

Waterbody Inventory for The Upper Hudson/Hoosic River Watershed

Water Index Number	Waterbody Segment	Category
Upper Hudson River, Main Stem, Waterford to Hadley		
H (portion 1)	Upper Hudson, Main Stem (1101-0002)	Impaired Seg
H (portion 2)	Upper Hudson, Main Stem (1101-0042)	Impaired Seg
H (portion 3)	Upper Hudson, Main Stem (1101-0043)	Impaired Seg
H (portion 4)	Upper Hudson, Main Stem (1101-0044)	Impaired Seg
H (portion 5)	Upper Hudson, Main Stem (1101-0005)	Impaired Seg
H (portion 6)	Upper Hudson, Main Stem (1101-0045)	Impaired Seg
H (portion 7)	Upper Hudson, Main Stem (1101-0046)	NoKnownImpact
H (portion 8)	Upper Hudson, Main Stem (1101-0047)	NoKnownImpact
Tribs to Upper Hudson River, Waterford to Mechanicville		
H-241 thru 261 (EOH)	Minor Tribs to East of Upper Hudson (1101-0053)	UnAssessed
H-241-1-P1072	Lansingburgh Reservoir (1101-0054)	UnAssessed
H-244 thru 263 (WOH)	Minor Tribs to West of Upper Hudson (1101-0055)	UnAssessed
H-247	Deep Kill, Lower, and tribs (1101-0056)	NoKnownImpact
H-247	Deep Kill, Upper, and tribs (1101-0057)	NoKnownImpact
H-260	Anthony Kill and minor tribs (1101-0025)	MinorImpacts
H-260- 2	Plum Brook, Upper, and tribs (1101-0058)	UnAssessed
H-260- 2-P1083	Mechanicville Reservoir (1101-0059)	UnAssessed
H-260- 6	Dwaas Kill and tribs (1101-0007)	Impaired Seg
H-260-P1089	Round Lake (1101-0060)	Need Verific
H-260-P1089-	Minor Tribs to Round Lakes (1101-0037)	UnAssessed
H-260-P1089-3	Ballston Creek and tribs (1101-0061)	UnAssessed
H-260-P1089-3-P1090	Ballston Lake (1101-0036)	MinorImpacts
H-260-P1089-3-P1090-	Tribs to Ballston Lake (1101-0062)	UnAssessed
H-260-P1089-5-P1094	Little Round Lake (1101-0063)	UnAssessed
Hoosic River Watershed		
H-264 (portion 1)	Hoosic River, Lower, Main Stem (1102-0002)	Impaired Seg
H-264 (portion 1b)/P1115	Schaghticoke Reservoir (1102-0015)	Impaired Seg
H-264 (portion 2)	Hoosic River, Middle, Main Stem (1102-0003)	Impaired Seg
H-264 (portion 3)	Hoosic River, Middle, Main Stem (1102-0016)	Impaired Seg
H-264 (portion 4)	Hoosic River, Upper, and tribs (1102-0017)	Impaired Seg
H-264 (portion 5)	Hoosic River, Upper, and minor tribs (1102-0018)	Impaired Seg
H-264- 1 thru 9 (selected)	Minor Tribs to Lower Hoosic River (1102-0019)	UnAssessed

...Upper Hudson/Hoosic Watershed

Water Index Number	Waterbody Segment	Category
Hoosic River Watershed (con't)		
H-264- 4	Tomhannock Creek, Lower, and tribs (1102-0020)	UnAssessed
H-264- 4-P1095	Tomhannock Reservoir (1102-0006)	Threat(Poss)
H-264- 4-P1095- (selected)	Minor Tribs to Tomhannock Reservoir (1102-0021)	UnAssessed
H-264- 4-P1095-1	Otter Creek and tribs (1102-0022)	UnAssessed
H-264- 4-P1095-1-6-P1103	Newcomb Pond (1102-0023)	UnAssessed
H-264- 4-P1095-3	Sunkauissia Creek and tribs (1102-0024)	UnAssessed
H-264- 4-P1095-3-6-P1109	Babcock Lake (1102-0014)	NoKnownImpct
H-264- 8	Powamppokonk/Fly Creek and tribs (1102-0025)	UnAssessed
H-264-10 thru 28 (selected)	Minor Tribs to Middle Hoosic River (1102-0004)	UnAssessed
H-264-20	Owl Kill and minor tribs (1102-0005)	NoKnownImpct
H-264-20-8	White Creek, Upper, and tribs (1102-0026)	UnAssessed
H-264-20-P1121,P1122	Lake Lauderdale, Schoolhouse Lake (1102-0011)	Need Verific
H-264-23	Walloomsac River and minor tribs (1102-0001)	NoKnownImpct
H-264-23-1	Little White Creek, Upper, and tribs (1102-0007)	UnAssessed
H-264-38	Little Hoosic River, Lower, and tribs (1102-0027)	NoKnownImpct
H-264-38	Little Hoosic River, Upper, and tribs (1102-0028)	UnAssessed
H-264-38- 5-P1127	Peckham Pond (1102-0031)	UnAssessed
H-264-38-12-P1129	Taconic (Crandall) Pond (1102-0029)	UnAssessed
H-264-38-20-P1130	Kendall Pond (1102-0030)	UnAssessed
H-264-41 thru 60 (selected)	Minor Tribs to Hoosic (Vermont drainage) (1102-0032)	UnAssessed
Tribes to Upper Hudson River, Stillwater to Schuylerville		
H-265	Schuyler Creek and tribs (1101-0093)	Impaired Seg
H-266 thru 300 (selected)	Minor Tribs to Upper Hudson (1101-0064)	UnAssessed
Fish Creek/Saratoga Lake Watershed		
H-299	Fish Creek, Lower, and tribs (1101-0065)	NoKnownImpct
H-299	Fish Creek, Upper, and tribs (1101-0066)	UnAssessed
H-299-P27	Saratoga Lake (1101-0012)	MinorImpacts
H-299-P27- (selected)	Minor Tribs to Saratoga Lake (1101-0067)	UnAssessed
H-299-P27-13	Kayaderosseras Cr, Lower, and minor trib (1101-0014)	NoKnownImpct
H-299-P27-13	Kayaderosseras Cr, Upper, and tribs (1101-0013)	Need Verific
H-299-P27-13- 1-P30	Lake Lonely (1101-0034)	Need Verific
H-299-P27-13- 1-P30- (selected)	Tribes to Lake Lonely (1101-0001)	Impaired Seg
H-299-P27-13- 1-P30-2-P35	Loughberry Lake (1101-0068)	UnAssessed
H-299-P27-13- 1-P30-2-P35-	Tribes to Loughberry Lake (1101-0069)	UnAssessed
H-299-P27-13- 1-P30-3	Bog Meadow Brook, Upper, and tribs (1101-0070)	UnAssessed
H-299-P27-13- 5	Geysier Brook and tribs (1101-0071)	Need Verific
H-299-P27-13- 5-8-P51	Granite Pond (1101-0072)	UnAssessed
H-299-P27-13- 9	Mourning Kill and tribs (1101-0073)	NoKnownImpct
H-299-P27-13-19	Glowegee Creek and tribs (1101-0074)	NoKnownImpct
H-299-P27-13-40-P71	Carp Pond (1101-0075)	UnAssessed

...Upper Hudson/Hoosic Watershed

Water Index Number	Waterbody Segment	Category
Battenkill Watershed		
H-301	Batten Kill, Lower, and minor tribs (1103-0010)	NoKnownImpct
H-301	Batten Kill, Middle, and minor tribs (1103-0011)	Impaired Seg
H-301	Batten Kill, Upper, and tribs (1103-0012)	Impaired Seg
H-301- 6	Fly Creek and tribs (1103-0013)	NoKnownImpct
H-301-17-P75	Carter Pond (1103-0014)	UnAssessed
H-301-17-P79	Cossayuna Lake (1103-0002)	Impaired Seg
H-301-17-P79-1-P80	Summit Lake (1103-0015)	UnAssessed
H-301-18-P82	McDougall Lake (1103-0016)	UnAssessed
H-301-20	Black Creek and minor tribs (1103-0017)	NoKnownImpct
H-301-20- 1	White Creek and tribs (1103-0004)	NoKnownImpct
H-301-20- 7-1-P85	Barkley Pond (1103-0018)	UnAssessed
H-301-20- 7-6-1-1a-P85a	Halls Pond (1103-0019)	UnAssessed
H-301-20- 8-P86	Scott Lake (1103-0020)	UnAssessed
H-301-20-11-P87	Smith Pond (1103-0021)	UnAssessed
H-301-20-P87a	Chamberlin Mills Pond (1103-0022)	UnAssessed
H-301-21-P88,P89	Hedges Lake, Clark Pond (1103-0023)	UnAssessed
Tribes to Upper Hudson River, Schuylerville to Hadley		
H-302 thru 317 (selected)	Minor Tribes to Upper Hudson (1101-0076)	UnAssessed
H-314	Moses Kill and tribs (1101-0077)	NoKnownImpct
H-314-20-P97b	Mud Pond (1101-0078)	UnAssessed
H-318	Snook Kill, Lower, and minor tribs (1101-0026)	MinorImpacts
H-318	Snook Kill, Upper, and tribs (1101-0079)	NoKnownImpct
H-318-1	North Branch Snook Kill and tribs (1101-0080)	Need Verific
H-318-1-3-P99	John Mack Pond (1101-0081)	UnAssessed
H-318-10-P102a	Camp Saratoga Pond (1101-0082)	UnAssessed
H-318-19-P107a	Lake Elizabeth (1101-0083)	UnAssessed
H-318-P100-2-P101	Moreau Lake (1101-0084)	NoKnownImpct
H-319 thru 343 (selected)	Minor Tribes to Upper Hudson (1101-0085)	Need Verific
H-319a	Champlain Canal (1101-0086)	UnAssessed
H-327-P109a-	Tribes to Hudson Falls water supply res (1101-0087)	UnAssessed
H-333-1	Tribes to S.Glens Falls water supply (1101-0088)	UnAssessed
H-343-P114	Keenan Reservoir (1101-0089)	UnAssessed
H-344 thru 367 (selected)	Minor Tribes to Upper Hudson (1101-0090)	UnAssessed
H-354-a-P115	Lake Bonita (1101-0091)	UnAssessed
H-363	Sturdevant Creek, Upper, and tribs (1101-0019)	UnAssessed
H-363-1-P120a	Woodland Lake (1101-0092)	UnAssessed
H-363-P119	Bullhead Pond (1101-0033)	Impaired Seg

This page intentionally left blank.

Upper Hudson, Main Stem (1101-0002)

Impaired Seg

Waterbody Location Information

Revised: 01/18/2007

Water Index No:	H (portion 1)	Drain Basin:	Upper Hudson River
Hydro Unit Code:	02020003/	Str Class:	A
Waterbody Type:	River	Reg/County:	5/Saratoga Co. (46)
Waterbody Size:	10.5 Miles	Quad Map:	TROY NORTH (J-26-4)
Seg Description:	from Waterford/Troy to near Mechanicville		

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

Use(s) Impacted	Severity	Problem Documentation
Water Supply	Threatened	Suspected
FISH CONSUMPTION	Precluded	Known

Type of Pollutant(s)

Known: PRIORITY ORGANICS (PCBs)
Suspected: ---
Possible: ---

Source(s) of Pollutant(s)

Known: ---
Suspected: ---
Possible: TOX/CONTAM. SEDIMENT, Industrial

Resolution/Management Information

Issue Resolvability:	3 (Strategy Being Implemented)	Resolution Potential: High
Verification Status:	5 (Management Strategy has been Developed)	
Lead Agency/Office:	EPA/DER	
TMDL/303d Status:	3c,4b (, more))	

Further Details

Fish consumption in this portion of the Upper Hudson River is impaired by health advisories recommending that no fish (any species) be eaten due to historic industrial discharges of PCBs to the river. The remediation of the river is the focus of a Federal Superfund dredging project. Frequent detections of phenolic compounds also threaten fish consumption as well as drinking water supply use. This reach of the Upper Hudson includes a municipal water supply withdrawal (Waterford).

Fish consumption in the Upper Hudson River from Troy Dam to Route 9 bridge in South Glens Falls is impaired due to a NYS DOH health advisory that recommends eating no fish (all species) because of elevated PCB levels. The sources of PCBs are attributed to historic industrial discharges. From approximately 1947 to 1977, the General Electric Company (GE) discharged as much as 1.3 million pounds of polychlorinated biphenyls (PCBs) from its capacitor manufacturing plants at the Hudson Falls and Fort Edward facilities into the Hudson River. In 1976, because of the concern over the bioaccumulation of PCBs in fish and other aquatic organisms and their subsequent consumption by people, the State of New York banned fishing in the Upper Hudson River and commercial fishing of striped bass, and several other species, in the Lower Hudson. In August 1995, the Upper Hudson was re-opened to fishing, but only on a catch and release basis.

(2004-05 NYS DOH Health Advisories and DEC/FWMR, Habitat, June 2004).

The approximately 200-mile stretch of the Hudson River from Hudson Falls to the Battery in New York City has since been declared a Federal Superfund site. The Upper Hudson River, an approximately 40 mile reach of the river from Hudson Falls to Troy, in Washington, Saratoga and Rensselaer Counties, is the major focus of the investigations, and is the reach that is being targeted for remediation. Previous studies identified 40 hot spots in the Upper Hudson, defined as sediments contaminated with greater than 50 parts per million (ppm) of PCBs. Also included in the site are five remnant deposits, which are river sediments that were exposed when the level of the river was lowered due to the removal of the Fort Edward Dam, in 1973.

This site is being addressed through a combination of Federal and potential responsible party actions. EPA is the lead agency for cleanup of the Hudson River PCBs Superfund site. The New York State Department of Environmental Conservation (NYSDEC) is the support agency for this project. The United States Department of Interior (Fish and Wildlife Service) and the United States Department of Commerce (National Oceanic and Atmospheric Administration) are also involved as federal trustees of natural resources. The February 2002 Record of Decision (ROD) calls for targeted environmental dredging and removal of approximately 2.65 million cubic yards of PCB-contaminated sediment from a 40-mile stretch of the Upper Hudson. In the ROD, EPA selected a plan that addresses the risks to people and the environment associated with PCBs in the sediments of the Upper Hudson River. More information regarding the remediation effort can be found on the EPA website at: <http://www.epa.gov/hudson/>.

The Town of Waterford obtains water from the Upper Hudson River; this is the only municipal water supply intake below Fort Edward and above the Troy Dam.

NYSDEC Rotating Integrated Basin Studies (RIBS) Routine Network monitoring of the Upper Hudson River in Waterford is conducted annually at the Route 4 bridge. In addition, when RIBS Intensive Network monitoring is conducted in a targeted basin every five years, additional sampling media are assessed to augment water chemistry findings and gain a broader overall assessment of water quality. During the most recent Intensive Network sampling in 2002, water chemistry, macroinvertebrate community assessment, (sampled in 2001) and toxicity testing were used to determine support of aquatic life and drinking water supply uses. In water column monitoring, high water temperatures exceeding water quality standards were measured on 33% of the 2002 sampling dates, and in 23% of the samples taken over the period from 1993-2002. However, based on resident benthic communities, water quality was assessed as non-impacted. Mayflies and caddisflies were well-represented in the 2001 sample. This indicates an improvement from slightly impacted conditions in 1988 and slightly to non-impacted conditions in 1993 and 1994. In addition, no significant mortality or reproductive impairment was found in toxicity testing. Based on these biological endpoints, water quality in this reach is considered to support its aquatic life use. However, water column chemistry shows mercury and total phenol to be parameters of concern for the drinking water supply and fish consumption use. Mercury concentrations exceeded the assessment criterion in 1 of 6 samples (17%) in 2002 and in 16% of the 50 samples collected in the period from 1993-2002 and is considered a parameter of concern. Total phenols violated the water quality standard in 3 of 6 samples (50%) in 2002, and in 42% of the 52 samples collected in the period from 1993-2002. (DEC/DOW, BWAM/SWMS, June 2005).

The most recent macroinvertebrate tissue sampling at this site was conducted in 1993. Caddisfly larvae collected at this site in 1993 showed high levels of PCBs (6400 ug/kg) greatly exceeding 1000 ug/kg provisional levels of concern. Lead and copper levels in the tissue samples were also elevated. In spite of the PCB contamination of the river and the resulting impact on fish consumption, water quality in this reach is considered to be full supporting of aquatic life uses. (DEC/DOW, BWAR/SBU, June 2005)

This portion of the Hudson is included on the NYS 2006 Section 303(d) List of Impaired Waters. The lake is included on Part 3c of the List as a Water for which TMDL Development may be Deferred (because the impairment is being addressed through other restoration measures).

This segment includes the waters of the Hudson River from the Mohawk River in Waterford to Lock 2 below Mechanicville. This portion of the Hudson River is Class A.

Upper Hudson, Main Stem (1101-0042)

Impaired Seg

Waterbody Location Information

Revised: 12/30/2005

Water Index No:	H (portion 2)	Drain Basin:	Upper Hudson River
Hydro Unit Code:	02020003/	Str Class:	C
Waterbody Type:	River	Reg/County:	5/Saratoga Co. (46)
Waterbody Size:	8.3 Miles	Quad Map:	MECHANICVILLE (J-26-1)
Seg Description:	from Mechanicville to Riverside		

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

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

Type of Pollutant(s)

Known: PRIORITY ORGANICS (PCBs)
 Suspected: ---
 Possible: ---

Source(s) of Pollutant(s)

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

Resolution/Management Information

Issue Resolvability:	3 (Strategy Being Implemented)	
Verification Status:	5 (Management Strategy has been Developed)	
Lead Agency/Office:	EPA/DER	Resolution Potential: High
TMDL/303d Status:	3c,4b (, more))	

Further Details

Fish consumption in this portion of the Upper Hudson River is impaired by health advisories recommending that no fish (any species) be eaten due to historic industrial discharges of PCBs to the river. The remediation of the river is the focus of a Federal Superfund dredging project. Other uses of the river are considered to be fully supported.

