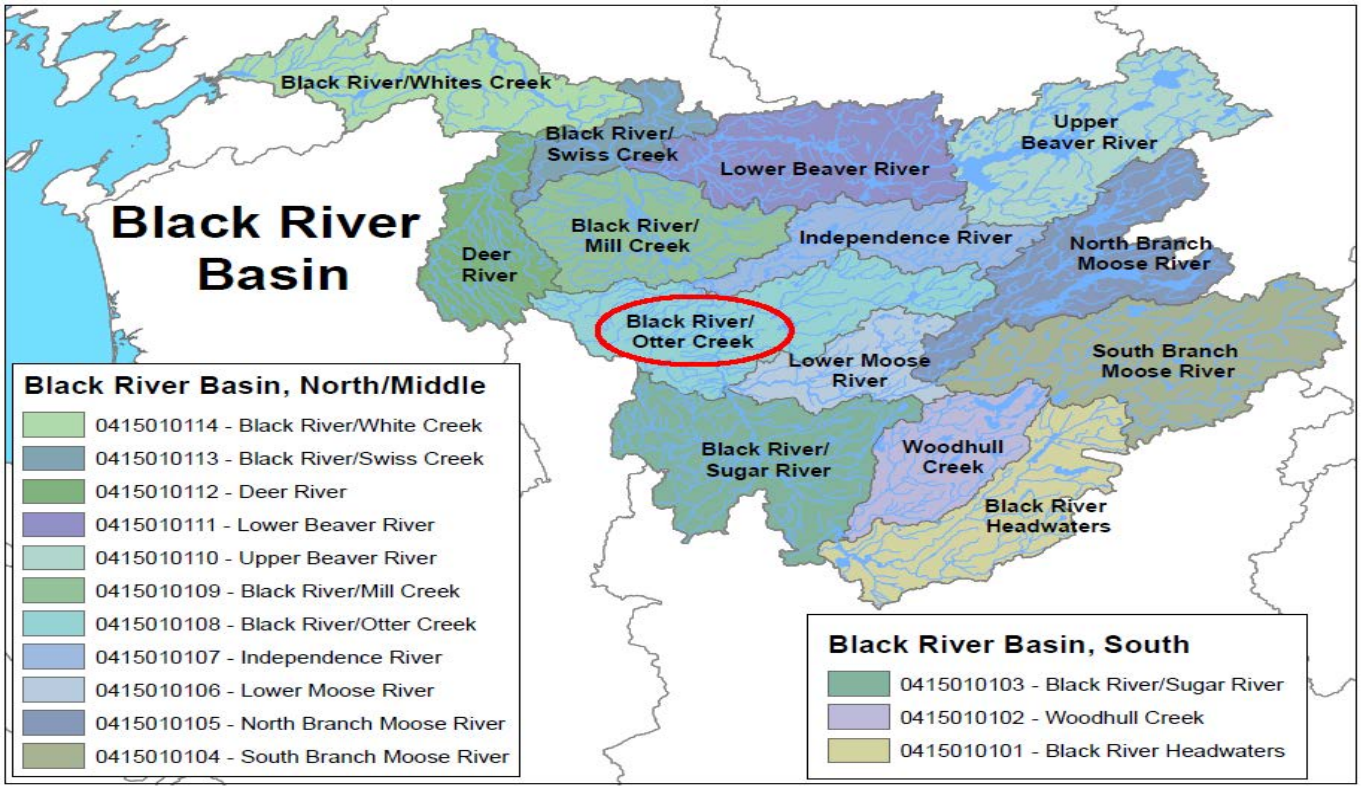

Black River/Otter Creek Watershed

(0415010108)

