loadings causing the impairment. (Impaired Water Restoration Plan/TMDL for Acid Rain Lakes (NYS Forest Preserve, DEC/DOW, BWAM, August 2006)

This segment also includes the smaller Ikeis Pond (P438) and unnamed ponds P439 and P440.

# Pepperbox Pond, Spring Ponds, Tied Lake (0801-0076) Impaired Seg

## Waterbody Location Information

Revised: / /

**Water Index No:** Ont 19- 40-18..P443 thru P448  
**Hydro Unit Code:** 04150101/150      **Str Class:** C  
**Waterbody Type:** Lake  
**Waterbody Size:** 31.4 Acres  
**Seg Description:** total area of both lakes

**Drain Basin:** Black River  
**Reg/County:** 6/Lewis Co. (25)  
**Quad Map:** NUMBER FOUR (F-20-0)

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

### Type of Pollutant(s)

Known: ACID/BASE (PH)  
Suspected: ---  
Possible: ---

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

Known: ATMOSPH. DEPOSITION  
Suspected: ---  
Possible: ---

## 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:** 2a (Multiple Segment/Categorical Water, Atmosph Dep)

**Resolution Potential:** Low

## Further Details

Aquatic life support in Pepperbox Pond, Spring Ponds and other waters of this segment are known to be impaired by low pH, a result of atmospheric deposition (acid rain).

Historical surveys of these waters indicate that low pH due to acid deposition is limiting the fishery. Monitoring by ALSC (1984-86) revealed a pH <5.0 and no presence of fish. Aquatic life in this segment is considered to be impaired.

The waters of this segment are included on the NYS 2006 Section 303(d) List of Impaired Waters. Pepperbox Pond, Lower Spring Pond and unnamed pond (P444a) are included on Part 2a of the List as an Atmospheric Deposition (Acid Rain) Water. (DEC/DOW, BWAM, 2006)

Efforts are underway on a national level to address problems caused by acid rain by reducing pollutant emissions, as required by the Clean Air Act. New York State (and other northeastern states) have taken legal action against USEPA to accelerate implementation of controls. Monitoring of these waters will continue, in order to assess changes in water quality resulting from implementation of the Clean Air Act. However, these changes are expected to occur only slowly over time.

In 2006, NYSDEC established and USEPA approved a TMDL to address acid rain impairment to 143 Adirondack

lakes that are located in NYS Forest Preserve lands, including unnamed pond P444a. Recognizing that the available pH data for many of these lakes is 20-30 years old, the TMDL outlines a phased/adaptive management approach, that initially relies heavily on monitoring and assessment to determine current conditions, modeling refinements to estimate future conditions, and the implementation of statewide, regional and national efforts to reduce atmospheric loadings causing the impairment. (Impaired Water Restoration Plan/TMDL for Acid Rain Lakes (NYS Forest Preserve, DEC/DOW, BWAM, August 2006)

# Francis Lake (0801-0192)

# Impaired Seg

## Waterbody Location Information

Revised: 08/02/1994

**Water Index No:** Ont 19- 40-18a/P449..P451      **Drain Basin:** Black River  
**Hydro Unit Code:** 04150101/150      **Str Class:** C(T)      Black River  
**Waterbody Type:** Lake      **Reg/County:** 6/Lewis Co. (25)  
**Waterbody Size:** 134.4 Acres      **Quad Map:** NUMBER FOUR (F-20-0)  
**Seg Description:** 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: ---  
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:** Low  
**TMDL/303d Status:** 2b (Multiple Segment/Categorical Water, Fish Consumption)

## Further Details

Fish consumption in Francis Lake is known to be impaired by mercury contamination, a result of atmospheric deposition.

Fish consumption in Francis Lake is impaired due to a NYS DOH health advisory that recommends eating no more than one meal per month of larger (over 9 inches) yellow perch and chain pickerel 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 issued prior to 1998-99. (2006-07 NYS DOH Health Advisories and DEC/DFWMR, Habitat, December 2006).

Mirror Pond, a small lake tributary to Francis Lake, is listed on the 2006 Section 303(d) List due to impacts from atmospheric deposition (acid rain).

This segment includes the smaller unnamed pond (P452) and Mirror Pond (P453).

# Minor Lakes Trib to Three Mile Cr Wshed (0801-0453) Impaired Seg

## Waterbody Location Information

Revised: 01/03/2007

**Water Index No:** Ont 19- 40-19-P456 thru P459      **Drain Basin:** Black River  
**Hydro Unit Code:** 04150101/150      **Str Class:** C      Black River  
**Waterbody Type:** Lake      **Reg/County:** 6/Oneida Co. (33)  
**Waterbody Size:** 0.0 Acres      **Quad Map:** NUMBER FOUR (F-20-0)  
**Seg Description:** total area of all lakes

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

### Type of Pollutant(s)

Known: ACID/BASE (PH)  
Suspected: ---  
Possible: ---

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

Known: ATMOSPH. DEPOSITION  
Suspected: ---  
Possible: ---

## 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:** 2a\*

**Resolution Potential:** Low

## Further Details

Aquatic life support in the waters of this segment are known to be impaired by low pH, a result of atmospheric deposition (acid rain).