Fish consumption in the Upper Hudson River from Troy Dam to Route 9 bridge in South Glens Falls is impaired due to a NYS DOH health advisory that recommends eating no fish (all species) because of elevated PCB levels. The sources of PCBs are attributed to historic industrial discharges. From approximately 1947 to 1977, the General Electric Company (GE) discharged as much as 1.3 million pounds of polychlorinated biphenyls (PCBs) from its capacitor manufacturing plants at the Hudson Falls and Fort Edward facilities into the Hudson River. In 1976, because of the concern over the bioaccumulation of PCBs in fish and other aquatic organisms and their subsequent consumption by people, the State of New York banned fishing in the Upper Hudson River and commercial fishing of striped bass, and several other species, in the Lower Hudson. In August 1995, the Upper Hudson was re-opened to fishing, but only on a catch and release basis. (2004-05 NYS DOH Health Advisories and DEC/FWMR, Habitat, June 2004).

The approximately 200-mile stretch of the Hudson River from Hudson Falls to the Battery in New York City has since

been declared a Federal Superfund site. The Upper Hudson River, an approximately 40 mile reach of the river from Hudson Falls to Troy, in Washington, Saratoga and Rensselaer Counties, is the major focus of the investigations, and is the reach that is being targeted for remediation. Previous studies identified 40 hot spots in the Upper Hudson, defined as sediments contaminated with greater than 50 parts per million (ppm) of PCBs. Also included in the site are five remnant deposits, which are river sediments that were exposed when the level of the river was lowered due to the removal of the Fort Edward Dam, in 1973.

This site is being addressed through a combination of Federal and potential responsible party actions. EPA is the lead agency for cleanup of the Hudson River PCBs Superfund site. The New York State Department of Environmental Conservation (NYSDEC) is the support agency for this project. The United States Department of Interior (Fish and Wildlife Service) and the United States Department of Commerce (National Oceanic and Atmospheric Administration) are also involved as federal trustees of natural resources. The February 2002 Record of Decision (ROD) calls for targeted environmental dredging and removal of approximately 2.65 million cubic yards of PCB-contaminated sediment from a 40-mile stretch of the Upper Hudson. In the ROD, EPA selected a plan that addresses the risks to people and the environment associated with PCBs in the sediments of the Upper Hudson River. More information regarding the remediation effort can be found on the EPA website at: <http://www.epa.gov/hudson/>

No recent biological sampling has been conducted in this reach of the Upper Hudson. However, biological (macroinvertebrate) assessments of the Hudson River in both Schuylerville just above the reach and in Waterford just below the reach show water quality to be non-impacted. These assessments represent steady improvement over conditions of slightly impacted in the late 1980s and 1990s. Mayflies and caddisflies were well-represented in the most recent sampling. Clean-water stoneflies not previously found at these sites were found at Schuylerville in 2001. In spite of the PCB contamination of the river and the resulting impact on fish consumption, water quality in this reach is considered to be full supporting of aquatic life uses. (DEC/DOW, BWAR/SBU, June 2005)

NYSDEC Rotating Integrated Basin Studies (RIBS) Routine Network monitoring of the Upper Hudson River in Waterford is conducted annually at the Route 4 bridge. In addition, when RIBS Intensive Network monitoring is conducted in a targeted basin every five years, additional sampling media are assessed to augment water chemistry findings and gain a broader overall assessment of water quality. During the most recent Intensive Network sampling in 2002, water chemistry, macroinvertebrate community assessment, (sampled in 2001) and toxicity testing were used to determine support of aquatic life and drinking water supply uses. In water column monitoring, high water temperatures exceeding water quality standards were measured on 33% of the 2002 sampling dates, and in 23% of the samples taken over the period from 1993-2002. However, based on resident benthic communities, water quality was assessed as non-impacted. Mayflies and caddisflies were well-represented in the 2001 sample. This indicates an improvement from slightly impacted conditions in 1988 and slightly to non-impacted conditions in 1993 and 1994. In addition, no significant mortality or reproductive impairment was found in toxicity testing. Based on these biological endpoints, water quality in this reach is considered to support its aquatic life use. However, water column chemistry shows mercury and total phenol to be parameters of concern for the drinking water supply and fish consumption use. Mercury concentrations exceeded the assessment criterion in 1 of 6 samples (17%) in 2002 and in 16% of the 50 samples collected in the period from 1993-2002 and is considered a parameter of concern. Total phenols violated the water quality standard in 3 of 6 samples (50%) in 2002, and in 42% of the 52 samples collected in the period from 1993-2002. Though this sampling site is located below this segment, it is considered to be representative of water quality in the upper reach. (DEC/DOW, BWAR/SWMS, June 2005)

This portion of the Hudson is included on the NYS 2006 Section 303(d) List of Impaired Waters. The lake is included on Part 3c of the List as a Water for which TMDL Development may be Deferred (because the impairment is being addressed through other restoration measures).

This segment includes the waters of the Hudson River from Lock 2 below Mechanicville to Lock 3 in Riverside, above Mechanicville. This portion of the Hudson River is Class C.

Upper Hudson, Main Stem (1101-0043)

Impaired Seg

Waterbody Location Information

Revised: 12/30/2005

Water Index No:	H (portion 3)	Drain Basin:	Upper Hudson River
Hydro Unit Code:	02020003/	Str Class:	B
Waterbody Type:	River	Reg/County:	5/Saratoga Co. (46)
Waterbody Size:	19.4 Miles	Quad Map:	MECHANICVILLE (J-26-1)
Seg Description:	from Riverside to Schuylerville		

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

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

Type of Pollutant(s)

Known: PRIORITY ORGANICS (PCBs)
Suspected: ---
Possible: ---

Source(s) of Pollutant(s)

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

Resolution/Management Information

Issue Resolvability:	3 (Strategy Being Implemented)	
Verification Status:	5 (Management Strategy has been Developed)	
Lead Agency/Office:	EPA/DER	Resolution Potential: High
TMDL/303d Status:	3c,4b (, more))	

Further Details

Fish consumption in this portion of the Upper Hudson River is impaired by health advisories recommending that no fish (any species) be eaten due to historic industrial discharges of PCBs to the river. The remediation of the river is the focus of a Federal Superfund dredging project.

Fish consumption in the Upper Hudson River from Troy Dam to Route 9 bridge in South Glens Falls is impaired due to a NYS DOH health advisory that recommends eating no fish (all species) because of elevated PCB levels. The sources of PCBs are attributed to historic industrial discharges. From approximately 1947 to 1977, the General Electric Company (GE) discharged as much as 1.3 million pounds of polychlorinated biphenyls (PCBs) from its capacitor manufacturing plants at the Hudson Falls and Fort Edward facilities into the Hudson River. In 1976, because of the concern over the bioaccumulation of PCBs in fish and other aquatic organisms and their subsequent consumption by people, the State of New York banned fishing in the Upper Hudson River and commercial fishing of striped bass, and several other species, in the Lower Hudson. In August 1995, the Upper Hudson was re-opened to fishing, but only on a catch and release basis. (2004-05 NYS DOH Health Advisories and DEC/FWMR, Habitat, June 2004).

The approximately 200-mile stretch of the Hudson River from Hudson Falls to the Battery in New York City has since

been declared a Federal Superfund site. The Upper Hudson River, an approximately 40 mile reach of the river from Hudson Falls to Troy, in Washington, Saratoga and Rensselaer Counties, is the major focus of the investigations, and is the reach that is being targeted for remediation. Previous studies identified 40 hot spots in the Upper Hudson, defined as sediments contaminated with greater than 50 parts per million (ppm) of PCBs. Also included in the site are five remnant deposits, which are river sediments that were exposed when the level of the river was lowered due to the removal of the Fort Edward Dam, in 1973.

This site is being addressed through a combination of Federal and potential responsible party actions. EPA is the lead agency for cleanup of the Hudson River PCBs Superfund site. The New York State Department of Environmental Conservation (NYSDEC) is the support agency for this project. The United States Department of Interior (Fish and Wildlife Service) and the United States Department of Commerce (National Oceanic and Atmospheric Administration) are also involved as federal trustees of natural resources. The February 2002 Record of Decision (ROD) calls for targeted environmental dredging and removal of approximately 2.65 million cubic yards of PCB-contaminated sediment from a 40-mile stretch of the Upper Hudson. In the ROD, EPA selected a plan that addresses the risks to people and the environment associated with PCBs in the sediments of the Upper Hudson River. More information regarding the remediation effort can be found on the EPA website at: <http://www.epa.gov/hudson/>

A biological (macroinvertebrate) assessment of the Hudson River in Schuylerville was conducted in 2001 and 1993. Multiplate sampling results indicated non-impacted conditions with numerous mayflies and caddisflies. Stoneflies were noted in some samples; these clean-water indicators were not previously collected at this site indicating improving water quality. In spite of the PCB contamination of the river and its impact on fish consumption, water quality in this reach is considered to be full supporting of aquatic life uses. (DEC/DOW, BWAR/SBU, June 2005)

This portion of the Hudson is included on the NYS 2006 Section 303(d) List of Impaired Waters. The lake is included on Part 3c of the List as a Water for which TMDL Development may be Deferred (because the impairment is being addressed through other restoration measures).

This segment includes the waters of the Hudson River from Lock 3 in Riverside, above Mechanicville, to the Batten Kill (-301) near Schuylerville.

Upper Hudson, Main Stem (1101-0044)

Impaired Seg

Waterbody Location Information

Revised: 12/30/2005

Water Index No:	H (portion 4)	Drain Basin:	Upper Hudson River
Hydro Unit Code:	02020003/	Str Class:	C
Waterbody Type:	River	Reg/County:	5/Saratoga Co. (46)
Waterbody Size:	28.1 Miles	Quad Map:	FORT MILLER (I-26-2)
Seg Description:	from Schuylerville Glens Falls		

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

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

Type of Pollutant(s)

Known: PRIORITY ORGANICS (PCBs)
Suspected: ---
Possible: ---

Source(s) of Pollutant(s)

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

Resolution/Management Information

Issue Resolvability:	3 (Strategy Being Implemented)	
Verification Status:	5 (Management Strategy has been Developed)	
Lead Agency/Office:	EPA/DER	Resolution Potential: High
TMDL/303d Status:	3c*,4b (, more))	

Further Details

Fish consumption in this portion of the Upper Hudson River is impaired by health advisories recommending that no fish (any species) be eaten due to historic industrial discharges of PCBs to the river. The remediation of the river is the focus of a Federal Superfund dredging project. Other uses of the river are considered to be fully supported.

Fish consumption in the Upper Hudson River from Troy Dam to Route 9 bridge in South Glens Falls is impaired due to a NYS DOH health advisory that recommends eating no fish (all species) because of elevated PCB levels. The sources of PCBs are attributed to historic industrial discharges. From approximately 1947 to 1977, the General Electric Company (GE) discharged as much as 1.3 million pounds of polychlorinated biphenyls (PCBs) from its capacitor manufacturing plants at the Hudson Falls and Fort Edward facilities into the Hudson River. In 1976, because of the concern over the bioaccumulation of PCBs in fish and other aquatic organisms and their subsequent consumption by people, the State of New York banned fishing in the Upper Hudson River and commercial fishing of striped bass, and several other species, in the Lower Hudson. In August 1995, the Upper Hudson was re-opened to fishing, but only on a catch and release basis. (2004-05 NYS DOH Health Advisories and DEC/FWMR, Habitat, June 2004).

The approximately 200-mile stretch of the Hudson River from Hudson Falls to the Battery in New York City has since

been declared a Federal Superfund site. The Upper Hudson River, an approximately 40 mile reach of the river from Hudson Falls to Troy, in Washington, Saratoga and Rensselaer Counties, is the major focus of the investigations, and is the reach that is being targeted for remediation. Previous studies identified 40 hot spots in the Upper Hudson, defined as sediments contaminated with greater than 50 parts per million (ppm) of PCBs. Also included in the site are five remnant deposits, which are river sediments that were exposed when the level of the river was lowered due to the removal of the Fort Edward Dam, in 1973.

This site is being addressed through a combination of Federal and potential responsible party actions. EPA is the lead agency for cleanup of the Hudson River PCBs Superfund site. The New York State Department of Environmental Conservation (NYSDEC) is the support agency for this project. The United States Department of Interior (Fish and Wildlife Service) and the United States Department of Commerce (National Oceanic and Atmospheric Administration) are also involved as federal trustees of natural resources. The February 2002 Record of Decision (ROD) calls for targeted environmental dredging and removal of approximately 2.65 million cubic yards of PCB-contaminated sediment from a 40-mile stretch of the Upper Hudson. In the ROD, EPA selected a plan that addresses the risks to people and the environment associated with PCBs in the sediments of the Upper Hudson River. More information regarding the remediation effort can be found on the EPA website at: <http://www.epa.gov/hudson/>

A biological (macroinvertebrate) assessment of the Hudson River above Fort Edward and in Schuylerville was conducted most recently in 2001. Sampling results indicated non-impacted conditions at the Fort Edward site in 2001, which was an improvement over non- to slightly impacted conditions in 1993. Multiplate sampling in Schuylerville was also assessed as non-impacted in 2001. Mayflies and caddisflies were numerous at both sites in the 2001 samples and stoneflies were noted in some samples. These clean-water indicators were not previously collected at the Schuylerville site, indicating improving water quality. In spite of the PCB contamination of the river and its impact on fish consumption, water quality in this reach is considered to be full supporting of aquatic life uses. (DEC/DOW, BWAR/SBU, June 2005)

This portion of the Hudson is proposed for inclusion on the NYS 2008 Section 303(d) List of Impaired Waters.

This segment includes the waters of the Hudson River from the Batten Kill (-301) near Schuylerville to a point 0.25 miles above the falls in Glens Falls.

This portion of the Hudson is proposed for inclusion on the NYS 2008 Section 303(d) List of Impaired Waters.

This segment includes the waters of the Hudson River from a point 0.25 miles above the falls in Glens Falls to the Sherman Island Dam above Glens Falls.

Upper Hudson, Main Stem (1101-0045)

Impaired Seg

Waterbody Location Information

Revised: 12/30/2005

Water Index No:	H (portion 6)	Drain Basin:	Upper Hudson River
Hydro Unit Code:	02020003/	Str Class:	A
Waterbody Type:	River	Reg/County:	5/Saratoga Co. (46)
Waterbody Size:	3.7 Miles	Quad Map:	GLENS FALLS (H-26-4)
Seg Description:	from Sherman Isl Dam abv Glens Falls to Spier Falls Dam		

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

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

Type of Pollutant(s)
 Known: METALS (mercury)
 Suspected: ---
 Possible: ---

Source(s) of Pollutant(s)
 Known: ---
 Suspected: ATMOSPHERIC DEPOSITION
 Possible: ---

Resolution/Management Information

Issue Resolvability:	1 (Needs Verification/Study (see STATUS))	
Verification Status:	3 (Cause Identified, Source Unknown)	
Lead Agency/Office:	DEC/FWMR	Resolution Potential: Low
TMDL/303d Status:	2b (Multiple Segment/Categorical Water, Fish Consumption))	

Further Details

Fish consumption in this reach of the Upper Hudson River is impaired due to a NYS DOH health advisory that recommends eating no more than one meal per month of larger (over 14 inch) smallmouth bass because of elevated mercury levels. The source of the mercury contamination is generally thought to be from atmospheric deposition. (2005-06 NYS DOH Health Advisories and DEC/FWMR, Habitat, October 2005)

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

This segment is above the portion of the Hudson River affected by the historic discharge of PCBs from General Electric facilities in Hudson Falls and Fort Edward.

This segment includes the waters of the Hudson River from the Sherman Island Dam above Glens Falls to the Spier Falls Dam below Corinth.

Upper Hudson, Main Stem (1101-0046)

NoKnownImpct

Waterbody Location Information

Revised: 02/10/2006

Water Index No: H (portion 7) **Drain Basin:** Upper Hudson River
Hydro Unit Code: 02020003/ **Str Class:** C Upper Hudson-Hoosic
Waterbody Type: River **Reg/County:** 5/Saratoga Co. (46)
Waterbody Size: 5.3 Miles **Quad Map:** CORINTH (I-25-2)
Seg Description: from Spier Falls Dam to Corinth

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

Use(s) Impacted	Severity	Problem Documentation
NO USE IMPAIRMNT		

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

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

Resolution/Management Information

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

Resolution Potential:

Further Details

NYSDEC Rotating Integrated Basin Studies (RIBS) Routine Network monitoring of the Upper Hudson River in Corinth is conducted annually at the River Street bridge. In addition when RIBS Intensive Network monitoring is conducted in a targeted basin every five years, additional sampling media are assessed to augment water chemistry findings and gain a broader overall assessment of water quality. During the most recent Intensive Network sampling in 2002, water chemistry, macroinvertebrate community assessment (sampled in 2001), invertebrate tissue chemistry, sediment analysis and toxicity testing were used to determine support of aquatic life uses. Biological sampling found mayflies and caddisflies to be well-represented in the 2001 sample. This represents an improvement from slightly impacted conditions in 1988 and slightly to non-impacted conditions in 1993 and 1994. Water column sampling revealed mercury and phenols to be present in concentrations above assessment criteria indicating a parameter of concern. No significant mortality or reproductive impairment was found in toxicity testing. Based on these biological endpoints, water quality in this reach is considered to support its aquatic life use. However mercury and total phenol levels in the water suggest possible impacts on fish consumption. A general advisory for limiting the consumption of sportfish from all waters of the state is in place due to the common occurrence of some chemicals (such as mercury and PCBs) in fish, the inability to test all waters and the possibility of other unidentified contaminants. Regarding mercury, there are additional advisories for women and children further restricting consumption of fish from waters of the Adirondacks and Catskills.