Water Index Number	Waterbody Segment	Category
Ont 19 (portion 5)	Black River, Middle, Main Stem (0801-0199)	NoKnownImpct
Ont 19- 58	Roaring Brook and minor tribs (0801-0222)	NoKnownImpct
Ont 19- 58- 6	Atwater Creek, Upper, and tribs (0801-0330)	UnAssessed
Ont 19- 59	Whetstone Gulf, Lower, and tribs (0801-0332)	NoKnownImpct
Ont 19- 59	Whetstone Gulf, Upper, and tribs (0801-0223)	NoKnownImpct
Ont 19- 60	Otter Creek and tribs (0801-0224)	NoKnownImpct
Ont 19- 60- 4-P662	Catspaw Lake (0801-0334)	UnAssessed
Ont 19- 60- 5-P663	Sand Pond (0801-0335)	UnAssessed
Ont 19- 60- 5-P664	Little Otter Lake (0801-0336)	Impaired Seg
Ont 19- 60-P674 thru P684	Minor Lakes Trib to Upper Otter Creek (0801-0041)	Impaired Seg
Ont 19- 60-P676	Big Otter Lake (0801-0337)	UnAssessed
Ont 19- 61 thru 80	Minor Tribs to Middle Black River (0801-0454)	NoKnownImpct
Ont 19- 68	Tannery Creek, Upper, and tribs (0801-0338)	UnAssessed
Ont 19- 70	Fish Creek and tribs (0801-0225)	NoKnownImpct
Ont 19- 70- 4-P689	Brantingham Lake (0801-0176)	Need Verific
Ont 19- 70- 4-P689-1,2	Tribs to Brantingham Lake (0801-0340)	UnAssessed
Ont 19- 70- 4-P689-P690	Pleasant Lake (0801-0341)	UnAssessed
Ont 19- 78	Mill Creek and minor tribs (0801-0342)	UnAssessed
Ont 19- 78- 2	Mill Creek Trib (0801-0343)	UnAssessed

Black River, Middle, Main Stem (0801-0199) NoKnownImpct

Waterbody Location Information

Revised: 01/08/2007

Water Index No:	Ont 19 (portion 5)			**Drain Basin:**	Black River
Hydro Unit Code:	04150101/***	**Str Class:**	C		Black River
Waterbody Type:	River			**Reg/County:**	6/Lewis Co. (25)
Waterbody Size:	22.5 Miles			**Quad Map:**	LOWVILLE (F-19-4)
Seg Description:	from Lowville to Lyons Falls				

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

NYSDEC Rotating Intensive Basin Studies (RIBS) Intensive Network monitoring of the Black River at State Route 812 in Lowville, Lewis County, was conducted during 2002 (multiplates) and 2003. Intensive Network sampling typically includes macroinvertebrate community analysis, water column chemistry, sediment and invertebrate tissues analysis and toxicity evaluation. Biological (macroinvertebrate) sampling (multiplates) indicated slightly impacted water quality. The invertebrate community was dominated by caddisflies, midges, and mayflies, indicative of minor impacts to water quality. The fish community was also assessed and found to reflect good water quality. Water column sampling revealed mercury and aluminum to be parameters of concern; results that are not unusual for a region of the state typically impacted by atmospheric deposition and acid rain but that should continue to be monitored. Analysis of sediments found zinc in elevated concentrations, but based on sediment quality guidelines developed for freshwater ecosystems, overall sediment quality is not likely to cause chronic toxicity to sediment-dwelling organisms. No organisms were collected for tissue analysis, so biological availability of these contaminants cannot be determined. Toxicity testing of water column and sediment showed no significant mortality or reproductive impacts. Taken together, these results indicate no significant water quality impacts and uses of the stream are considered to be fully supported. (DEC/DOW, BWAM/RIBS, January 2007)

A biological (macroinvertebrate) assessment of the Black River in Greig (at Burdicks Crossing Road) was also

conducted in 2002. Sampling results indicated slightly impacted water quality conditions. This represents a significant improvement from 1991 sampling. caddisflies, midges and mayflies dominated the sample. Aquatic worms, indicators of organic wastes were greatly reduced from over 50% of the sample in 1991 to less than 1% of the fauna in 2002. The improvement is attributed to the reduction of pulp and paper mill waste discharges in Lyons Falls and the construction of a municipal WWTP to serve the Village of Lyons Falls. 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)