Historical surveys of these waters indicate that low pH due to acid deposition is limiting the fishery. Monitoring by ALSC (1984-85) revealed a pH <5.0 and no presence of fish. Aquatic life in this segment is considered to be impaired.

The waters of this segment are included on the NYS 2006 Section 303(d) List of Impaired Waters. Unnamed ponds (P456, P456a) are included on Part 2a of the List as an Atmospheric Deposition (Acid Rain) Water. Unnamed pond (P457) and Bear Pond are also included on the 2006 Section 303(d) List in Appendix A as a Smaller Lake Impaired by Acid Rain. (DEC/DOW, BWAM, 2006)

Efforts are underway on a national level to address problems caused by acid rain by reducing pollutant emissions, as required by the Clean Air Act. New York State (and other northeastern states) have taken legal action against USEPA to accelerate implementation of controls. Monitoring of these waters will continue, in order to assess changes in water quality resulting from implementation of the Clean Air Act. However, these changes are expected to occur only slowly over time.

In 2006, NYSDEC established and USEPA approved a TMDL to address acid rain impairment to 143 Adirondack

lakes that are located in NYS Forest Preserve lands, including unnamed pond P456. Recognizing that the available pH data for many of these lakes is 20-30 years old, the TMDL outlines a phased/adaptive management approach, that initially relies heavily on monitoring and assessment to determine current conditions, modeling refinements to estimate future conditions, and the implementation of statewide, regional and national efforts to reduce atmospheric loadings causing the impairment. (Impaired Water Restoration Plan/TMDL for Acid Rain Lakes (NYS Forest Preserve, DEC/DOW, BWAM, August 2006)

This segment includes multiple lakes/ponds within the Three Mile Creek Watershed; including Bear Pond (P459), as well as smaller unnamed ponds.

# Sunday Lake, Sunday Creek Reservoir (0801-0195)

Impaired Seg

## Waterbody Location Information

Revised: 08/03/1994

**Water Index No:** Ont 19- 40-20-P473, P474      **Drain Basin:** Black River  
**Hydro Unit Code:** 04150101/150      **Str Class:** C(T)      Black River  
**Waterbody Type:** Lake      **Reg/County:** 6/Oneida Co. (33)  
**Waterbody Size:** 19.1 Acres      **Quad Map:** NUMBER FOUR (F-20-0)  
**Seg Description:** entire lake

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

### Type of Pollutant(s)

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

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

Known: ---  
Suspected: ---  
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:** Low  
**TMDL/303d Status:** 2a,2b (Multiple Segment/Categorical Water, Atmosph Dep, more)

## Further Details

Fish consumption and aquatic life support in Sunday Lake/Sunday Creek Reservoir is known to be impaired by mercury contamination, and low pH a result of atmospheric deposition.

Fish consumption in Sunday Lake is impaired due to a NYS DOH health advisory that recommends eating no chain pickerel and no more than one meal per month of yellow perch 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 issued prior to 1998-99. Sunday Lake is included on the NYS 2006 Section 303(d) List of Impaired Waters; it is listed on Part 2b of the List as a Fish Consumption Water. (2006-07 NYS DOH Health Advisories and DEC/DFWMR, Habitat, December 2006).

Historical surveys of these lakes indicate that low pH due to acid deposition is limiting the fishery. Monitoring by ALSC (1984) revealed a pH that ranged from <5.0 to above 6.0 and no presence of fish. Aquatic life in this segment is considered to be impaired. The waters of this segment are included on the NYS 2006 Section 303(d) List of Impaired Waters. Sunday Creek Reservoir (P474) and unnamed pond (P476) are included on Part 2a of the List as an Atmospheric Deposition (Acid Rain) Water. (DEC/DOW, BWAM, 2006)

Efforts are underway on a national level to address problems caused by acid rain by reducing pollutant emissions, as required by the Clean Air Act. New York State (and other northeastern states) have taken legal action against USEPA to accelerate implementation of controls. Monitoring of these waters will continue, in order to assess changes in water quality resulting from implementation of the Clean Air Act. However, these changes are expected to occur only slowly over time.

This segment includes smaller unnamed ponds (P460 thru P477).

# Minor Lakes Trib to Moshier Creek (0801-0039)

Impaired Seg

## Waterbody Location Information

Revised: / /

**Water Index No:** Ont 19- 40-22-P479 thru P492 (sel)      **Drain Basin:** Black River  
**Hydro Unit Code:** 04150101/150      **Str Class:** C      Black River  
**Waterbody Type:** Lake      **Reg/County:** 6/Oneida Co. (33)  
**Waterbody Size:** 147.3 Acres      **Quad Map:** NUMBER FOUR (F-20-0)  
**Seg Description:** total area of all selected lakes

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

### Type of Pollutant(s)

Known: ACID/BASE (PH)  
Suspected: ---  
Possible: ---

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

Known: ATMOSPH. DEPOSITION  
Suspected: ---  
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:** Low  
**TMDL/303d Status:** 2a (Multiple Segment/Categorical Water, Atmosph Dep)

## Further Details

Aquatic life support in the waters of this segment are known to be impaired by low pH, a result of atmospheric deposition (acid rain).