This sampling site is located just upstream of the segment and is considered to be representative of water quality. (DEC/DOW, BWAR/RIBS, June 2005)

Macroinvertebrate tissue samples collected in 1993 and 1994 showed slightly elevated levels of titanium and detectable levels of methoxychlor; no other metals, organochlorine pesticides or PCBs were detected. In spite of these minor impacts, water quality in this reach is considered to be full supporting of aquatic life. (DEC/DOW, BWAR/SBU, June 2005)

This segment includes the waters of the Hudson River from the Spier Falls Dam below Corinth to the dam in Corinth.

Upper Hudson, Main Stem (1101-0047)

NoKnownImpct

Waterbody Location Information

Revised: 02/10/2006

Water Index No: H (portion 8)	Drain Basin: Upper Hudson River	
Hydro Unit Code: 02020003/	Str Class: B	Upper Hudson-Hoosic
Waterbody Type: River	Reg/County: 5/Saratoga Co. (46)	
Waterbody Size: 5.8 Miles	Quad Map: LAKE LUZERNE (H-25-3)	
Seg Description: from Corinth to Hadley		

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

Use(s) Impacted	Severity	Problem Documentation
NO USE IMPAIRMNT		

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

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

Resolution/Management Information

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

Resolution Potential:

Further Details

NYSDEC Rotating Integrated Basin Studies (RIBS) Routine Network monitoring of the Upper Hudson River in Corinth is conducted annually at the River Street bridge. In addition when RIBS Intensive Network monitoring is conducted in a targeted basin every five years, additional sampling media are assessed to augment water chemistry findings and gain a broader overall assessment of water quality. During the most recent Intensive Network sampling in 2002, water chemistry, macroinvertebrate community assessment (sampled in 2001), invertebrate tissue chemistry, sediment analysis and toxicity testing were used to determine support of aquatic life uses. Biological sampling found mayflies and caddisflies to be well-represented in the 2001 sample. This represents an improvement from slightly impacted conditions in 1988 and slightly to non-impacted conditions in 1993 and 1994. Water column sampling revealed mercury and phenols to be present in concentrations above assessment criteria indicating a parameter of concern. No significant mortality or reproductive impairment was found in toxicity testing. Based on these biological endpoints, water quality in this reach is considered to support its aquatic life use. However mercury and total phenol levels in the water suggest possible impacts on fish consumption. A general advisory for limiting the consumption of sportfish from all waters of the state is in place due to the common occurrence of some chemicals (such as mercury and PCBs) in fish, the inability to test all waters and the possibility of other unidentified contaminants. Regarding mercury, there are additional advisories for women and children further restricting consumption of fish from waters of the Adirondacks and Catskills.

(DEC/DOW, BWAR/RIBS, June 2005)

Macroinvertebrate tissue samples collected in 1993 and 1994 showed slightly elevated levels of titanium and detectable levels of methoxychlor; no other metals, organochlorine pesticides or PCBs were detected. In spite of these minor impacts, water quality in this reach is considered to be full supporting of aquatic life. (DEC/DOW, BWAR/SBU, June 2005)

This segment includes the waters of the Hudson River from the dam in Corinth to the Sacandaga River in Hadley.

Deep Kill, Lower, and tribs (1101-0056)

NoKnownImpct

Waterbody Location Information

Revised: 07/05/2005

Water Index No:	H-247	Drain Basin:	Upper Hudson River
Hydro Unit Code:	02020003/250	Str Class:	C(T)
Waterbody Type:	River	Reg/County:	4/Rensselaer Co. (42)
Waterbody Size:	11.6 Miles	Quad Map:	TROY NORTH (J-26-4)
Seg Description:	stream and tribs from mouth to Grant Hollow		

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:
TMDL/303d Status:	n/a ()	

Further Details

A biological (macroinvertebrate) assessment of Deep Kill in Grant Hollow (at Grant Hollow Road) was conducted in 2001. Sampling results indicated non-impacted water quality conditions. The stream showed evidence of nonpoint source nutrient enrichment, but faunal metrics were within the range of non-impact. No prior data were available for the stream. (DEC/DOW, BWAR/SBU, June 2005)

This segment includes the portion of the stream and all tribs from the mouth to the unnamed pond (P1073) just above Grant Hollow. The waters of the stream are Class C,C(T). Tribs to this reach are also Class C,C(T).

Deep Kill, Upper, and tribs (1101-0057)

NoKnownImpct

Waterbody Location Information

Revised: 07/05/2005

Water Index No: H-247
Hydro Unit Code: 02020003/250 **Str Class:** A
Waterbody Type: River
Waterbody Size: 15.8 Miles
Seg Description: stream and tribs above Grant Hollow

Drain Basin: Upper Hudson River
Upper Hudson-Hoosic
Reg/County: 4/Rensselaer Co. (42)
Quad Map: TOMHANNOCK (J-26-3)

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

Use(s) Impacted	Severity	Problem Documentation
NO USE IMPAIRMNT		

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

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

Resolution/Management Information

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

Resolution Potential:

Further Details

A biological (macroinvertebrate) assessment of Deep Kill in Grant Hollow (at Grant Hollow Road) was conducted in 2001. Sampling results indicated non-impacted water quality conditions. The stream showed evidence of nonpoint source nutrient enrichment, but faunal metrics were within the range of non-impact. 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, BWAR/SBU, June 2005)

This segment includes the portion of the stream and all tribs above the unnamed pond (P1073) just above Grant Hollow (P1073). The waters of the stream are Class A. Tribs to this reach are also Class A.

Anthony Kill and minor tribs (1101-0025)

MinorImpacts

Waterbody Location Information

Revised: 11/06/2006

Water Index No: H-260
Hydro Unit Code: 02020003/240 **Str Class:** C
Waterbody Type: River
Waterbody Size: 33.1 Miles
Seg Description: entire stream and selected/smaller tribs

Drain Basin: Upper Hudson River
Upper Hudson-Hoosic
Reg/County: 5/Saratoga Co. (46)
Quad Map: MECHANICVILLE (J-26-1)

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

Use(s) Impacted	Severity	Problem Documentation
Recreation	Stressed	Known

Type of Pollutant(s)

Known: PATHOGENS
Suspected: Aesthetics (floatables)
Possible: ---

Source(s) of Pollutant(s)

Known: COMB. SEWER OVERFLOW, URBAN RUNOFF
Suspected: ---
Possible: ---

Resolution/Management Information

Issue Resolvability: 2 (Strategy Exists, Needs Funding/Resources)
Verification Status: 5 (Management Strategy has been Developed)
Lead Agency/Office: DOW/BWP
TMDL/303d Status: n/a ()

Resolution Potential: High

Further Details

Recreational uses in the Anthony Kill experience minor impacts to water quality due to elevated levels of pathogens. Combined sewer overflows (CSOs) in Mechanicville are presumed to be the likely source.

NYSDEC Rotating Integrated Basin Studies (RIBS) monitoring of the Anthony Kill in Mechanicville was conducted in 2001 and 2002. In 2001 biological screening, the macroinvertebrate community at two sites in Mechanicville was found to be well-balanced, and contain large numbers of clean-water mayflies. Screening for acute toxicity indicated slight sediment toxicity, but no porewater toxicity, to be present. In 2002 intensive sampling, water quality, as determined by macroinvertebrate community assessment, was again considered to be non-impacted. Of analyzed water column parameters, only iron was found in concentrations above assessment criteria, and this is not believed to affect designated uses for this waterbody. Elevated coliform results support the concern regarding area CSOs. Macroinvertebrates collected at this site and chemically analyzed for contaminants show no organochlorine pesticides, PAHs, or PCBs present in concentrations above established guidance values. Sediments contain some contaminants in concentrations that may be of concern, but based on sediment quality guidelines developed for freshwater ecosystems, overall sediment quality is not likely to cause chronic toxicity to sediment-dwelling organisms. Chronic toxicity testing using water from this location shows no significant mortality or reproductive effects on the test organism. Based on the consensus of these

established assessment methods, overall water quality at this site shows minor impacts, but supports its aquatic life and recreation uses. (DEC/DOW, BWAM/RIBS, June 2005).

This segment includes the entire stream and selected/smaller tribs, from the mouth to Round Lake. The waters of the stream are Class C,C(T). Tribs to this reach/segment, including Lower Plum Brook (-2), are Class C,C(T). Upper Plum Brook (-2) and Dwaas Kill (-6) are listed separately.

Dwaas Kill and tribs (1101-0007)

Impaired Seg

Waterbody Location Information

Revised: 11/06/2006

Water Index No:	H-260- 6	Drain Basin:	Upper Hudson River
Hydro Unit Code:	02020003/240	Str Class:	C(T)
Waterbody Type:	River	Reg/County:	5/Saratoga Co. (46)
Waterbody Size:	43.6 Miles	Quad Map:	ROUND LAKE (J-25-2)
Seg Description:	entire stream and tribs		

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

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

Type of Pollutant(s)

Known: NUTRIENTS (Phosphorus)
 Suspected: SILT/SEDIMENT, Pathogens
 Possible: - - -

Source(s) of Pollutant(s)

Known: - - -
 Suspected: CONSTRUCTION, URBAN RUNOFF, Failing On-Site Syst
 Possible: - - -

Resolution/Management Information

Issue Resolvability:	1 (Needs Verification/Study (see STATUS))	
Verification Status:	3 (Cause Identified, Source Unknown)	
Lead Agency/Office:	DOW/Reg5	Resolution Potential: Medium
TMDL/303d Status:	1 (Individual Waterbody Impairment Requiring a TMDL)	

Further Details

Recreational uses and aquatic life support in the Dwaas Kill is impaired by nutrient enrichment and elevated levels of pathogens attributed to urban/stormwater runoff and possible failing/inadequate on-site wastewater treatment systems.

NYSDEC Rotating Integrated Basin Studies (RIBS) monitoring of the Dwaas Kill in the town of Halfmoon hamlet of Ushers, was conducted in 2001 and 2002. In 2001 biological screening, the macroinvertebrate community was found to be moderately impacted, while in 2002, slight impact was indicated. In both years, filter-feeding caddisflies and algal-scraping riffle beetles were dominant, and nutrient enrichment was shown to be the primary factor affecting the fauna. Screening for acute toxicity indicated moderate sediment toxicity to be present. In 2002 intensive sampling, mercury was found in the water column in concentrations above the assessment criterion indicating a parameter of concern. Macroinvertebrates collected at this site and chemically analyzed for metals, organochlorine pesticides, PAHs, and PCBs, contained zinc in concentrations above established guidance values, but no sediments were found to contain contaminants that exceeded the threshold effects concentration, indicating a low likelihood of toxicity to sediment-dwelling organisms. Chronic toxicity testing using water from this location shows no significant mortality or reproductive effects on the test organism. However, based on a moderately impacted macroinvertebrate community, and

the presence of moderate acute sediment toxicity, water quality at this location is not considered to support its aquatic life use. Mercury levels in the water also suggest possible impacts on fish consumption. A general advisory for limiting the consumption of sportfish from all waters of the state is in place due to the common occurrence of some chemicals (such as mercury and PCBs) in fish, the inability to test all waters and the possibility of other unidentified contaminants. (DEC/DOW, BWAM/RIBS, June 2005).

Biological (macroinvertebrate) assessments of an additional site on the Dwaas Kill in Clifton Park (at Vischer Ferry Road) was conducted in 2000. Water quality of the stream at this site was assessed as slightly impacted. Nonpoint source nutrient enrichment was the primary stressor. (DEC/DOW, BWAR/SBU, July 2002)

Water quality impacts on the fishery due to silt and sedimentation from construction activities have been noted in previous assessments of the stream and its tribs. The watershed is subject to considerable residential and commercial development pressures. The regional staff indicates that inadequate stormwater controls (predating the Phase II stormwater effort) result in sedimentation in the streams. Sewage discharges from commercial and residential areas have been noted in the past. Because of this past history, impacts from inadequate and/or failing on-site septic systems is listed as a possible source of pollutants.

Dwaas Kill and tribs is included on the NYS 2006 Section 303(d) List of Impaired Waters. The lake is included on Part 1 of the List as a waterbody segment requiring the development of a TMDL or other strategy to attain water quality standards for phosphorus and silt/sediment.

This segment includes the entire stream and all tribs. The waters of the stream are Class C,C(T). Tribs to this reach/segment, including Long Kill (-3) and Cooley Kill (-4), are Class C,C(T),C(TS).

Round Lake (1101-0060)

Need Verific

Waterbody Location Information

Revised: 02/08/2007

Water Index No:	H-260-P1089	Drain Basin:	Upper Hudson River
Hydro Unit Code:	02020003/240	Str Class:	B
Waterbody Type:	Lake	Reg/County:	5/Saratoga Co. (46)
Waterbody Size:	320.1 Acres	Quad Map:	ROUND LAKE (J-25-2)
Seg Description:	entire lake		

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

Use(s) Impacted	Severity	Problem Documentation
Recreation	Stressed	Possible

Type of Pollutant(s)
 Known: ---
 Suspected: ---
 Possible: OTHER POLLUTANTS

Source(s) of Pollutant(s)
 Known: ---
 Suspected: ---
 Possible: OTHER SOURCE

Resolution/Management Information

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

Further Details

Various potential sources of impacts to this waterbody have been identified in previous assessments. However, actual impacts to uses need to be verified/reverified. Previous assessments indicate that: Bathing, fish propagation and aesthetics are impaired by high water levels flooding public beach and spawning areas and dislodging vegetative debris/scum. Beaver dams have raised water level by approximately 2 1/2 feet. A proposed public beach improvement project is funded except for sewer connection. Investigation of a fish kill in spring of 1993 noted spawning areas of largemouth bass are under stress. Construction (Lakehill Estates) threatens bathing and aesthetics due to siltation and urban runoff. Lawn pesticides and fertilizers from same area threaten fish survival.

This segment includes the total length of selected/smaller tribs to Round Lake and Little Round Lake.

Ballston Lake (1101-0036)

MinorImpacts

Waterbody Location Information

Revised: 12/04/2006

Water Index No:	H-260-P1089-3-P1090	Drain Basin:	Upper Hudson River
Hydro Unit Code:	02020003/240	Str Class:	A
Waterbody Type:	Lake	Reg/County:	5/Saratoga Co. (46)
Waterbody Size:	277.7 Acres	Quad Map:	ROUND LAKE (J-25-2)
Seg Description:	entire lake		

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

Use(s) Impacted	Severity	Problem Documentation
Water Supply	Threatened	Known
Public Bathing	Stressed	Known
Recreation	Stressed	Known

Type of Pollutant(s)

Known: ALGAL/WEED GROWTH, NUTRIENTS (phosphorus)
 Suspected: Silt/Sediment
 Possible: Water Level/Flow

Source(s) of Pollutant(s)

Known: - - -
 Suspected: FAILING ON-SITE SYST, STREAMBANK EROSION
 Possible: Agriculture, Hydro Modification, Urban Runoff

Resolution/Management Information

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

Further Details

Water supply, public bathing and some recreational uses (swimming, fishing, boating) in Ballston Lake are known experience minor impacts to water quality due to nutrient (phosphorus) enrichment in this eutrophic lake. The primary source of these impacts are nonpoint runoff of nutrients and sediment from the lake watershed. While assessments in recent years have suggested greater impacts, it is not clear whether these conditions represent a short-term (perhaps weather related) phenomenon or is indicative of a more permanent long-term trend. The current assessment is that uses continue to be fully supported in the lake, in spite of minor impacts.