Previously aquatic life support and aesthetics in this portion of the Black River were impacted by the discharge of inadequately treated process wastewater from Lyons Falls Pulp & Paper and failing and/or inadequate on-site wastewater treatment systems serving the Village of Lyons Falls. The paper mill discharge was highly turbid with excessive suspended solids; odors during the warmer summer months were also a problem. The mill discharge was in regular non-compliance with the TSS, BOD and settleable solids limits its SPDES permit from fall 1996 thru summer 1998. In 1997-1998 the company removed sludge from its treatment lagoons and in December 1997 the company signed a consent order to develop short- and long-term sludge management plans. Partial implementation of the short-term plan (additional sludge removal) began in spring 1998 and a permanent sludge dewatering system was planned. However, the mill closed in 2002. (DEC/DOW, Region 6, June 2005)

Impacts from failing/inadequate on-site septic systems in Lyons Falls have also been addressed. The discharge of raw sewage and septic tank effluent from over 150 homes and businesses in the Village of Lyons Falls to the Black River and its tributaries had significant impact on the uses in these waters. Portions of the tributaries waters wee fenced to prevent children and pets from being exposed to sewage. During summer low flow conditions the village periodically flushes the stream with water. However in the late 1990s the Village of Lyons Falls received a $2 million dollar Clean Air/Clean Water Bond Act grant from NYSDEC to construct a wastewater treatment plant. Construction of the WWTP was completed and went on-line in early 2001. (DEC/DOW Region 6, June 2005)

Also previously, a Fisheries Survey of the general area between Lyons Falls & Carthage was conducted in 1992-93. While the study showed an improvement in the overall fishery, an interview with the author of the report (Doug Carlson) revealed a "suspected problem" caused by the Lyons Falls Pulp and Paper mill discharge, warranting additional follow-up. A suspected "sludge bank" just downstream of the outfall pipe was noticed during the survey. However due to the flushing action of the river during periods of high flow, deposition is thought to occur only during low flow periods. Sampling conducted in 1998 concluded that there were no detectable changes or obvious impairment to the fish community. (DEC/DFWMR Region 6, July 1999)

In August 2005, a large volume (estimated to be 4-8 million gallons) of liquid manure was released into the Black River near the downstream end of this segment as a result of a collapsed dike at a manure storage lagoon at the Marks Farm in East Martinsburg. This caused lethal levels of ammonia and very low dissolved oxygen in a 24 mile reach of the river. The resulting fish kill was estimated to be 200,000 to 250,000 mortalities over the four days that it took for the slug of toxic water to move downstream. Subsequent sampling by NYSDEC found that a month or so after the spill water quality in the river had recovered sufficiently to support the fishery. In addition, much of the macroinvertebrate community which support the fishery survived the spill. While the conditions have largely returned to those prior to the spill, it will take considerable time to re-establish a population of larger and older fishes. (DEC/DFWMR and DOW/SBU, January 2007)

This segment includes the portion of the Black River from Mill Creek (-51) in Lowville to Moose River (-81) in Lyons Falls. The waters of this portion of the stream are Class C. Tribs to this reach/segment, including Mill Creek (-51), Independence River (-57), Roaring Brook (-58), Whetstone Creek (-59), Otter Creek (-60), Tannery Creek (-68), Fish Creek (-70), Mill Creek (-78) and Moose River (-81), are listed separately.