Historical surveys of these waters indicate that low pH due to acid deposition is limiting the fishery. Monitoring by DFW (1975-80) and ALSC (1984-86) revealed a pH <5.0 and no presence of fish. Aquatic life in this segment is considered to be impaired. The waters of this segment are included on the NYS 2006 Section 303(d) List of Impaired Waters. Cropsey Pond, Deer Pond, Sunshine Pond, Upper Moshier Pond, Duck Pond and other waters were included on Part 2a of the List as an Atmospheric Deposition (Acid Rain) Water. Cropsey Pond and unnamed ponds (P484a, P488, P490) are included on the 2006 Section 303(d) List in Appendix A as a Smaller Lake Impaired by Acid Rain. (DEC/DOW, BWAM, 2006)

Efforts are underway on a national level to address problems caused by acid rain by reducing pollutant emissions, as required by the Clean Air Act. New York State (and other northeastern states) have taken legal action against USEPA to accelerate implementation of controls. Monitoring of these waters will continue, in order to assess changes in water quality resulting from implementation of the Clean Air Act. However, these changes are expected to occur only slowly over time.

In 2006, NYSDEC established and USEPA approved a TMDL to address acid rain impairment to 143 Adirondack lakes that are located in NYS Forest Preserve lands, including Cropsey, Sunshine and Duck Ponds. Recognizing that the available pH data for many of these lakes is 20-30 years old, the TMDL outlines a phased/adaptive management approach, that initially relies heavily on monitoring and assessment to determine current conditions, modeling refinements to estimate future conditions, and the implementation of statewide, regional and national efforts to reduce atmospheric loadings causing the impairment. (Impaired Water Restoration Plan/TMDL for Acid Rain Lakes (NYS Forest Preserve, DEC/DOW, BWAM, August 2006)

This segment includes multiple lakes/ponds within the Moshier Creek Watershed; including Cropsey Pond (P480), Deer Pond (P485), Sunshine Pond (P487), Upper Moshier Pond (P491) and Duck Pond (P492), as well as smaller unnamed ponds including P484a, P488, P480. Lower Moshier Pond (P489) is listed separately.

# Lower Moshier Pond (0801-0049)

Impaired Seg

## Waterbody Location Information

Revised: / /

**Water Index No:** Ont 19- 40-22-P489      **Drain Basin:** Black River  
**Hydro Unit Code:** 04150101/150      **Str Class:** C(T)      Black River  
**Waterbody Type:** Lake      **Reg/County:** 6/Oneida Co. (33)  
**Waterbody Size:** 14.3 Acres      **Quad Map:** NUMBER FOUR (F-20-0)  
**Seg Description:** entire lake

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

### Type of Pollutant(s)

Known: ACID/BASE (PH)  
Suspected: ---  
Possible: ---

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

Known: ATMOSPH. DEPOSITION  
Suspected: ---  
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:** Low  
**TMDL/303d Status:** 2a (Multiple Segment/Categorical Water, Atmosph Dep)

## Further Details

Aquatic life support in Lower Moshier Pond is known to be impaired by low pH, a result of atmospheric deposition (acid rain).

Historical surveys of these waters indicate that low pH due to acid deposition is limiting the fishery. Monitoring by DFW (1982) revealed a pH between 5.0 and 5.5. Aquatic life in this segment is considered to be impaired. The waters of this segment are included on the NYS 2006 Section 303(d) List of Impaired Waters. Lower Moshier Pond was included on Part 2a of the List as an Atmospheric Deposition (Acid Rain) Water. (DEC/DOW, BWAM, 2006)

Efforts are underway on a national level to address problems caused by acid rain by reducing pollutant emissions, as required by the Clean Air Act. New York State (and other northeastern states) have taken legal action against USEPA to accelerate implementation of controls. Monitoring of these waters will continue, in order to assess changes in water quality resulting from implementation of the Clean Air Act. However, these changes are expected to occur only slowly over time.

In 2006, NYSDEC established and USEPA approved a TMDL to address acid rain impairment to 143 Adirondack lakes that are located in NYS Forest Preserve lands, including Lower Moshier Pond. Recognizing that the available pH

data for many of these lakes is 20-30 years old, the TMDL outlines a phased/adaptive management approach, that initially relies heavily on monitoring and assessment to determine current conditions, modeling refinements to estimate future conditions, and the implementation of statewide, regional and national efforts to reduce atmospheric loadings causing the impairment. (Impaired Water Restoration Plan/TMDL for Acid Rain Lakes (NYS Forest Preserve, DEC/DOW, BWAM, August 2006)