Ballston Lake has been sampled as part of the NYSDEC Citizen Statewide Lake Assessment Program (CSLAP) since 1991 through 2005. An Interpretive Summary report of the findings of this sampling was published in 2006. These data indicate that the lake continues to be best characterized as eutropic, or highly productive. Phosphorus levels in the lake regularly exceed the threshold for "stressed" recreational uses. However transparency measurements show lake clarity to exceed what is recommended for swimming beaches. Deep water nutrient levels are very high, but it does not appear that these nutrients mix with surface waters (or they are either dissipated or substantially reduced by the time the lake

turns over in the fall. Most other water quality measurements (color, conductivity, nitrate, ammonia, etc) do not appear to warrant significant concerns. However deep water ammonia levels are elevated and would be a threat to drinking waters use if a supply were to be drawn from deeper in the lake. (DEC/DOW, BWAM/CSLAP, May 2006)

Public perception of the lake and its uses is also evaluated as part of the CSLAP program. These assessment also show the lake to be generally supportive of recreational uses, with the lake being described as "excellent" to "slightly impacted" for most uses. Assessments have been somewhat less favorable in more recent years, primarily due to less than favorable weather conditions. Weed growth is not dense enough to have an impact of recreational uses or aesthetic quality of the lake. For many lake associations, this is the ideal situation: limited aquatic vegetation that does not hinder swimming or boating, but that is adequate to support a sports fishery. (DEC/DOW, BWAM/CSLAP, May 2006)

Copper sulfate, has been applied to the lake annually (in June) for at least the last 20 years in order to reduce algal blooms. While many feel this is an effective way to reduce algae, others are certain of the effectiveness of this practice or of the long-term effects on the aquatic community, including a previously excellent bass, walleye and pike fishery. There are also concerns regarding the threat of invasive species and residents routinely conduct hand-harvesting activities to address impacts from aquatic plant populations. (Saratoga County SWCD, 2006)

Another specific source of nutrients to the lake that is currently being addressed by NYSDEC through enforcement action is the wastewater discharge from a local restaurant (Carney's Restaurant). This facility continues to operate with a failed septic tank/sand filter system that discharges partially wastewater to a tributary of Ballston Lake. The restaurant has a long history (10-plus years) of non-compliance . (DEC/DOW, Reg 5, December 2006)

Previous assessments have indicated that the lake outlet is clogged by beaver dams, fallen trees, sediment and massive amounts of water willow and other weeds. As a result seasonally high water levels (6-8") cause flooding with shoreline erosion and inundation of private septic systems. BLIA members have been clearing the existing channel by hand, but once opened up it really needs to be dredged. Town of Ballston has agreed to match funds to rent Army Corps amphibious backhoe to dredge channel and dig ponds in wetland for improved storage of stormwater to more rapidly drain Lake after heavy rain and snowmelt. (Ballston Lake Improvement Association, 1996)

Hoosic River, Lower, Main Stem (1102-0002)

Impaired Seg

Waterbody Location Information

Revised: 11/06/2006

Water Index No: H-264 (portion 1) **Drain Basin:** Upper Hudson River
Hydro Unit Code: 02020003/230 **Str Class:** B Upper Hudson-Hoosic
Waterbody Type: River **Reg/County:** 4/Rensselaer Co. (42)
Waterbody Size: 15.8 Miles **Quad Map:** SCHAGHTICOKE (J-26-2)
Seg Description: from mouth to Johnsonville Dam

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: PRIORITY ORGANICS (PCBs)
Suspected: Nutrients, Silt/Sediment
Possible: Water Level/Flow

Source(s) of Pollutant(s)

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

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))
Verification Status: 4 (Source Identified, Strategy Needed)
Lead Agency/Office: DEC/FWMR **Resolution Potential:** Medium
TMDL/303d Status: 2b (Multiple Segment/Categorical Water, Fish Consumption))

Further Details

Fish consumption in the Hoosic River is impaired due to a NYS DOH health advisory that recommends eating no more than one meal per month of larger brown trout (over 14 inches) because of elevated PCB levels. Past/historical industrial discharges are considered to be the most likely source of the contamination. (2004-05 NYS DOH Health Advisories).

Biological (macroinvertebrate) assessments at various sites along the Hoosic River reveal generally slightly impacted water quality. Most recent sampling has focused on sites upstream of this reach. Sampling at Eagle Bridge, about 10 miles upstream of this reach, in 2001 found conditions to be slightly impacted by silt and nonpoint source nutrient enrichment. Similar conditions were noted in 1993. The most recent sampling within this reach occurred in the 1980s (in Johnsonville, Valley Falls and Schaghticoke) and also resulted in assessment of slightly impacted conditions. (DEC/DOW, SWMS/SBU, June 2005)

Discharges of raw sewage into the river from the unsewered village of Valley Falls has been a long-standing problem. However, a small municipal wastewater treatment facility has been constructed to serve the village. Homes in the center of the village have been connected to the facility; remaining residences are expected to be hook-up by the end of the

summer (DEC/DOW, Region 4, June 2005)

Hydrologic fluctuations in the river related to the operation of the Johnsonville Hydropower facility and impoundment in Johnsonville have in the past restricted largemouth bass spawning and recruitment (1986 Johnsonville Reservoir Fisheries Survey and Management Recommendation, McBride). However, more recently DEC Fisheries staff has indicated that there are no problems at the present time as draw downs will be limited to one foot or less. The James Thompson hydro project in Valley Falls is also located along this reach. (DEC/DFWMR, Region 4, 1996)

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

This segment includes the waters of the Hoosic River from the mouth at the Hudson to the Johnsonville Reservoir Dam in Johnsonville. This portion of the Hoosic River is Class B,B(T).

Schaghticoke Reservoir (1102-0015)

Impaired Seg

Waterbody Location Information

Revised: 11/06/2006

Water Index No: H-264 (portion 1b)/P1115
Hydro Unit Code: 02020003/230 **Str Class:** C
Waterbody Type: Lake(R)
Waterbody Size: 147.3 Acres
Seg Description: entire reservoir

Drain Basin: Upper Hudson River
Upper Hudson-Hoosic
Reg/County: 4/Rensselaer Co. (42)
Quad Map: SCHAGHTICOKE (J-26-2)

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: PRIORITY ORGANICS (PCBs)
Suspected: ---
Possible: ---

Source(s) of Pollutant(s)

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

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))
Verification Status: 4 (Source Identified, Strategy Needed)
Lead Agency/Office: DEC/FWMR **Resolution Potential:** Medium
TMDL/303d Status: 2b (Multiple Segment/Categorical Water, Fish Consumption))

Further Details

Fish consumption in the Hoosic River, including the Schaghticoke Reservoir, is impaired due to a NYS DOH health advisory that recommends eating no more than one meal per month of larger brown trout (over 14 inches) because of elevated PCB levels. Past/historical industrial discharges are considered to be the most likely source of the contamination. (2004-05 NYS DOH Health Advisories).

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

Hoosic River, Middle, Main Stem (1102-0003)

Impaired Seg

Waterbody Location Information

Revised: 11/06/2006

Water Index No: H-264 (portion 2) **Drain Basin:** Upper Hudson River
Hydro Unit Code: 02020003/230 **Str Class:** B Upper Hudson-Hoosic
Waterbody Type: River **Reg/County:** 4/Rensselaer Co. (42)
Waterbody Size: 13.1 Miles **Quad Map:** EAGLE BRIDGE (J-27-1)
Seg Description: from Johnsonville Dam to Walloomsac River

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: PRIORITY ORGANICS (PCBs)
Suspected: Nutrients, Silt/Sediment
Possible: Water Level/Flow

Source(s) of Pollutant(s)

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

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))
Verification Status: 4 (Source Identified, Strategy Needed)
Lead Agency/Office: DEC/FWMR **Resolution Potential:** Medium
TMDL/303d Status: 2b (Multiple Segment/Categorical Water, Fish Consumption))

Further Details

Fish consumption in the entire Hoosic River, including this reach, is impaired by PCBs attributed to past/historic discharges and sediments. Aquatic life support is thought to experience minor impacts to water quality due to silt, sediment and nutrient enrichment from agricultural activity and other nonpoint sources within the watershed.

Fish consumption in the Hoosic River is impaired due to a NYS DOH health advisory that recommends eating no more than one meal per month of larger brown trout (over 14 inches) because of elevated PCB levels. Past/historical industrial discharges are considered to be the most likely source of the contamination. (2004-05 NYS DOH Health Advisories).

Biological (macroinvertebrate) assessments at various sites along the Hoosic River reveal generally slightly impacted water quality. Sampling at Eagle Bridge in 2004 and 2001 found conditions to be slightly impacted by silt and nonpoint source nutrient enrichment. Similar conditions were noted in 1993. Sampling in Hoosick Junction and Hoosick Falls in 2001 also reveal similar conditions at these sites just upstream of the reach. In spite of these minor impacts, aquatic life is considered to be fully supported in the stream. (DEC/DOW, SWMS/SBU, June 2005)

In 2001, a large spill of copper sulfate from the Oak Mitsui plant in Hoosick Falls was investigated to determine the extent of damage to aquatic invertebrate life. The damage to resident macroinvertebrate communities in the river appeared to be slight, but significant. Although all sites downstream of the spill maintained populations of stoneflies, caddisflies, hellgrammites, and crayfish, populations of mayflies were greatly depleted downstream of Hoosick Falls. Midge populations were also greatly reduced. The estimated recovery time for community impact was one year. Copper levels in invertebrate tissues increased an average of 85% downstream of the spill, and exceeded levels of concern. The site at Eagle Bridge was assessed as slightly impacted in the 2001 sampling. This site had been assessed as non-impacted in 1993 macroinvertebrate sampling, but was slightly impacted in samplings before then. (DEC/DOW, BWAM/SBU and Region 4, June 2004)

Recent (2006) sampling by the Hoosick River Watershed Association pointed to impacts downstream of Hoosick Falls that were similar to those found following the 2001 spill of copper sulfate. Some improvement was found 2 miles downstream at Eagle Bridge. Subsequent investigation by DEC Regional Fisheries staff found no evidence of a fish kill or any other impacts to the fishery. Important indicator species including stoneflies, mayflies, caddisflies beetles, midges and true flies were present at each station sampled. DEC staff believe there was likely some temporary impacts due to an unknown source, however the river appears to have bounced back satisfactorily. Continued monitoring is recommended. (DEC/DFWMR, Reg 4 and DEC/DOW, BWAM/SBU, December 2006)

This waterbody is included on the NYS 2006 Section 303(d) List of Impaired Waters. The lake was included on Part 2b of the List as a Fish Consumption Water. This segment includes the waters of the Hoosic River from the Johnsonville Reservoir Dam in Johnsonville to the Walloomsac River (-23) in North Hoosic. This portion of the Hoosic River is Class B,B(T).

Hoosic River, Middle, Main Stem (1102-0016)

Impaired Seg

Waterbody Location Information

Revised: 11/06/2006

Water Index No: H-264 (portion 3) **Drain Basin:** Upper Hudson River
Hydro Unit Code: 02020003/230 **Str Class:** C(T) Upper Hudson-Hoosic
Waterbody Type: River **Reg/County:** 4/Rensselaer Co. (42)
Waterbody Size: 3.9 Miles **Quad Map:** HOOSICK FALLS (J-27-2)
Seg Description: from Walloomsac River to Hoosic Falls

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: PRIORITY ORGANICS (PCBs)
Suspected: Nutrients
Possible: Water Level/Flow

Source(s) of Pollutant(s)

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

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))
Verification Status: 4 (Source Identified, Strategy Needed)
Lead Agency/Office: DEC/FWMR **Resolution Potential:** Medium
TMDL/303d Status: 2b* ()

Further Details

Fish consumption in the entire Hoosic River, including this reach, is impaired by PCBs attributed to past/historic discharges and sediments. Aquatic life support is thought to experience minor impacts to water quality due to silt, sediment and nutrient enrichment from agricultural activity and other nonpoint sources within the watershed.

Fish consumption in the Hoosic River is impaired due to a NYS DOH health advisory that recommends eating no more than one meal per month of larger brown trout (over 14 inches) because of elevated PCB levels. Past/historical industrial discharges are considered to be the most likely source of the contamination. (2004-05 NYS DOH Health Advisories).

Biological (macroinvertebrate) assessments at various sites along the Hoosic River reveal generally slightly impacted water quality. Sampling at Hoosick Junction and Hoosick Falls 2001 found conditions to be slightly impacted by silt and nonpoint source nutrient enrichment. Similar conditions were noted in 1993. Sampling in Eagle Bridge in 2001 also reveal similar conditions at this site just downstream of the reach. In spite of these minor impacts, aquatic life is considered to be fully supported in the stream. Elevated levels of PCBs have been detected in caddisflies and crayfish collected at in North Petersburg upstream of the reach in 1993-94; organochlorine pesticides were also detected.

(DEC/DOW, SWMS/SBU, June 2005)

The HydroPower hydroelectric facility in Hoosic Falls causes some water flow fluctuations through waters diversions and releases. Fish passage is also an issue.

In 2001, a large spill of copper sulfate from the Oak Mitsui plant in Hoosick Falls was investigated to determine the extent of damage to aquatic invertebrate life. The damage to resident macroinvertebrate communities in the river appeared to be slight, but significant. Although all sites downstream of the spill maintained populations of stoneflies, caddisflies, hellgrammites, and crayfish, populations of mayflies were greatly depleted downstream of Hoosick Falls. Midge populations were also greatly reduced. The estimated recovery time for community impact was one year. Copper levels in invertebrate tissues increased an average of 85% downstream of the spill, and exceeded levels of concern. The site at Eagle Bridge was assessed as slightly impacted in the 2001 sampling. This site had been assessed as non-impacted in 1993 macroinvertebrate sampling, but was slightly impacted in samplings before then. (DEC/DOW, BWAM/SBU and Region 4, June 2004)

This waterbody is proposed for inclusion on the NYS 2008 Section 303(d) List of Impaired Waters due to impairment to fish consumption.

This segment includes the waters of the Hoosic River from the Walloomsac River (-23) in North Hoosic to the southern boundary of the Village of Hoosic Falls. This portion of the Hoosic River is Class C(T).

Hoosic River, Upper, and tribs (1102-0017)

Impaired Seg

Waterbody Location Information

Revised: 11/06/2006

Water Index No: H-264 (portion 4) **Drain Basin:** Upper Hudson River
Hydro Unit Code: 02020003/230 **Str Class:** B(T) Upper Hudson-Hoosic
Waterbody Type: River **Reg/County:** 4/Rensselaer Co. (42)
Waterbody Size: 3.9 Miles **Quad Map:** HOOSICK FALLS (J-27-2)
Seg Description: stream and tribs from Hoosic Falls to Route 7

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: PRIORITY ORGANICS (PCBs)
Suspected: Nutrients
Possible: - - -

Source(s) of Pollutant(s)

Known: TOX/CONTAM. SEDIMENT
Suspected: Agriculture
Possible: - - -

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))
Verification Status: 4 (Source Identified, Strategy Needed)
Lead Agency/Office: DEC/FWMR **Resolution Potential:** Medium
TMDL/303d Status: 2b* ()

Further Details

Fish consumption in the entire Hoosic River, including this reach, is impaired by PCBs attributed to past/historic discharges and sediments. Aquatic life support is thought to experience minor impacts to water quality due to silt, sediment and nutrient enrichment from agricultural activity and other nonpoint sources within the watershed.

Fish consumption in the Hoosic River is impaired due to a NYS DOH health advisory that recommends eating no more than one meal per month of larger brown trout (over 14 inches) because of elevated PCB levels. Past/historical industrial discharges are considered to be the most likely source of the contamination. (2004-05 NYS DOH Health Advisories).

Biological (macroinvertebrate) assessments at various sites along the Hoosic River reveal generally slightly impacted water quality. Sampling at Hoosick in 2001 found non-impacted conditions, however conditions returned to slightly impacted in 2004. The discrepancy between the sampling results for the 2 years could be the result of streamflow conditions rather than an improvement and subsequent decline in water quality. Sampling in Hoosick Falls (downstream) and North Petersburg (upstream) in 2001 reveal slightly impacted conditions attributed siltation and nonpoint nutrient sources. In spite of these minor impacts, aquatic life is considered to be fully supported in the stream. Elevated levels

of PCBs have been detected in caddisflies and crayfish collected at the North Petersburg site in 1993-94 upstream of the reach; organochlorine pesticides were also detected. (DEC/DOW, SWMS/SBU, June 2005)

This waterbody is proposed for inclusion on the NYS 2008 Section 303(d) List of Impaired Waters to due impairment to fish consumption.

This segment includes the portion of the Hoosic River and all tribs from the southern boundary of the Village of Hoosic Falls to Route 7. The waters of this portion of the stream are Class B(T). Tribs to this reach/segment, including Browns Creek (-32) and Pine Valley Brook (-34), are Class C,C(T).

Hoosic River, Upper, and minor tribs (1102-0018)

Impaired Seg

Waterbody Location Information

Revised: 01/04/2007

Water Index No: H-264 (portion 5) **Drain Basin:** Upper Hudson River
Hydro Unit Code: 02020003/230 **Str Class:** C(T) Upper Hudson-Hoosic
Waterbody Type: River **Reg/County:** 4/Rensselaer Co. (42)
Waterbody Size: 46.7 Miles **Quad Map:** NORTH POWNAL (J-27-3)
Seg Description: stream and selected/smaller tribs, above Hoosic

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: PRIORITY ORGANICS (PCBs)
Suspected: Nutrients
Possible: - - -

Source(s) of Pollutant(s)

Known: TOX/CONTAM. SEDIMENT
Suspected: Agriculture
Possible: - - -

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))
Verification Status: 4 (Source Identified, Strategy Needed)
Lead Agency/Office: DEC/FWMR **Resolution Potential:** Medium
TMDL/303d Status: 2b* ()

Further Details

Fish consumption in the entire Hoosic River, including this reach, is impaired by PCBs attributed to past/historic discharges and sediments. Aquatic life support is thought to experience minor impacts to water quality due to silt, sediment and nutrient enrichment from agricultural activity and other nonpoint sources within the watershed. Elevated levels of priority organics (PCBs, pesticides) in macroinvertebrate tissue have also been noted.

Fish consumption in the Hoosic River is impaired due to a NYS DOH health advisory that recommends eating no more than one meal per month of larger brown trout (over 14 inches) because of elevated PCB levels. Past/historical industrial discharges are considered to be the most likely source of the contamination. (2004-05 NYS DOH Health Advisories).