Roaring Brook and minor tribs (0801-0222) NoKnownImpct

Waterbody Location Information

Revised: 01/10/2007

Water Index No:	Ont 19- 58			**Drain Basin:**	Black River
Hydro Unit Code:	04150101/100	**Str Class:**	C(T)		Black River
Waterbody Type:	River			**Reg/County:**	6/Lewis Co. (25)
Waterbody Size:	69.3 Miles			**Quad Map:**	GLENFIELD (G-19-1)
Seg Description:	entire stream and select tribs				

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 Roaring Brook in Martinsburg (at Route 26) was conducted in 2002 and 1996. Sampling results clearly indicated non-impacted water quality conditions. The habitat was considered good, although some silt deposits were noted. The fauna was very diverse and the biological indices clearly indicated excellent water quality. (DEC/DOW, BWAM/SBU, June 2005)

This segment includes the entire stream and select/smaller tribs. The waters of the stream are Class C,C(T). Tribs to this reach/segment, including Lower Atwater Creek (-6), are Class C,C(T),C(TS). Upper Atwater Creek is listed separately.

Whetstone Gulf, Lower, and tribs (0801-0332) NoKnownImpct

Waterbody Location Information

Revised: 01/10/2007

Water Index No:	Ont 19- 59			**Drain Basin:**	Black River
Hydro Unit Code:	04150101/100	**Str Class:**	B(T)		Black River
Waterbody Type:	River			**Reg/County:**	6/Lewis Co. (25)
Waterbody Size:	19.7 Miles			**Quad Map:**	GLENFIELD (G-19-1)
Seg Description:	stream and tribs, from mouth to state park				

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 Whetstone Gulf in Glendale (at Glendale Road) was conducted in 2002 and 1996. Sampling results indicated non-impacted water quality conditions. The invertebrate fauna was diverse and well-balanced and the indices indicated excellent water quality. (DEC/DOW, BWAM/SBU, June 2005)

This segment includes the portion of the stream and all tribs from the mouth to Route 26 at the Whetstone Creek State Park. The waters of this portion of the stream are Class C,C(T). Tribs to this reach/segment are Class C. Upper Whetstone Creek is listed separately.

Whetstone Gulf, Upper, and tribs (0801-0223) NoKnownImpct

Waterbody Location Information

Revised: 01/10/2007

Water Index No:	Ont 19- 59			**Drain Basin:**	Black River
Hydro Unit Code:	04150101/100	**Str Class:**	C(T)		Black River
Waterbody Type:	River			**Reg/County:**	6/Lewis Co. (25)
Waterbody Size:	4.4 Miles			**Quad Map:**	GLENFIELD (G-19-1)
Seg Description:	stream and tribs, in/above state park				

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 Whetstone Gulf in Glendale (at Glendale Road) was conducted in 2002 and 1996. Sampling results indicated non-impacted water quality conditions. The invertebrate fauna was diverse and well-balanced and the indices indicated excellent water quality. Though this sampling point is just below the described segment, it is considered representative of water quality in the upper reach. This segment is listed as being evaluated rather than monitored. (DEC/DOW, BWAM/SBU, June 2005)

This segment includes the portion of the stream and all tribs above Route 26 at the Whetstone Creek State Park. The waters of this portion of the stream are Class B(T) from Route 26 to unnamed tribs (-3), and Class C(T) for the remainder of the reach. Tribs to this reach/segment are Class C(T). Lower Whetstone Creek is listed separately.

Otter Creek and tribs (0801-0224) NoKnownImpct

Waterbody Location Information

Revised: 01/10/2007

Water Index No:	Ont 19- 60			**Drain Basin:**	Black River
Hydro Unit Code:	04150101/090	**Str Class:**	C(T)		Black River
Waterbody Type:	River			**Reg/County:**	6/Lewis Co. (25)
Waterbody Size:	148.4 Miles			**Quad Map:**	BRANTINGHAM (G-19-2)
Seg Description:	entire stream and tribs				

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) assessments of Otter Creek in Otter Creek (at Pine Grove Road) were conducted in 2002 and 1996. Sampling results indicated non-impacted water quality conditions. The invertebrate fauna was diverse and all screening criteria were met. A second site, in Brantingham(at Partridgeville Road) was sampling in 2002 and similar conditions were found. (DEC/DOW, BWAM/SBU, June 2005)

Although there are nearly 150 miles of stream miles above the site, land use is largely forested and undeveloped and access is quite limited. Consequently, the assessment of non-impacted water quality for all stream miles is considered to be a mixed (monitored/evaluated) assessment.