NYSDEC Rotating Integrated Basin Studies (RIBS) monitoring of the Hoosic River in tPetersburg, Rensselaer County, (at County Route 95) was conducted in 2001 and 2002. Biological screening in 2001 was conducted at Route 346 and found the macroinvertebrate community to be slightly impacted. In 2002 intensive sampling water quality as determined by macroinvertebrate community composition, was again assessed as slightly impacted. Water column chemistry showed no analyzed water column constituents in concentrations above assessment criteria. Macroinvertebrates collected at this

site and chemically analyzed for organochlorine pesticides, PAHs, and PCBs, were found to contain elevated PCBs. While levels did not violate the level of concern established for invertebrate tissue, the presence of these compounds is consistent with the fish consumption advisory and impaired status of this segment. No sediment contaminant concentrations were measured at levels likely to be toxic to sediment-dwelling organisms. Chronic toxicity testing using water from this location showed no significant chronic effects on the test organism. Based on the consensus of these established assessment methods, overall water quality at this location indicates minor impacts, but supportive of aquatic life use. (DEC/DOW, BWAM/RIBS, June 2005).

Biological (macroinvertebrate) assessments at various sites along the Hoosic River reveal generally slightly impacted water quality. Community types suggest most sites were affected by nonpoint source nutrient enrichment, although the sites also showed similarities to natural communities as well. The most recent study of the river in 2004 shows water quality improved when compared to results from 1986 study, though both studies found conditions to be in the range of slightly impacted. Sampling at Petersburg Junction in 2001 and in North Petersburg in 2002 found conditions to be slightly impacted by silt and nonpoint source nutrient enrichment. Similar conditions were noted in 1993. (DEC/DOW, SWMS/SBU, June 2005)

This waterbody is proposed for inclusion on the NYS 2008 Section 303(d) List of Impaired Waters due to impairment to fish consumption.

This segment includes the portion of the Hoosic River and selected/smaller tribs above Route 7 near Hoosic. The waters of the stream are Class C(T). Tribs to this reach/segment, including Shingle Hollow Creek (-35) and Breese Hollow Brook (-36), are Class C,C(T),C(TS). The Little Hoosic River (-38) and direct drainage tribs to Vermont are listed separately.

Tomhannock Reservoir (1102-0006)

Threat(Poss)

Waterbody Location Information

Revised: 04/20/2007

Water Index No: H-264- 4-P1095	Drain Basin: Upper Hudson River	
Hydro Unit Code: 02020003/230	Str Class: A	Upper Hudson-Hoosic
Waterbody Type: Lake(R)	Reg/County: 4/Rensselaer Co. (42)	
Waterbody Size: 1721.5 Acres	Quad Map: TOMHANNOCK (J-26-3)	
Seg Description: entire reservoir		

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

Use(s) Impacted Water Supply	Severity Threatened	Problem Documentation Possible
--	-------------------------------	--

Type of Pollutant(s)

Known: ---
Suspected: ---
Possible: PATHOGENS, Nutrients, Silt/Sediment

Source(s) of Pollutant(s)

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

Resolution/Management Information

Issue Resolvability: 3 (Strategy Being Implemented)	
Verification Status: 5 (Management Strategy has been Developed)	
Lead Agency/Office: ext/muni	Resolution Potential: High
TMDL/303d Status: n/a ()	

Further Details

Drinking water use of Tomhannock Reservoir is considered to be potentially threatened due to the susceptibility of the water supply to possible contamination from activities and sources in the watershed. Class A surface waters of the state that serve as the source of potable water for significant populations are typically categorized as threatened.

The New York State Health Department Source Water Assessment for the Tomhannock Reservoir found an elevated susceptibility to contamination for this source of drinking water. The amount of agricultural lands in the assessment area results in elevated potential for protozoa and pesticides contamination. However, there is reason to believe that land cover data may over estimate the percentage of row crops in the assessment area. While there are some facilities present, permitted discharges do not likely represent an important threat to source water quality, based on their density in the assessment area. In addition, it appears that the total amount of wastewater discharged to surface water in this assessment area is not high enough to further raise the potential for contamination (particularly for protozoa). There is also noteworthy contamination susceptibility associated with other discrete contaminant sources, and these facility types include: mines and closed landfills. Finally, it should be noted that hydrologic characteristics (e.g. basin shape and flushing rates) generally make reservoirs highly sensitive to existing and new sources of phosphorus and microbial contamination. (NYSDOH, SWAP, 2006)

The Tomhannock Reservoir, a man made reservoir that serves approximately 50,000 residents of Troy, as well as the industrial and commercial customers within the City, through over 13,000 service connections. In addition, the City wholesales water to the City of Rensselaer, The Village of Menands, and portions of the Towns of East Greenbush, North Greenbush, Brunswick, and Schaghticoke. The Village of Waterford has an emergency connection to the City water system, which is used on an as needed basis. The daily average of water produced is 18 million gallons per day. The quality of the water from the Tomhannock Reservoir is good to excellent. During 2005, the City did not experience any restriction of our water source. (City of Troy, 2005 Drinking Water Report, May 2006)

Babcock Lake (1102-0014)

NoKnownImpct

Waterbody Location Information

Revised: 02/08/2007

Water Index No:	H-264- 4-P1095-3-6-P1109	Drain Basin:	Upper Hudson River
Hydro Unit Code:	02020003/230	Str Class:	A
Waterbody Type:	Lake	Reg/County:	4/Rensselaer Co. (42)
Waterbody Size:	44.7 Acres	Quad Map:	GRAFTON (J-27-4)
Seg Description:	entire lake		

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

Use(s) Impacted	Severity	Problem Documentation
NO USE IMPAIRMNT		

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

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

Resolution/Management Information

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

Resolution Potential:

Further Details

Babcock Lake has been sampled as part of the NYSDEC Citizen Statewide Lake Assessment Program (CSLAP) beginning in 1987 and continuing through the present. An Interpretive Summary report of the findings of this sampling was published in 2005. These data indicate that the lake continues to be best characterized as mesoligotrophic, or moderately unproductive. Nutrient levels reflect an unproductive lake, while water transparency and chlorophyll a suggest moderate productivity. Phosphorus levels in the lake rarely exceed the state guidance values indicating impacted/stressed recreational uses, and resulting transparency measurements meet what is recommended for swimming beaches at nearly all times. With the exception of nutrient-mediated algal blooms in 1995 and 2000, perhaps triggered by elevated deepwater nutrient levels, water quality conditions in Babcock Lake have been fairly stable and supportive of most forms of recreation. (DEC/DOW, BWAM/CSLAP, October 2005)

Public perception of the lake and its uses is also evaluated as part of the CSLAP program. These assessment also indicate recreational suitability of the lake to be very favorable since the lake was first evaluated and continuing through the most recent assessment. The lake is described most frequently as "excellent" for support of most uses. The lake 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 and has not been cited as impacting recreational uses and is consistent with the lack of seasonally induced invasive weed growth or algal blooms. (DEC/DOW, BWAM/CSLAP, May 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. (DEC/DOW, BWAM/CSLAP, November 2005)

Though water clarity in Babcock Lake is very good, the watershed consists of moderately steep slopes and unpaved roadways. Stormwater runoff occasionally represents source of a turbidity problem that can impact recreation and/or water supply uses. (Rensselaer County WQCC, 1998)

Owl Kill and minor tribs (1102-0005)

NoKnownImpct

Waterbody Location Information

Revised: 07/05/2005

Water Index No: H-264-20
Hydro Unit Code: 02020003/230 **Str Class:** C
Waterbody Type: River
Waterbody Size: 48.7 Miles
Seg Description: entire stream and selected/smaller tribs

Drain Basin: Upper Hudson River
Upper Hudson-Hoosic
Reg/County: 5/Washington Co. (58)
Quad Map: EAGLE BRIDGE (J-27-1)

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

Use(s) Impacted	Severity	Problem Documentation
NO USE IMPAIRMNT		

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

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

Resolution/Management Information

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

Resolution Potential:

Further Details

Biological (macroinvertebrate) assessment of Owl Kill in White Creek at Owl Kill Road bridge was conducted in 2001. Sampling results indicated non-impacted water quality conditions. The fauna was diverse, and indicated light nutrient enrichment. Similar conditions were noted in 1993. (DEC/DOW, BWAR/SBU, June 2005)

The waters of the stream are Class C,C(T). Tribs to this reach/segment, including Center White Creek (-3), Mosley Brook (-6), Brownell Hollow Brook (-7), Lower White Creek (-8), Cambridge Creek (-10), Maynard Brook (-12) and McClellan Brook (-13), are Class C,C(T),C(TS). Upper White Creek (-8) is listed separately.

Lake Lauderdale, Schoolhouse Lake (1102-0011)

Need Verific

Waterbody Location Information

Revised: 12/05/2006

Water Index No:	H-264-20-P1121,P1122	Drain Basin:	Upper Hudson River	
Hydro Unit Code:	02020003/230	Str Class:	B	Upper Hudson-Hoosic
Waterbody Type:	Lake	Reg/County:	5/Washington Co. (58)	
Waterbody Size:	89.6 Acres	Quad Map:	CAMBRIDGE (I-27-4)	
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
Aquatic Life	Stressed	Possible
Recreation	Stressed	Possible

Type of Pollutant(s)

Known: ---
Suspected: ALGAL/WEED GROWTH
Possible: NUTRIENTS, Pathogens, Silt/Sediment

Source(s) of Pollutant(s)

Known: ---
Suspected: ---
Possible: CONSTRUCTION, Failing On-Site Syst, Urban Runoff

Resolution/Management Information

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

Resolution Potential:

Further Details

Recreational uses of the Lake Lauderdale may experience restrictions due to minor impacts/threats to water quality. These impacts/threats are a result of aquatic weed growth and periodic algal blooms.

Submergent weed growth is reported to be most significant in the southern end of the lake. Hypolimnetic anoxia during the summer months and algal blooms that occur during the summer season have also been reported. The lakeshore is heavily developed. Previously agricultural practices have been cited as sources of pollutants, but the last farms in the watershed have recently ceased operation. (Washington County WQCC/SWCD, 2006)

Specific data on the lake is limited and impacts, pollutants and sources need to be verified.

Walloomsac River and minor tribs (1102-0001)

NoKnownImpct

Waterbody Location Information

Revised: 07/05/2005

Water Index No: H-264-23
Hydro Unit Code: 02020003/220 **Str Class:** C(T)
Waterbody Type: River
Waterbody Size: 12.7 Miles
Seg Description: entire stream and selected/smaller tribs

Drain Basin: Upper Hudson River
Upper Hudson-Hoosic
Reg/County: 4/Rensselaer Co. (42)
Quad Map: HOOSICK FALLS (J-27-2)

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
TMDL/303d Status: n/a ()

Resolution Potential:

Further Details

A biological (macroinvertebrate) assessment of Walloomsac River in North Hoosick (at Route 22) was conducted in 2001. Sampling results indicated non-impacted water quality conditions. Although the fauna indicated some effects of nutrient enrichment and siltation, all metrics were within the range of non-impacted water quality. Previous sampling at the Cottrell Road site in Walloomsac yielded assessments of slightly impacted, based on the 1993 and 1994 kick sampling. Most indices were borderline non-impacted. Community types suggested silt was the primary influence on the fauna. (DEC/DOW, BWAR/SBU, June 2005)

Previous listing of impacts/impairment to the stream in 1996 were due in large part to problems at the Bennington, Vermont WWTP. However the plant has been upgraded and impacts due to the plant/discharge have been resolved. Acute/chronic toxicity testing results at Columbia Corporation had been an issue as well, but more recently the company has passed toxicity testing requirements of its permit.

The stream is stocked annually with more than 6,000 brown trout. anecdotal information suggests a quality smallmouth bass fishery is also supported. (DEC/FWMR, Region 4, May 2003)

This segment includes the entire stream and selected/smaller tribs, within NYS. The waters of the stream are Class C(T). Tribs to this reach/segment, including Lower Little White Creek (-1), are Class C,C(TS). Upper Little White Creek (-1) is listed separately.

Little Hoosic River, Lower, and tribs (1102-0027)

NoKnownImpct

Waterbody Location Information

Revised: 07/05/2005

Water Index No:	H-264-38	Drain Basin:	Upper Hudson River
Hydro Unit Code:	02020003/180	Str Class:	C(TS)
Waterbody Type:	River	Reg/County:	4/Rensselaer Co. (42)
Waterbody Size:	35.1 Miles	Quad Map:	NORTH POWNAL (J-27-3)
Seg Description:	stream and tribs from mouth to Petersburg		

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:
TMDL/303d Status:	n/a ()	

Further Details

NYSDEC Rotating Integrated Basin Studies (RIBS) monitoring of the Little Hoosic River in North Petersburg (at Route 346) was conducted in 2001 and 2002. Based on biological (macroinvertebrate) sampling, this site was assessed as having non-impacted water quality in 2002, although some nutrient enrichment was indicated. Although the site was assessed as slightly impacted during biological screening in 2001, in 1994 and all previous sampling, no impacts to water quality were noted. The impact measured in 2001 may be flow-related. Water column sampling in 2002 revealed no parameters exceeding assessment criteria. Macroinvertebrates analyzed for pesticides, PCBs, and PAHs showed total PCBs present, but not exceeding levels of concern. Based on sediment quality guidelines developed for freshwater ecosystems, overall sediment quality is not likely to cause chronic toxicity to sediment-dwelling organisms. Chronic toxicity testing using water from this location showed no significant mortality or reproductive effects on the test organism. 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.

The Little Hoosic has a reputation as a quality trout water. Stocking of the stream was discontinued in 1981 when wild trout were determined to be abundant and self-sustaining. (DEC/FWMR, Region 4, May 2003)

This segment includes the portion of the stream and all tribs from the mouth to Clay Brook (-8) in Petersburg. The waters of the stream are Class C(TS). Tribs to this reach/segment, including Church Hollow Brook (-2), Prosser Hollow Brook (-4), Dill Creek (-5), Lewis Hollow Brook (-6), Hills Hollow Brook (-7) and Clay Brook (-8), are Class C,C(T),C(TS).

Schuyler Creek and tribs (1101-0093)

Impaired Seg

Waterbody Location Information

Revised: 12/05/2006

Water Index No: H-265
Hydro Unit Code: 02020003/100 **Str Class:** C(T)
Waterbody Type: River (Low Flow)
Waterbody Size: 0.0 Miles
Seg Description: entire stream and tribs

Drain Basin: Upper Hudson River
Upper Hudson-Hoosic
Reg/County: 5/Saratoga Co. (46)
Quad Map: MECHANICVILLE (J-26-1)

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

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

Type of Pollutant(s)

Known: NUTRIENTS (phosphorus)
Suspected: D.O./OXYGEN DEMAND, PATHOGENS
Possible: - - -

Source(s) of Pollutant(s)

Known: PRIVATE/COMM/INST (Hillside Colony Trail.Pk.)
Suspected: Urban Runoff
Possible: - - -

Resolution/Management Information

Issue Resolvability: 2 (Strategy Exists, Needs Funding/Resources)
Verification Status: 5 (Management Strategy has been Developed)
Lead Agency/Office: DOW/Reg5
TMDL/303d Status: 1* ()

Resolution Potential: High

Further Details

Aquatic life support and recreational uses in Schuyler Creek are considered to be impaired by nutrients, pathogens and low dissolved oxygen attributed to untreated/partially treated sewage from an aging and inadequate WWTP serving a trailer park. Although the impact to aquatic life does not quite reach the level of impairment for this particular use, the discharge has a significant impact on aquatic life that is measureable and suggests highly stressed conditions.

A biological (macroinvertebrate) survey of Schuyler Creek at multiple sites in the vicinity of Stillwater was conducted in 2003. Sampling results indicated slightly impacted water quality conditions at all sites. Although there was no exceedence of the Biological Impairment Criteria, the data did show that there was an impact on the stream biota attributed to the Hillside Colony trailer park discharge. The fauna below the discharge was heavily dominated by aquatic worms while more sensitive stone flies and mayflies that were numerous at upstream sites were rare or absent below the discharge. (DEC/DOW, BWAR/SBU, August 2003)

Effluent from an aging 30 year old wastewater treatment plant serving the Hillside Trailer Park discharges untreated/partially treated wastewater into the creek periodically, primarily during wet weather. The collection systems

experiences significant infiltration and inflow, resulting in high flows that the plant is unable to handle. These overflows contribute to sludge deposits, discharge of solids and odors in the creek. The situation is the focus of a consent order. (DEC/DOW, Region 5, Dec 2006)

This segment includes the entire stream and all tribs. The waters of the stream are Class C from the mouth to unnamed trib (-2) and Class C(T) for the remainder of the reach. Tribs to this reach/segment are Class C.

Fish Creek, Lower, and tribs (1101-0065)

NoKnownImpct

Waterbody Location Information

Revised: 07/05/2005

Water Index No: H-299
Hydro Unit Code: 02020003/090 **Str Class:** C
Waterbody Type: River
Waterbody Size: 51.8 Miles
Seg Description: stream and tribs, from mouth to Staffords Bridge

Drain Basin: Upper Hudson River
Upper Hudson-Hoosic
Reg/County: 5/Saratoga Co. (46)
Quad Map: QUAKER SPRINGS (I-26-4)

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

Use(s) Impacted	Severity	Problem Documentation
NO USE IMPAIRMNT		

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

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

Resolution/Management Information

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

Resolution Potential:

Further Details

NYSDEC Rotating Integrated Basin Studies (RIBS) monitoring of Fish Creek in Victory Mills (at Bridge Street) was conducted in 2001 and 2002. Biological screening in 2001 revealed the macroinvertebrate community to be slightly impacted as a result of nutrient enrichment, assumed to be from nonpoint sources. Communities were dominated by mayflies, filter-feeding caddisflies, and algal-scraping riffle beetles. Community assessment conducted in 2002 again found the stream to be slightly impacted. In 2002 intensive sampling water column chemistry revealed mercury, lead and water temperatures that exceeded the assessment criteria indicating a parameter of concern. However, macroinvertebrate tissue samples collected at this site and chemically analyzed for metals, pesticides, PCBs, and PAHs showed none exceeding levels of concern. Sediments contain some contaminants in concentrations that may be of concern, but based on sediment quality guidelines developed for freshwater ecosystems, overall sediment quality is not likely to cause chronic toxicity to sediment-dwelling organisms. Chronic toxicity testing using water from this location shows no significant mortality or reproductive effects on the test organism. 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. Mercury and lead levels in the water suggest possible impacts on fish consumption. A general advisory for limiting the consumption of sportfish from all waters of the state is in place due to the common occurrence of some chemicals (such as mercury and PCBs) in fish, the inability to test all waters and the possibility of other unidentified contaminants.

(DEC/DOW, BWAM/SWMS, June 2005).

This segment includes the portion of the stream from the mouth to Staffords Bridge and all tribs. The waters of the stream are Class C. Tribs to this reach/segment, including Cold Brook (-9) and Sucker Brook (-12), are primarily Class C,C(T), with some tribs designated Class D.

Saratoga Lake (1101-0012)

MinorImpacts

Waterbody Location Information

Revised: 12/06/2006

Water Index No:	H-299-P27	Drain Basin:	Upper Hudson River
Hydro Unit Code:	02020003/090	Str Class:	A
Waterbody Type:	Lake	Reg/County:	5/Saratoga Co. (46)
Waterbody Size:	4031.9 Acres	Quad Map:	QUAKER SPRINGS (I-26-4)
Seg Description:	entire lake		

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

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

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

Known: HABITAT MODIFICATION
 Suspected: Urban Runoff
 Possible: Agriculture

Resolution/Management Information

Issue Resolvability:	3 (Strategy Being Implemented)	
Verification Status:	5 (Management Strategy has been Developed)	
Lead Agency/Office:	ext/WQCC	Resolution Potential: Medium
TMDL/303d Status:	n/a ()	

Further Details

Recreational uses (swimming, fishing, boating) in Saratoga Lake are known to experience minor impacts to water quality due to aquatic weed growth, including invasives (Eurasian milfoil). Slightly elevated nutrient (phosphorus) levels and algal readings have also be noted in this mesoeutrophic lake. The primary source of these impacts are habitat modification (related to the invasive species) and nonpoint runoff of nutrients and sediment from the lake watershed. The current assessment is that uses continue to be fully supported in the lake, in spite of minor impacts.

Saratoga Lake has been sampled as part of the NYSDEC Citizen Statewide Lake Assessment Program (CSLAP) beginning in 1988 and has continued through 2005. An Interpretive Summary report of the findings of this sampling was published in 2006. These data indicate that the lake continues to be best characterized as meso-eutrophic, or moderately to highly productive. Phosphorus levels in the lake suggest a highly productive lake, while clarity and algae measurements indicate moderate productivity. Levels of total phosphorus in the shallow water zones of the lake have decreased ove the last 20 years, and internal recycling of phosphorus has become a more significant factor in the annual phosphorus cycle. More recent (and future) water transparency and algae levels be be influenced by zebra mussels, which have been documented in the lake. (DEC/DOW, BWAM/CSLAP, May 2006)

Public perception of the lake and its uses is also evaluated as part of the CSLAP program. These assessment also show the lake to be supportive of recreational uses, with the lake most often described as "could not be nicer" to "excellent" for most uses. Algae is cited more often than nuisance weed growth as having an impact on recreational uses, but this is likely due to an aggressive aquatic plant management program in the lake. (DEC/DOW, BWAM/CSLAP, February 2006)

Higher aquatic plant populations in some areas of the lake are managed by mechanical harvesting. Experimental projects associated with the use of aquatic herbicides (Fluridone) and herbivorous aquatic insects have been conducted in recent years. A Long-Term Aquatic Vegetation Management Plan was prepared for the lake in 2004 by the Saratoga Lake Protection and Improvement District. The plan characterizes the scope of the impacts and proposes that a program integrating lake drawdown, mechanical harvesting of weeds and herbicide treatments is needed in order to achieve significant improvements in the management of nuisance weed growth in the lake. Winter drawdowns and harvesting are currently being conducted; a proposal to treat the entire lake with an herbicide is currently under consideration. (Saratoga Lake Long-Term Aquatic Vegetation Management Plan, Saratoga Lake Protection and Improvement District, 2004)

There is currently a proposal by the City of Saratoga Springs to use the lake as a public water supply. An initial Environmental Impact Statement was prepared. A number of issues were identified through the SEQR process and those are being addressed in the EIS. As of now, the permit application for this proposal is incomplete. (DEC/DOW, Reg 5, December 2006)

Kayaderoseras Cr, Lower, and minor trib (1101-0014) NoKnownImpct

Waterbody Location Information

Revised: 07/05/2005

Water Index No: H-299-P27-13
Hydro Unit Code: 02020003/090 **Str Class:** C
Waterbody Type: River
Waterbody Size: 92.1 Miles
Seg Description: stream and selected tribs from mouth to Milton Center

Drain Basin: Upper Hudson River
Upper Hudson-Hoosic
Reg/County: 5/Saratoga Co. (46)
Quad Map: SARATOGA SPRINGS (I-25-3)

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

Use(s) Impacted	Severity	Problem Documentation
NO USE IMPAIRMNT		

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

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

Resolution/Management Information

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

Resolution Potential:

Further Details

NYSDEC Rotating Integrated Basin Studies (RIBS) monitoring of Kayaderoseras Creek in Ballston Spa was conducted 2001 and 2002. Biological screening conducted in 2001 at County Route 45 found water quality to be non-impacted. Intensive sampling in 2002 at Route 63 a short distance upstream determined macroinvertebrate community to be slightly impacted. Filter-feeding caddisflies and algal-scraping riffle beetles were dominant, and the stream bottom contained heavy growths of diatoms and filamentous algae. In the water column, mercury was found in concentrations above the assessment criterion indicating a parameter of concern. However macroinvertebrate tissue samples collected at this site and chemically analyzed for metals, organochlorine pesticides, PAHs, and PCBs, were not found to contain compounds in concentrations above established guidance values. No sediments were found to contain contaminants that exceeded the threshold effects concentration, indicating a low likelihood of toxicity to sediment-dwelling organisms. Chronic toxicity testing using water from this location shows no significant mortality or reproductive effects on the test organism. In spite of some minor effects on the fauna, aquatic life support is considered to be fully supported in the stream. Mercury levels in the water suggest possible impacts on fish consumption. A general advisory for limiting the consumption of sportfish from all waters of the state is in place due to the common occurrence of some chemicals (such as mercury and PCBs) in fish, the inability to test all waters and the possibility of other unidentified contaminants. (DEC/DOW, BWAM/RIBS, June 2005).

Biological (macroinvertebrate) assessments of Kayaderosseras Creek in Ballston Spa (above Grays Crossing Road/Route 45) and in Milton Center (below Middle Line Road) were conducted in 2001. Sampling results indicated non-impacted water quality conditions. Sampling in 2002 at an alternate site in Ballston Spa (above Ralph Street) showed slight impact from nutrient enrichment. A 1997 sampling of 4 sites from Porter Corners to Ballston Spa found possible slight impacts near the headwaters and near the mouth. However the headwater location at Porter Corners was determined to be due to headwater effect, and the assessment was upgraded to non-impacted. All four sites (two within this segment, two above the reach) show some indications of nutrient enrichment, and the stream was described as being potentially vulnerable to additional nonpoint sources, as these would likely to result in substantial changes in the stream ecosystem. Despite these conditions, aquatic life is considered to be fully supported in the stream, and there are no other apparent water quality impacts to designated uses. (DEC/DOW, BWAR/SBU, June 2005)

There are a number of areas along this reach of the stream and along tribs where local residents (Earth Team volunteers) have identified exposed, eroding banks that may be impacting fishery habitat. Agricultural practices in the Wheeler Creek watershed have also been cited by local residents as potentially causing impacts.

A local watershed protection group, Friends of the Kayaderosseras, works to conserve the creek. The group conducts stream walks/debris removal, cuts new trails and canoe access points, plants tree, and conducts water quality testing in partnership with Skidmore College students. Contact: www.kayaderosseras.org.

This segment includes the portion of the stream and selected/smaller tribs from the mouth at Saratoga Lake to Glowegee Creek (-19) in Milton Center. The waters of the stream are Class C,C(T). Tribs to this reach/segment, including Gordon Creek (-11), are also Class C,C(T). Lake Lonely (P30) and tribs, Geysers Brook (-5) and Mourning Kill (-9) are listed separately.

Kayderosseras Cr, Upper, and tribs (1101-0013)

Need Verific

Waterbody Location Information

Revised: 11/09/2006

Water Index No: H-299-P27-13
Hydro Unit Code: 02020003/090 **Str Class:** C
Waterbody Type: River
Waterbody Size: 150.6 Miles
Seg Description: stream and tribs above Milton Center

Drain Basin: Upper Hudson River
Upper Hudson-Hoosic
Reg/County: 5/Saratoga Co. (46)
Quad Map: MIDDLE GROVE (I-25-4)

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

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

Type of Pollutant(s)

Known: ---
Suspected: SILT/SEDIMENT, THERMAL CHANGES
Possible: ---

Source(s) of Pollutant(s)

Known: STREAMBANK EROSION
Suspected: ---
Possible: Construction, Landfill/Land Disp. (Astro Bros Landfill)

Resolution/Management Information

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

Further Details

Aquatic life support is thought to be threatened by silt/sediment and elevated temperatures. Temperatures in recent years have at time reached the upper limit for teh support of a trout fishery. Silt and sediment from eroding streambanks and other nonpoint sources may be affecting fish habitat and spawning areas. In spite of these threats, aquatic life is fully supported in the stream currently and there are no other apparent water quality impacts to designated uses.

A biological (macroinvertebrate) assessment of Kayderosseras Creek in Milton Center (below Middle Line Road) was conducted in 2001. Sampling results indicated non-impacted water quality conditions. A 1997 sampling of 4 sites from Porter Corners to Ballston Spa found possible slight impacts near the headwaters and near the mouth. However the headwater location at Porter Corners was determined to be due to headwater effect, and the assessment was upgraded to non-impacted. All four sites (two within this segment, two below the reach) show some indications of nutrient enrichment, and the stream was described as being potentially vulnerable to additional nonpoint sources, as these would likely to result in substantial changes in the stream ecosystem. Despite these conditions, aquatic life is considered to be fully supported in the stream, and there are no other apparent water quality impacts to designated uses. (DEC/DOW, BWAR/SBU, June 2005)

A trib to this reach, Clover Mill Brook had previously experienced impacts related to a bordering landfill operation (Astro Bros.) that has no closed. Although some leachate from the closed landfill DEC still occurs, water sampling has shown improvement in water quality and trout have been documented in the stream. On the same trib NYSDOT undertook a road realignment project. Significant stream siltation - including a significant rainstorm event that "blew out" a portion of the roadway that was under construction at the time - occurred during the roadway re-construction. The deposition of a significant amount of material in the stream likely had impact on aquatic/fish habitat but no assessments have been done to document the impacts. (DEC/DOW, Region 5, Dec 2006)

There are a number of areas along this reach of the Kayaderosseras and along tribs where local residents (Earth Team volunteers) have identified exposed, eroding banks that may be impacting fishery habitat. Silt/sedimentation from land development and streambank erosion in this rapidly developing area are a threat to fish habitat and spawning areas. Trout Unlimited concurs that sedimentation is affecting some trout spawning areas. Some of the sites have been addressed by either volunteers or by Saratoga County DPW. (Saratoga County WQCC/SWCD, June 2003)

A local watershed protection group, Friends of the Kayaderosseras, works to conserve the creek. The group conducts stream walks/debris removal, cuts new trails and canoe access points, plants trees, and conducts water quality testing in partnership with Skidmore College students. Contact: www.kayaderosseras.org

A trib to this reach, Clover Mill Brook had previously experienced impacts related to a bordering landfill operation (Astro Bros.) that has no closed. Although some leachate from the closed landfill DEC still occurs, water sampling has shown improvement in water quality and trout have been documented in the stream. On the same trib NYSDOT undertook a road realignment project. Significant stream siltation - including a significant rainstorm event that "blew out" a portion of the roadway that was under construction at the time - occurred during the roadway re-construction. The deposition of a significant amount of material in the stream likely had impact on aquatic/fish habitat but no assessments have been done to document the impacts. (DEC/DOW, Region 5, Dec 2006)

This segment includes the portion of the stream and all tribs above Glowegee Creek (-19) in Milton Center. The waters of the stream are primarily Class C(T), with a portion designated Class B(T). Tribs to this reach/segment, including Crook Brook (-20), Star Brook (-21), Clover Mill Brook (-22), Frink Brook (-23), Gasher Brook (-27), Blue Brook (-32), Peacock Brook (-33), Vly Creek (-34), South Branch (-36) and Mud Creek (-40), are Class C,C(T),C(TS).

Lake Lonely (1101-0034)

Need Verific

Waterbody Location Information

Revised: 02/08/2007

Water Index No: H-299-P27-13- 1-P30
Hydro Unit Code: 02020003/090 **Str Class:** B
Waterbody Type: Lake
Waterbody Size: 115.1 Acres
Seg Description: entire lake
Drain Basin: Upper Hudson River
Upper Hudson-Hoosic
Reg/County: 5/Saratoga Co. (46)
Quad Map: QUAKER SPRINGS (I-26-4)

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

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

Type of Pollutant(s)

Known: ---
Suspected: NUTRIENTS (phosphorus)
Possible: Aesthetics

Source(s) of Pollutant(s)

Known: ---
Suspected: ---
Possible: URBAN RUNOFF, Storm Sewers

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: 3a (Waterbody Requiring Verification of Impairment))

Further Details

Various potential sources of impacts to this waterbody have been identified in previous assessments. However, actual impacts to uses need to be verified/reverified. Previous assessments indicate that: Excessive growth of algae and rooted aquatic plants stresses the aesthetics of the lake and stresses non-contact recreational uses. D.O. depletion in the hypolimnion may severely stresses fish propagation. More recently, stormwater impacts have been identified as contributing to impacts.

The lake is included on the NYS 2006 Section 303(d) List of Impaired Waters. The lake is included on Part 3a of the List as a Water Requiring Verification of Impairment.

Tribs to Lake Lonely (1101-0001)

Impaired Seg

Waterbody Location Information

Revised: 07/06/2005

Water Index No:	H-299-P27-13- 1-P30- (selected)	Drain Basin:	Upper Hudson River
Hydro Unit Code:	02020003/090	Str Class:	C
Waterbody Type:	River	Reg/County:	5/Saratoga Co. (46)
Waterbody Size:	21.1 Miles	Quad Map:	QUAKER SPRINGS (I-26-4)
Seg Description:	total length of selected tribs to lake		

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	Stressed	Known

Type of Pollutant(s)

Known: D.O./OXYGEN DEMAND, NUTRIENTS (Phosphorus)
 Suspected: PATHOGENS, Aesthetics, Ammonia
 Possible: Metals

Source(s) of Pollutant(s)

Known: MUNICIPAL (Saratoga Springs)
 Suspected: STORM SEWERS, Urban Runoff
 Possible: Landfill/Land Disp.

Resolution/Management Information

Issue Resolvability:	1 (Needs Verification/Study (see STATUS))	
Verification Status:	4 (Source Identified, Strategy Needed)	
Lead Agency/Office:	DOW/Reg5	Resolution Potential: Medium
TMDL/303d Status:	1 (Individual Waterbody Impairment Requiring a TMDL))	

Further Details

Aquatic life support and recreational uses in Spring Run are impaired by conventional pollutants (nutrients, oxygen demanding substances) attributed to sewage discharges and possible industrial toxic discharges. Pathogens are suspected, as the primary source is thought to be sewage inputs. Urban runoff is also a likely source of pollutants.

A biological (macroinvertebrate) survey of Spring Run at multiple sites between Saratoga Springs and its mouth at Lake Lonely Smithville was conducted in 2001-02. Sampling results indicated water quality conditions that ranged from slightly to severely impacted. The most severe impacts were attributed to sewage inputs and occurred near the source of the stream. Sampling in 2002 revealed more severely impacted fauna and a much higher level of conductivity, supporting worsening conditions in 2002 than in 2001. (DEC/DOW, BWAR/SBU, October 2002)

Occasional sewage overflows in the City of Saratoga Springs are being addressed by the city. However, it is estimated that 25% of the stream flow is from storm water runoff. Low DO levels are found downstream of the Saratoga Springs (C) Landfill, which may also be contributing to the problem. (DEC/DOW, Region 5, June 2005)

The Tribs to Lake Lonely segment is included on the NYS 2006 Section 303(d) List of Impaired Waters. The lake is included on Part 1 of the List as a waterbody segment requiring the development of a TMDL or other strategy to attain water quality standards for phosphorus, dissolved oxygen/oxygen demand and pathogens.

This segment includes the total length of selected/smaller tribs to Lake Lonely. Tribs within this segment, including Spring Run (-2), and Lower Bog Meadow Brook (-3), are Class C,C(T). Upper Bog Meadow Brook (-3) is listed separately.