This segment includes the entire stream and all tribs. The waters of the stream are Class C(T). Tribs to this reach/segment, including Little Otter Creek (-5), Crooked Creek (-6) and Tommy Roaring Creek (-12), are also Class C(T). Tribs to Big Otter Lake (P676) are listed separately.

Little Otter Lake (0801-0336) Impaired Seg

Waterbody Location Information

Revised: 12/24/2004

Water Index No:	Ont 19- 60- 5-P664	**Drain Basin:**	Black River
Hydro Unit Code:	04150101/090 **Str Class:** C(T)		Black River
Waterbody Type:	Lake	**Reg/County:**	6/Lewis Co. (25)
Waterbody Size:	44.7 Acres	**Quad Map:**	BRANTINGHAM (G-19-2)
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 **Resolution Potential:** Low
TMDL/303d Status: 2a*

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 (1985-86) 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. Florence Pond (P664a) 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. Because there is no data indicating impact on the larger Little Otter Lake, 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.
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 Florence 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)

Minor Lakes Trib to Upper Otter Creek (0801-0041) Impaired Seg

Waterbody Location Information

Revised: / /

Water Index No:	Ont 19- 60-P674 thru P684	**Drain Basin:**	Black River
Hydro Unit Code:	04150101/090 **Str Class:** C(T)		Black River
Waterbody Type:	Lake	**Reg/County:**	6/Oneida Co. (33)
Waterbody Size:	69.9 Acres	**Quad Map:**	MCKEEVER (G-20-0)
Seg Description:	total area of all four 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 (1976) and ALSC (1985-85) revealed a pH <5.0 and no presence of fish. Aquatic life in this segment is considered to be impaired. This segment are included on the NYS 2006 Section 303(d) List of Impaired Waters. East Pond, Black Foot Pond, and unnamed pond (P679) are included on Part 2a of the List as an Atmospheric Deposition (Acid Rain) Water. West Pond (P675) 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.
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 East 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)

This segment includes multiple lakes/ponds within the Upper Otter Creek Watershed; including Goose Pond (P674), West Pond (P675), North Pond (P677), East Pond (P678), Little Simon Pond (P680), Blackfoot Pond (P681) and Gibbs Lake (P684). Big Otter Lake (P676) is listed separately.

Minor Tribs to Middle Black River (0801-0454) NoKnownImpct

Waterbody Location Information

Revised: 01/12/2007

Water Index No: Ont 19- 61 thru 80 **Drain Basin:** Black River
Hydro Unit Code: 04150101/100 **Str Class:** C Black River
Waterbody Type: River (Low Flow) **Reg/County:** 6/Lewis Co. (25)
Waterbody Size: 0.0 Miles **Quad Map:** BRANTINGHAM (G-19-2)
Seg Description: total length of select tribs, Pine Grove to Lyons Falls

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) assessments of a number of these minor tribs were conducted in 2002. These include House Creek in Glenfield, and Douglass Creek in Greig. Sampling results indicated water quality that ranged from non- to slightly impacted. House Creek was assessed as non-impacted, with diverse and well-balanced fauna of mayflies, stoneflies and caddisflies. Douglass Creek was assessed as slightly impacted, with a fauna dominated by filter-feeding midges and caddisflies indicating nonpoint source nutrient enrichment. In spite of some minor effects on the fauna, aquatic life support is considered to be fully supported in these streams, and there are no other apparent water quality impacts. (DEC/DOW, BWAM/SBU, June 2005)

This segment includes the total length of selected/smaller tribs to the Black River from Independence River (-57) in Pine Grove to Moose River (-81) in Lyons Falls. Tribs within this segment, including House Creek (-63), Douglass Creek (-66) and Lower Tannery Creek (-68), are primarily Class C,C(T),C(TS). Independence River (-57), Roaring Brook (-58), Whetstone Creek (-59), Otter Creek (-60), Upper Tannery Creek (-68), Fish Creek (-70), Mill Creek (-79) and Moose River (-81) are listed separately.