Geyser Brook and tribs (1101-0071)

Need Verific

Waterbody Location Information

Revised: 07/08/2005

Water Index No:	H-299-P27-13- 5	Drain Basin:	Upper Hudson River
Hydro Unit Code:	02020003/090	Str Class:	C
Waterbody Type:	River	Reg/County:	5/Saratoga Co. (46)
Waterbody Size:	70.5 Miles	Quad Map:	SARATOGA SPRINGS (I-25-3)
Seg Description:	entire stream and selected/smaller tribs		

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

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

Source(s) of Pollutant(s)
 Known: ---
 Suspected: ---
 Possible: FAILING ON-SITE SYST, Urban Runoff

Resolution/Management Information

Issue Resolvability:	1 (Needs Verification/Study (see STATUS))	
Verification Status:	1 (Waterbody Nominated, Problem Not Verified)	
Lead Agency/Office:	DOW/Reg5	Resolution Potential: Medium
TMDL/303d Status:	n/a ()	

Further Details

Aquatic life support and recreational uses in Geyser Brook may be experiencing minor impacts due to conventional pollutants from failing and/or inadequate onsite septic systems or other sewage outputs. However this assessment is based on sampling in a smaller trib to the stream. Actual current conditions in the waters of this segment need to be verified.

Biological (macroinvertebrate) assessments of Bell Creek, a trib to Geyser Brook, at sites in Saratoga Springs and Greenfield Center were conducted in 1997. Sampling results indicated slightly impacted water quality conditions. The fauna included some clean-water species and some species possibly indicating organic wastes. (DEC/DOW, BWAR/SBU, June 2005)

This segment includes the entire stream and selected/smaller tribs. The waters of the stream are Class C from the mouth to unnamed pond (P38), and Class C(T) for the remainder of the reach. Tribs to this reach/segment, including Rowland Hollow Creek (-2), Slade Creek (-3), Bell Brook (-4), Sessleman Brook (-8-P51-2), are primarily Class C,C(T),C(TS); small Ballston Spa reservoirs (-2-2-P44) is Class AA. (June 2001)

Mourning Kill and tribs (1101-0073)

NoKnownImpct

Waterbody Location Information

Revised: 10/02/2006

Water Index No:	H-299-P27-13- 9	Drain Basin:	Upper Hudson River
Hydro Unit Code:	02020003/090	Str Class:	C
Waterbody Type:	River	Reg/County:	5/Saratoga Co. (46)
Waterbody Size:	39.5 Miles	Quad Map:	ROUND LAKE (J-25-2)
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:
TMDL/303d Status:	n/a ()	

Further Details

A biological (macroinvertebrate) survey of Mourning Kill at multiple sites between its headwaters in Harmony Corners and its mouth in Ballston Spa was conducted in 2005. Sampling results indicated slightly impacted water quality conditions at all four sites sampled. Resident macroinvertebrate communities were dominated by caddisflies, mayflies and riffle beetles. All sites contained clean-water stoneflies, but overall species richness was poor. Sluggish wetland-like conditions in some reaches of the stream may have some influence on the communities. Despite these slight impacts, aquatic life is considered to be fully supported in the stream, and there are not other apparent water quality impacts to designated uses. (DEC/DOW, BWAR/SBU, September 2005)

This segment includes the entire stream and all tribs. The waters of the stream are Class C. Tribs to this reach/segment are also Class C.

Glowegee Creek and tribs (1101-0074)

NoKnownImpct

Waterbody Location Information

Revised: 07/06/2005

Water Index No:	H-299-P27-13-19	Drain Basin:	Upper Hudson River
Hydro Unit Code:	02020003/090	Str Class:	C
Waterbody Type:	River		Upper Hudson-Hoosic
Waterbody Size:	51.4 Miles	Reg/County:	5/Saratoga Co. (46)
Seg Description:	entire stream and tribs	Quad Map:	MIDDLE GROVE (I-25-4)

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

Use(s) Impacted	Severity	Problem Documentation
NO USE IMPAIRMNT		

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

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

Resolution/Management Information

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

Resolution Potential:

Further Details

A biological (macroinvertebrate) assessment of Glowegee Creek in Milton Center (above Lewis Road) was conducted in 2001. Sampling results indicated non-impacted water quality conditions. The fauna exhibited some traits of nutrient enrichment, however impacts were within the range on non-impacted and aquatic life uses are fully support. (DEC/DOW, BWAR/SBU, June 2005)

This segment includes the entire stream and all tribs. The waters of the stream are Class C(T). Tribs to this reach/segment are Class C,C(T),C(TS).

Batten Kill, Lower, and minor tribs (1103-0010)

NoKnownImpct

Waterbody Location Information

Revised: 07/06/2005

Water Index No: H-301
Hydro Unit Code: 02020003/080 **Str Class:** C
Waterbody Type: River
Waterbody Size: 40.7 Miles
Seg Description: stream and selected tribs from mouth to Greenwich

Drain Basin: Upper Hudson River
Upper Hudson-Hoosic
Reg/County: 5/Washington Co. (58)
Quad Map: SCHUYLERVILLE (I-26-3)

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

Use(s) Impacted	Severity	Problem Documentation
NO USE IMPAIRMNT		

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

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

Resolution/Management Information

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

Resolution Potential:

Further Details

Biological (macroinvertebrate) surveys of the Batten Kill at multiple sites between the mouth and the Vermont state line (and beyond) were conducted in 1999 and 2001. Sampling results indicated water quality conditions that range between non-impacted and slightly impacted. Many sites are borderline between these two categories, depending on flow-year. Historically, water quality in the Batten Kill has been excellent, with typically non-impacted conditions throughout the reach. However, the 1999 survey found slightly impacted conditions at a number of sites upstream of this reach. In the 2001 follow-up macroinvertebrate sampling, some upstream sites returned to non-impacted conditions, while apparent slight declines in water quality compared to 1986 conditions were documented at Shushan, Battenville, Center Falls, and at the one site within this reach: Clarks Mills. Impacts appear assignable to nonpoint source nutrient enrichment. Slight increases in conductance in the river occurred since 1984 are likely related to residential and commercial development in the watershed. Further sampling is needed in the upper Batten Kill to examine the apparent trend. Despite these changes, aquatic life is considered to be fully supported in the stream, and there are no other apparent water quality impacts to designated uses. (DEC/DOW, BWAM/SBU, June 2005)

This segment includes the portion of the stream and selected/smaller tribs from the mouth to the dam in Greenwich. The waters of the stream are Class C for the reach. Tribs to this reach/segment, including Hartshorn Brook (-4), are primarily

Class C,C(T),C(TS). Fly Creek (-6) and larger lakes in the watershed are listed separately.

Batten Kill, Middle, and minor tribs (1103-0011)

Impaired Seg

Waterbody Location Information

Revised: 10/02/2006

Water Index No: H-301
Hydro Unit Code: 02020003/080 **Str Class:** B(T)
Waterbody Type: River
Waterbody Size: 49.6 Miles
Seg Description: stream and selected tribs, fr Greenwich to E.Greenwich

Drain Basin: Upper Hudson River
Reg/County: 5/Washington Co. (58)
Quad Map: CAMBRIDGE (I-27-4)

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

Use(s) Impacted	Severity	Problem Documentation
HABITAT/HYDROLOGY	Impaired	Suspected

Type of Pollutant(s)

Known: ---
Suspected: OTHER POLLUTANTS (loss of cover, predation)
Possible: ---

Source(s) of Pollutant(s)

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

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))
Verification Status: 4 (Source Identified, Strategy Needed)
Lead Agency/Office: DEC/FWMR **Resolution Potential:** Medium
TMDL/303d Status: 4c (Impaired by Pollution, Not Pollutant(s), Not Listed))

Further Details

Habitat/hydrology use of this reach of the Batten Kill is thought to be impaired as a result of the systematic removal of stream cover, combined with increased predation by birds. These conditions hinder the ability of the river to support a trout fishery. There is no evidence of water quality problem.

Historically, the Batten Kill supported a very strong wild brown trout fishery. However since the mid-1980s, the brown trout population has been in decline. The most recent explanation for the decline has focused on channel alterations and the systematic removal of trees, brush and limbs that hinder canoeists, kayakers and other recreationists in the river. But this habitat alteration removes the most effective refuge for fish from predators, flooding and high temperatures. This cover is especially important to support young trout. Though the loss of habitat as a cause of the decline of the fishery remains a theory, it is gaining considerable acceptance. To support the number of mergansers recorded on the river would require a considerable fish population. Furthermore, the size and class of trout that have declined is consistent with what mergansers would be expected to consume. Decrease abundances of other species would also be consistent with predation by mergansers. (DEC/DFWMR, Region 5, July 2005)

Biological (macroinvertebrate) surveys of the Batten Kill at multiple sites between the mouth and the Vermont state line

(and beyond) were conducted in 1999 and 2001. Sampling results indicated water quality conditions that range between non-impacted and slightly impacted. Many sites are borderline between these two categories, depending on flow-year. Historically, water quality in the Batten Kill has been excellent, with typically non-impacted conditions throughout the reach. However, the 1999 survey found slightly impacted conditions at a number of sites within and upstream of this reach. In the 2001 follow-up macroinvertebrate sampling, some upstream sites returned to non-impacted conditions, while apparent slight declines in water quality compared to 1986 conditions were documented upstream of this reach at Shushan, within the reach at Battenville, and Center Falls, and below this reach at Clarks Mills. Impacts appear assignable to nonpoint source nutrient enrichment. Slight increases in conductance in the river occurred since 1984 are likely related to residential and commercial development in the watershed. Further sampling is needed in the upper Batten Kill to examine the apparent trend. Despite these changes, aquatic life is considered to be fully supported in the stream, and there are no other apparent water quality impacts to designated uses. (DEC/DOW, BWAM/SBU, June 2005)

Fish surveys conducted in 2000 also point to causes other than water quality. These surveys found high abundance of wild fingerling trout and more old, large trout than were present in the 1970s. But natural reproduction by trout is typically the first life stage to fail when water quality degrades. And the presence of older trout indicate that water quality over time is capable of supporting the fishery over a longer continuum. Neither of these indicators is definitive, as tribs, springs and other refuge can sustain the fish. But these indicators along with healthy macroinvertebrate community suggest impacts not the result of poor water quality. (DEC/DFWMR, Reg 5, July 2005)

This segment includes the portion of the stream and all tribs from the dam in Greenwich to Black Creek (-20) near East Greenwich. The waters of the stream are Class B(T) from Greenwich to tribs -8a and Class C(TS) for the remainder of the reach. Tribs to this reach/segment, including Trout Brook (-11), Whittaker Brook (-17) and Livingston Brook (-18), are primarily Class C,C(T),C(TS); a few waters are Class D. Larger lakes in the watershed are listed separately.

Batten Kill, Upper, and tribs (1103-0012)

Impaired Seg

Waterbody Location Information

Revised: 10/02/2006

Water Index No: H-301	Drain Basin: Upper Hudson River
Hydro Unit Code: 02020003/080	Str Class: C*
Waterbody Type: River	Reg/County: 5/Washington Co. (58)
Waterbody Size: 72.5 Miles	Quad Map: SHUSHAN (I-27-3)
Seg Description: stream and tribs, above E.Greenwich	

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

Use(s) Impacted	Severity	Problem Documentation
Fish Consumption	Stressed	Suspected
HABITAT/HYDROLOGY	Impaired	Suspected

Type of Pollutant(s)

Known: ---
 Suspected: METALS (mercury), OTHER POLLUTANTS (loss of cover, predation)
 Possible: ---

Source(s) of Pollutant(s)

Known: ---
 Suspected: ATMOSPH. DEPOSITION, HABITAT MODIFICATION
 Possible: ---

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))	
Verification Status: 4 (Source Identified, Strategy Needed)	
Lead Agency/Office: DEC/FWMR	Resolution Potential: Medium
TMDL/303d Status: 4c (Impaired by Pollution, Not Pollutant(s), Not Listed))	

Further Details

Habitat/hydrology use of this reach of the Batten Kill is thought to be impaired as a result of the systematic removal of stream cover, combined with increased predation by birds. These conditions hinder the ability of the river to support a trout fishery. Fish consumption is listed as stressed due to slightly elevated levels of mercury found in a crayfish sample. Atmospheric deposition is the most likely source of this pollutant.

Historically, the Batten Kill supported a very strong wild brown trout fishery. However since the mid-1980s, the brown trout population has been in decline. The most recent explanation for the decline has focused on channel alterations and the systematic removal of trees, brush and limbs that hinder canoeists, kayakers and other recreationists in the river. But this habitat alteration removes the most effective refuge for fish from predators, flooding and high temperatures. This cover is especially important to support young trout. Though the loss of habitat as a cause of the decline of the fishery remains a theory, it is gaining considerable acceptance. To support the number of mergansers recorded on the river would require a considerable fish population. Furthermore, the size and class of trout that have declined is consistent with what mergansers would be expected to consume. Decrease abundances of other species would also be consistent with predation by mergansers. (DEC/DFWMR, Region 5, July 2005)

Biological (macroinvertebrate) surveys of the Batten Kill at multiple sites between the mouth and the Vermont state line (and beyond) were conducted in 1999 and 2001. Sampling results indicated water quality conditions that range between non-impacted and slightly impacted. Many sites are borderline between these two categories, depending on flow-year. Historically, water quality in the Batten Kill has been excellent, with typically non-impacted conditions throughout the reach. However, the 1999 survey found slightly impacted conditions at a number of sites within this reach. In the 2001 follow-up macroinvertebrate sampling, some upstream sites returned to non-impacted conditions, while apparent slight declines in water quality compared to 1986 conditions were documented within the reach at Shushan, and farther below this reach at Battenville, Center Falls, and Clarks Mills. Impacts appear assignable to nonpoint source nutrient enrichment. Slight increases in conductance in the river occurred since 1984 are likely related to residential and commercial development in the watershed. Further sampling is needed in the upper Batten Kill to examine the apparent trend. Crayfish collected in 1994 near the Vermont border showed endosulfan sulfate present above detection limits, and mercury present at 0.50 ug/g, exceeding the provisional level of concern of 0.20 ug/g for crayfish. (DEC/DOW, BWAM/SBU, June 2005)

Fish surveys conducted in 2000 also point to causes other than water quality. These surveys found high abundance of wild fingerling trout and more old, large trout than were present in the 1970s. But natural reproduction by trout is typically the first life stage to fail when water quality degrades. And the presence of older trout indicate that water quality over time is capable of supporting the fishery over a longer continuum. Neither of these indicators is definitive, as tribs, springs and other refuge can sustain the fish. But these indicators along with healthy macroinvertebrate community suggest impacts not the result of poor water quality. (DEC/DFWMR, Reg 5, July 2005)

Biological (macroinvertebrate) assessments of two tribs to this portion of the Batten Kill, Camden Creek and Chunks Creek, were also conducted in 1999. This sampling indicated non-impacted water quality at both sites. The fauna contained many species of clean-water mayflies, stoneflies, and caddisflies.

This segment includes the portion of the stream and all tribs within NYS from Black Creek (-20) near East Greenwich to the Vermont border. The waters of the stream are Class C(TS). Tribs to this reach/segment, including Flaxmill Brook (-21), Juniper Swamp Brook (-22), Steele Brook (-26), Murray Hollow Brook (-27), Camden Creek (-28) and Chunks Brook (-30), are primarily Class C,C(T),C(TS); small portions are Class B(T) and Class D. Larger lakes in the watershed are listed separately.

Fly Creek and tribs (1103-0013)

NoKnownImpct

Waterbody Location Information

Revised: 07/06/2005

Water Index No:	H-301- 6	Drain Basin:	Upper Hudson River
Hydro Unit Code:	02020003/080	Str Class:	C
Waterbody Type:	River	Reg/County:	5/Washington Co. (58)
Waterbody Size:	27.2 Miles	Quad Map:	CAMBRIDGE (I-27-4)
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:
TMDL/303d Status:	n/a ()	

Further Details

A biological (macroinvertebrate) assessment of Fly Creek in Greenwich (above Route 372) was conducted in 2001. Sampling results indicated non-impacted water quality conditions. Within the non-impacted category, the fauna exhibited some traits of nutrient enrichment. However the stream is considered to fully support aquatic life uses. (DEC/DOW, BWAR/SBU, June 2005)

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

Cossayuna Lake (1103-0002)

Impaired Seg

Waterbody Location Information

Revised: 12/06/2006

Water Index No:	H-301-17-P79	Drain Basin:	Upper Hudson River
Hydro Unit Code:	02020003/080	Str Class:	A
Waterbody Type:	Lake	Reg/County:	5/Washington Co. (58)
Waterbody Size:	659.3 Acres	Quad Map:	COSSAYUNA (I-27-1)
Seg Description:	entire lake		

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

Use(s) Impacted	Severity	Problem Documentation
Aquatic Life	Stressed	Possible
RECREATION	Impaired	Known
HABITAT/HYDROLOGY	Impaired	Known

Type of Pollutant(s)

Known: ALGAL/WEED GROWTH, NUTRIENTS (phosphorus), PROBLEM SPECIES, Silt/Sediment
 Suspected: - - -
 Possible: Pathogens

Source(s) of Pollutant(s)

Known: HABITAT MODIFICATION
 Suspected: FAILING ON-SITE SYST, Agriculture, Construction
 Possible: - - -

Resolution/Management Information

Issue Resolvability:	1 (Needs Verification/Study (see STATUS))	
Verification Status:	4 (Source Identified, Strategy Needed)	
Lead Agency/Office:	DOW/Reg5	Resolution Potential: Medium
TMDL/303d Status:	3a->1 ()	

Further Details

Recreational uses (swimming, fishing, boating) in Cossayuna Lake are considered to be impaired due to nutrient (phosphorus) enrichment, and aquatic weed growth (including invasives) in this eutrophic lake. The primary source of these impacts are failing and/or inadequate on-site septic systems serving lakeshore residences, nonpoint runoff of nutrients and sediment from the lake watershed and habitat modification (related to the invasive species).

Cossayuna Lake has been sampled as part of the NYSDEC Citizen Statewide Lake Assessment Program (CSLAP) beginning in 1992 and continuing through 2005. An Interpretive Summary report of the findings of this sampling was published in 2006. These data indicate that the lake continues to be best characterized as eutrophic, or highly productive, although productivity has been somewhat lower over the most recent five years. Phosphorus levels in the lake regularly exceed the state guidance criteria for impacted recreational uses, resulting in transparency measurements that at times fail to meet what is recommended for swimming beaches. However water clarity readings have improved in the most recent years of sampling. (DEC/DOW, BWAM/CSLAP, May 2006)

Public perception of the lake and its uses is also evaluated as part of the CSLAP program. These assessment also indicate recreational suitability of the lake to be mostly unfavorable since that lake was first evaluated and continuing through the most recent assessment. The lake is described most frequently as "slightly" to "substantially" impaired for most uses. Assessments have noted that aquatic plants regularly grow to the lake surface and are frequently quite dense. Aquatic plant communities appear to be dominated by a mix of native and non-native species. The lake association has been actively engaged in an aquatic plant control effort for many years. These efforts include use of aquatic herbicides in selective areas, targeted mechanical weed harvesting, and lake drawdown. (DEC/DOW, BWAM/CSLAP, May 2006)

A two-year water quality study was conducted in 2000-01 by the Washington County WQCC and Adirondack Community College. The study found elevated nutrient concentrations in tribs to the lake. Elevated levels of pathogens - perhaps related to waterfowl populations - were also noted. The lake is surrounded by camps with on-site septic systems as well as a trailer park. There are some agricultural activity along the tribs to the lake, but overall agriculture is declining. (Washington County WQCC/SWCD, 2005)

The lake is included on the NYS 2006 Section 303(d) List of Impaired Waters. The lake is included on Part 3a of the List as a a Water Requiring Verification of Impairment, however this updated assessment suggests that the suspected impairments are confirmed and the lake be moved to Part 1 of the List as Waterbody Requiring TMDL Development (or other strategy to attain water quality standards).

Black Creek and minor tribs (1103-0017)

NoKnownImpct

Waterbody Location Information

Revised: 07/06/2005

Water Index No:	H-301-20	Drain Basin:	Upper Hudson River
Hydro Unit Code:	02020003/080	Str Class:	C
Waterbody Type:	River	Reg/County:	5/Washington Co. (58)
Waterbody Size:	98.5 Miles	Quad Map:	COSSAYUNA (I-27-1)
Seg Description:	entire stream and selected/smaller 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
TMDL/303d Status: n/a ()

Resolution Potential:

Further Details

A biological (macroinvertebrate) assessment of Black Creek in Fitch Point (at Cemetery Road) was conducted in 2001. Sampling results indicated slightly impacted water quality conditions. Nonpoint source nutrient enrichment was identified as the primary stressor. This site was assessed as non-impacted in a 1999 sampling. Despite this decline, aquatic life is considered to be fully supported in the stream, and there are no other apparent water quality impacts to designated uses. (DEC/DOW, BWAR/SBU, June 2005)

This segment includes the entire stream and selected/smaller tribs. The waters of the stream are Class C. Tribs to this reach/segment, including West Beaver Brook (-3) and West Branch Black Creek, are Class C,C(T),C(TS). White Creek (-1) and larger lakes in the watershed are listed separately.

White Creek and tribs (1103-0004)

NoKnownImpct

Waterbody Location Information

Revised: 07/06/2005

Water Index No: H-301-20- 1
Hydro Unit Code: 02020003/070 **Str Class:** C*
Waterbody Type: River
Waterbody Size: 45.8 Miles
Seg Description: entire stream and tribs

Drain Basin: Upper Hudson River
Upper Hudson-Hoosic
Reg/County: 5/Washington Co. (58)
Quad Map: SALEM (I-27-2)

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
TMDL/303d Status: n/a ()

Resolution Potential:

Further Details

NYSDEC Rotating Integrated Basin Studies (RIBS) monitoring of White Creek in Salem/Greenwich (Hanks Road) was conducted in 2001 and 2002. Biological screening in 2001 found water quality to be non-impacted, with fauna that contained many species of clean-water mayflies, stoneflies, and caddisflies. Community assessment conducted as part of Intensive Network sampling in 2002 revealed water quality to be slightly impacted, with nutrient enrichment indicated as a primary stressor. The surrounding land is highly agricultural. Water column sampling revealed no parameters of concern. Macroinvertebrate tissue samples analyzed for pesticides, PCBs, and PAHs showed no contaminants to be above levels of concern. Based on sediment quality guidelines developed for freshwater ecosystems, overall sediment quality is not likely to cause chronic toxicity to sediment-dwelling organisms. Chronic toxicity testing using water from this location showed no significant mortality or reproductive effects on the test organism. Based on the consensus of these established assessment methods, overall aquatic life support is considered to be fully supported in the river despite minor effects on the fauna and there are no other apparent water quality impacts. (DEC/DOW, BWAR/RIBS, January 2005)

A previous biological assessment of White Creek in Salem (at Hanks Road) was conducted in 1999. Sampling results indicated non-impacted water quality conditions. The fauna contained many species of clean-water mayflies, stoneflies, and caddisflies. An intensive study of White Creek by Hudson Basin River Watch in 2001 found elevated levels of

nitrogen and fecal coliforms at most sites. These results are likely the result of agricultural activity in the watershed and are not known to be causing violations of water quality standards and/or impairment to uses in the stream. (DEC/DOW, BWAR/SBU, June 2005)

This segment includes the entire stream and all tribs. The waters of the stream are Class C(T). Tribs to this reach/segment, including Blind Buck Stream (-1), Beaver Brook (-2) and Buttermilk Falls Brook (-3), are primarily Class C,C(T),C(TS); portions of Blind Buck Stream (-1) are Class B,B(T).

Moses Kill and tribs (1101-0077)

NoKnownImpct

Waterbody Location Information

Revised: 07/06/2005

Water Index No: H-314	Drain Basin: Upper Hudson River
Hydro Unit Code: 02020003/030	Str Class: C
Waterbody Type: River	Reg/County: 5/Washington Co. (58)
Waterbody Size: 128.7 Miles	Quad Map: FORT MILLER (I-26-2)
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:
TMDL/303d Status: n/a ()	

Further Details

A biological (macroinvertebrate) assessment of Moses Kill in Lick Springs (below Route 46) was conducted in 2001. Sampling results indicated slightly impacted water quality conditions. The fauna was dominated by filter-feeding caddisflies, reflecting nutrient enrichment and impoundment effects. No prior data were available for the stream. Despite these conditions, aquatic life is considered to be fully supported in the stream, and there are no other apparent water quality impacts to designated uses. (DEC/DOW, BWAR/SBU, June 2005)

This segment includes the entire stream and all tribs. The waters of the stream are Class C,C(T) Tribs to this reach/segment, including Dead Creek (-2), Gillis Brook (-19) and Hook Brook (-21), are Class C,C(T).

Snook Kill, Lower, and minor tribs (1101-0026)

MinorImpacts

Waterbody Location Information

Revised: 12/06/2006

Water Index No:	H-318	Drain Basin:	Upper Hudson River
Hydro Unit Code:	02020003/020	Str Class:	C
Waterbody Type:	River	Reg/County:	5/Saratoga Co. (46)
Waterbody Size:	59.2 Miles	Quad Map:	GANESVOORT (I-26-1)
Seg Description:	stream and selected tribs from mouth to Gansevoort		

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

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

Type of Pollutant(s)

Known: ---
 Suspected: SILT/SEDIMENT, THERMAL CHANGES
 Possible: Nutrients, Pathogens

Source(s) of Pollutant(s)

Known: ---
 Suspected: ---
 Possible: AGRICULTURE, CONSTRUCTION, STREAMBANK EROSION

Resolution/Management Information

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

Further Details

Aquatic life support in this reach of the Snook Kill is thought to experience minor impacts/threats due to silt/sediment from streambank erosion and nonpoint runoff from agricultural and development activities in the watershed.

Incidents of heavy sedimentation and/or slope erosion occur periodically. Causes vary but include agricultural activities, construction activities, roadway work and channel deflection due to fallen trees. Trout Unlimited and the Saratoga County WQCC report that stream temperature readings approach the maximum for supporting trout. Sandy bottoms, rather than the preferred rock and gravel necessary for trout propagation, are common. (Saratoga County WQCC, 2004)

A biological (macroinvertebrate) assessment of a portion of Snook Kill above this reach in Dimmick Corners was conducted in 2001. Sampling results indicated non-impacted water quality conditions, but reflected light effects of nonpoint source nutrient enrichment. The fauna included clean-water mayflies and stoneflies, but was dominated by filter-feeding caddisflies. In spite of some of these minor impacts, uses are considered to be fully supported in the stream. (DEC/DOW, BWAR/SBU, June 2005)

In Cole Brook, over a foot of sand and silt from a massive gully-landslide was deposited in a tributary in the spring

(1993) snowmelt, impacting fishery habitat. The area affected is Cole Brook 500' upstream from Lindsey Hill Road and unknown distance downstream. The tributary is located 300' from Cole Brook Road and Lindsey Hill Road intersection, and is affected for about 3000' upstream of confluence with Cole Brook.(Saratoga County WQCC/SWCD, 1996)

This segment includes the portion of the stream and selected/smaller tribs from the mouth to unnamed trib (-4) near Gansevoort. The waters of the stream are Class C for this reach. Tribs to this reach/segment, including Cole Brook (-3), are primarily Class C,C(T),C(TS). North Branch (-1) is listed separately.

Snook Kill, Upper, and tribs (1101-0079)

NoKnownImpct

Waterbody Location Information

Revised: 07/06/2005

Water Index No: H-318
Hydro Unit Code: 02020003/020 **Str Class:** C(T)
Waterbody Type: River
Waterbody Size: 94.1 Miles
Seg Description: stream and tribs above Gansvoort

Drain Basin: Upper Hudson River
Upper Hudson-Hoosic
Reg/County: 5/Saratoga Co. (46)
Quad Map: GANESVOORT (I-26-1)

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

Use(s) Impacted	Severity	Problem Documentation
NO USE IMPAIRMNT		

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

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

Resolution/Management Information

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

Resolution Potential:

Further Details

A biological (macroinvertebrate) assessment of this portion of Snook Kill in Dimmick Corners (at Dimmick Road) was conducted in 2001. Sampling results indicated non-impacted water quality conditions, but reflected light effects of nonpoint source nutrient enrichment. The fauna included clean-water mayflies and stoneflies, but was dominated by filter-feeding caddisflies. (DEC/DOW, BWAR/SBU, June 2005)

This segment includes the portion of the stream and all tribs above unnamed trib (-4) near Gansvoort. The waters of this portion of the stream are Class C(T). Tribs to this reach/segment, including Delegan Brook (-10) and Little Snook Kill (-11), are primarily C,C(T).

North Branch Snook Kill and tribs (1101-0080)

Need Verific

Waterbody Location Information

Revised: 12/06/2006

Water Index No: H-318-1
Hydro Unit Code: 02020003/020 **Str Class:** C(T)
Waterbody Type: River
Waterbody Size: 39.6 Miles
Seg Description: entire stream and tribs

Drain Basin: Upper Hudson River
Upper Hudson-Hoosic
Reg/County: 5/Saratoga Co. (46)
Quad Map: GANESVOORT (I-26-1)

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

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

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

Known: ---
Suspected: AGRICULTURE, STREAMBANK EROSION
Possible: Construction

Resolution/Management Information

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

Resolution Potential: Medium

Further Details

Aquatic life support in North Branch may experience minor impacts/threats due to silt/sediment from streambank erosion and nonpoint runoff from agriculture and development activities in the watershed.

Incidents of heavy sedimentation and/or slope erosion occur periodically. Causes vary but include agricultural activities, construction activities, roadway work and channel deflection due to fallen trees. The meandering nature of the stream contributes to streambank erosion. (Saratoga County WQCC, June 2003)

This segment includes the entire stream and all tribs. The waters of the stream are Class C(T). Tribs to this reach/segment are primarily Class C,C(T),C(TS).

Moreau Lake (1101-0084)

NoKnownImpct

Waterbody Location Information

Revised: 02/08/2007

Water Index No:	H-318-P100-2-P101	Drain Basin:	Upper Hudson River
Hydro Unit Code:	02020003/020	Str Class:	A(T)
Waterbody Type:	Lake	Reg/County:	5/Saratoga Co. (46)
Waterbody Size:	128.1 Acres	Quad Map:	GANESVOORT (I-26-1)
Seg Description:	entire lake		

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

Use(s) Impacted	Severity	Problem Documentation
NO USE IMPAIRMNT		

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

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

Resolution/Management Information

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

Further Details

[list uses IMPAIRED] in (this portion of) [waterbody] is/are impaired by [list pollutants] attributed to [list sources]. [list uses IMPACTED] in xxx creek (are known to/are thought to/may) experience minor impacts/threats due to [list pollutants] from [list sources].

Moreau Lake has been sampled as part of the NYSDEC Citizen Statewide Lake Assessment Program (CSLAP) beginning in 1994 and continuing through the present. An Interpretive Summary report of the findings of this sampling was published in 2003. These data indicate that the lake continues to be best characterized as oligotrophic, or highly unproductive. Chlorophyll a has decreased over the sampling period, although none of the trophic indicators have varied in a manner that appears to be statistically significant. Phosphorus levels in the lake typically fall below the state guidance values indicating impacted/stressed recreational uses. Corresponding transparency measurements easily exceed what is minimally recommended for swimming beaches. Reading for pH fall within the state standards range of 6.5 to 8.5. (DEC/DOW, BWAM/CSLAP, August 2003)

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 highly favorable. The recreational suitability of the lake is described most

frequently as "could not be nicer" and/or "excellent." The lake itself is most often described as "crystal clear" or "not quite crystal clear." These assessments are consistent with the measured water quality characteristics of the lake. Aquatic plant assessments have not been conducted in the lake, weed growth has not been cited as impacting recreational uses. (DEC/DOW, BWAM/CSLAP, August 2003)

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.

Minor Tribs to Upper Hudson (1101-0085)

Need Verific

Waterbody Location Information

Revised: 12/06/2006

Water Index No:	H-319 thru 343 (selected)	Drain Basin:	Upper Hudson River
Hydro Unit Code:	02020003/020	Str Class:	C
Waterbody Type:	River	Reg/County:	5/Saratoga Co. (46)
Waterbody Size:	101.4 Miles	Quad Map:	HUDSON FALLS (H-26-3)
Seg Description:	total length of sel. tribs, Hudson Falls to Glens Falls		

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

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

Type of Pollutant(s)

Known: ---
 Suspected: ---
 Possible: D.O./OXYGEN DEMAND, Nutrients

Source(s) of Pollutant(s)

Known: ---
 Suspected: ---
 Possible: AGRICULTURE, INDUSTRIAL, Urban Runoff

Resolution/Management Information

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

Further Details

Aquatic life support in Bond Creek may experience minor impacts/threats due to nutrient loadings and low dissolved oxygen from agricultural activities and other nonpoint source runoff in the watershed. This assessment applies to this one tributary; other tribs included in this segment listing are UnAssessed.

The stream originates near excavation and construction projects in Queensbury. The flow continues through the Floyd Bennet Air Field and Warren-Washington County Industrial Park. The lower reach of the stream traverses and meanders over several hundred acres of highly erodable agricultural lands. The stream then empties into the Champlain Canal in Hudson Falls and then the Upper Hudson in Fort Edward.

This segment includes the total length of all selected/smaller tribs to the Upper Hudson from Snook Kill (-318) below Fort Edward to/including Clendon Brook (-343) near West Glens Falls. Tribs within this segment, including Bond Creek (-319), Cold Brook (-327) and Clendon Brook (-343, are primarily Class C,C(T). Some portions designated as Class AA are listed separately.

Bullhead Pond (1101-0033)

Impaired Seg

Waterbody Location Information

Revised: 12/08/2006

Water Index No: H-363-P119
Hydro Unit Code: 02020003/010 **Str Class:** C
Waterbody Type: Lake
Waterbody Size: 6.4 Acres
Seg Description: entire lake
Drain Basin: Upper Hudson River
Upper Hudson-Hoosic
Reg/County: 5/Saratoga Co. (46)
Quad Map: CORINTH (I-25-2)

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

Use(s) Impacted AQUATIC LIFE	Severity Impaired	Problem Documentation 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 Bullhead Pond is known to be impaired by low pH, a result of atmospheric deposition (acid rain).

Historical surveys of the lake indicate that low pH due to acid deposition is limiting the fishery. The NYSDEC Lakes Database indicates that the pH of this lake is less than or equal to 6.0. Aquatic life is considered to be impaired. This waterbody is included on the NYS 2006 Section 303(d) List of Impaired Waters. The lake was included on Part 2a of the List as an Atmospheric Deposition (Acid Rain) Water. (DEC/DOW, BWAR, 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 page intentionally left blank.