Fish Creek and tribs (0801-0225) NoKnownImpct

Waterbody Location Information

Revised: 01/10/2007

Water Index No:	Ont 19- 70			**Drain Basin:**	Black River
Hydro Unit Code:	04150101/080	**Str Class:**	C(TS)		Black River
Waterbody Type:	River			**Reg/County:**	6/Lewis Co. (25)
Waterbody Size:	50.9 Miles			**Quad Map:**	BRANTINGHAM (G-19-2)
Seg Description:	entire stream and tribs				

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) assessments of Fish Creek near Greig (at Fish Creek Road fishing access) were conducted in 2002 and 1996. Sampling results indicated non-impacted water quality conditions. The habitat was excellent and the fauna was dominated by mayflies, stoneflies and caddisflies. (DEC/DOW, BWAM/SBU, June 2005)

This segment includes the entire stream and all tribs. The waters of the stream are Class C,C(T),C(TS). Tribs to this reach/segment, including Brantingham Lake Outlet (-4), are Class C,C(T). Tribs to Brantingham Lake (P689) are listed separately.

Brantingham Lake (0801-0176) Need Verific

Waterbody Location Information

Revised: 09/29/2006

Water Index No: Ont 19- 70- 4-P689
Hydro Unit Code: 04150101/080 **Str Class:** A
Waterbody Type: Lake (Mesotrophic)
Waterbody Size: 326.7 Acres
Seg Description: entire lake

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

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Water Supply	Threatened	Suspected
Public Bathing	Threatened	Suspected

Type of Pollutant(s)
Known: - - -
Suspected: PATHOGENS, Nutrients
Possible: - - -

Source(s) of Pollutant(s)
Known: - - -
Suspected: FAILING ON-SITE SYST
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

Drinking water supply and recreational uses (swimming) of Brantingham Lake may be considered to be threatened by pathogens. The suspected source of possible impacts is from failing and/or inadequate on-site septic systems serving older lake front camps and residences.

Brantingham Lake has been sampled as part of the NYSDEC Citizen Statewide Lake Assessment Program (CSLAP) beginning in 2001 and 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 exceed the state guidance values indicating impacted/stressed recreational uses. Corresponding transparency measurements easily meet what is recommended for swimming beaches. Measurements of pH typically fall within the state water quality range of 6.5 to 8.5. The lake water is slightly colored, which is also typical of northwestern Adirondack Lakes. Oxygen levels do not appear to be significantly reduced at lower lake depths and internal nutrient cycling is not significant. (DEC/DOW, BWAM/CSLAP, March 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 continue to be very favorable. 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 consistent with the perceived water quality conditions in the lake and its measured water quality characteristics. Assessments have noted that aquatic plants rarely grows to the lake surface. (DEC/DOW, BWAM/CSLAP, March 2006)

This lake waterbody is designated class A, suitable for use as a water supply, public bathing beach, general recreation and aquatic life support. 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. Although CSLAP sampling does not include pathogen sampling and cannot be used to evaluate for bacterial impairment, other CSLAP parameters suggest that no other listings appear to be warranted.

The Brantingham Cottage Association (BCA) has provided coliform data that has been reviewed by DEC. Although the BCA has characterized a large percentage of these samples as "failing" to meet criteria, the criteria used for this evaluation is much more stringent than DEC water quality standards and assessment criteria. Sampling procedures and other associated metadata (to determine if the sampling data is representative of the lake as a whole) were also not available to review. Nonetheless, the apparent frequent occurrence of detectable fecal coliform suggests that an assessment of threatened is appropriate for this waterbody. (DEC/DOW, Region 6, August 2006)

In addition to continued monitoring, the lake would benefit from a strong septic management plan. Such a plan should include detailed sanitary surveys with dye testing of septic systems, site inspections and regular system maintenance requirements. (DEC/DOW, BWAM, August 2006)