

Upper Hudson, Main Stem (1101-0002)

Impaired Seg

Waterbody Location Information

Revised: 09/09/2008

Water Index No: H (portion 1) **Drain Basin:** Upper Hudson River
Hydro Unit Code: 02020003/ **Str Class:** A Upper Hudson-Hoosic
Waterbody Type: River **Reg/County:** 5/Saratoga Co. (46)
Waterbody Size: 10.9 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
Public Bathing	Stressed	Suspected
FISH CONSUMPTION	Precluded	Known

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

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

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 (Waterbody Being Addressed by Other Means, 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/DFWMR, 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, BWAM/SBU, June 2005)

Swimmable Hudson

In response to the improvement in Hudson River water quality since the 1970s, there has been a rise in recreational use and a public call for increased swimming opportunities. Currently swimming occurs in popular anchoring spots along the shore, including areas not designated for swimming. However, in spite of growing use publicly available swimming areas in the Hudson remain limited. To reach the goal of a swimmable Hudson River, the NYSDEC Hudson River Estuary Program: and Division of Water are focusing on four primary areas of water quality impact

1) the need for seasonal disinfection of municipal and other wastewater discharges, 2) the reduction of CSO impacts through appropriate control strategies, 3) implementation and compliance with Phase II Stormwater permit program, and 4) continued support of a vessel No Discharge Zone in the Hudson. While the impetus for the Swimmable Hudson initiative was largely focused on the estuary waters of the Lower Hudson, the effort extends into the Upper Hudson Basin as well and includes disinfection of municipal plant discharges impacting this segment. (DEC/HREP and DEC/DOW, BWAM, May 2008)

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: 09/09/2008

Water Index No: H (portion 2) **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: 4.2 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
Public Bathing	Stressed	Suspected
FISH CONSUMPTION	Precluded	Known

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

Known: TOX/CONTAM. SEDIMENT
Suspected: Municipal
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 (Waterbody Being Addressed by Other Means, 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/DFWMR, 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, BWAM/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, BWAM/SWMS, June 2005)

Swimmable Hudson

In response to the improvement in Hudson River water quality since the 1970s, there has been a rise in recreational use and a public call for increased swimming opportunities. Currently swimming occurs in popular anchoring spots along the shore, including areas not designated for swimming. However, in spite of growing use publicly available swimming areas in the Hudson remain limited. To reach the goal of a swimmable Hudson River, the NYSDEC Hudson River Estuary Program: and Division of Water are focusing on four primary areas of water quality impact

1) the need for seasonal disinfection of municipal and other wastewater discharges, 2) the reduction of CSO impacts through appropriate control strategies, 3) implementation and compliance with Phase II Stormwater permit program, and

4) continued support of a vessel No Discharge Zone in the Hudson. While the impetus for the Swimmable Hudson initiative was largely focused on the estuary waters of the Lower Hudson, the effort extends into the Upper Hudson Basin as well and includes disinfection of municipal plant discharges impacting this segment. (DEC/HREP and DEC/DOW, BWAM, May 2008)

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: 09/09/2008

Water Index No: H (portion 3) **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: 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
Public Bathing	Stressed	Suspected
FISH CONSUMPTION	Precluded	Known

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

Known: TOX/CONTAM. SEDIMENT
Suspected: Municipal
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 (Waterbody Being Addressed by Other Means, 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/DFWMR, 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, BWAM/SBU, June 2005)

Swimmable Hudson

In response to the improvement in Hudson River water quality since the 1970s, there has been a rise in recreational use and a public call for increased swimming opportunities. Currently swimming occurs in popular anchoring spots along the shore, including areas not designated for swimming. However, in spite of growing use publicly available swimming areas in the Hudson remain limited. To reach the goal of a swimmable Hudson River, the NYSDEC Hudson River Estuary Program: and Division of Water are focusing on four primary areas of water quality impact 1) the need for seasonal disinfection of municipal and other wastewater discharges, 2) the reduction of CSO impacts through appropriate control strategies, 3) implementation and compliance with Phase II Stormwater permit program, and 4) continued support of a vessel No Discharge Zone in the Hudson. While the impetus for the Swimmable Hudson initiative was largely focused on the estuary waters of the Lower Hudson, the effort extends into the Upper Hudson Basin as well and includes disinfection of municipal plant discharges impacting this segment. (DEC/HREP and DEC/DOW, BWAM, May 2008)

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: 09/09/2008

Water Index No: H (portion 4) **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: 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: Pathogens

Source(s) of Pollutant(s)

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

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

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/DFWMR, 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, BWAM/SBU, June 2005)

Swimmable Hudson

In response to the improvement in Hudson River water quality since the 1970s, there has been a rise in recreational use and a public call for increased swimming opportunities. Currently swimming occurs in popular anchoring spots along the shore, including areas not designated for swimming. However, in spite of growing use publicly available swimming areas in the Hudson remain limited. To reach the goal of a swimmable Hudson River, the NYSDEC Hudson River Estuary Program and Division of Water are focusing on four primary areas of water quality impact

1) the need for seasonal disinfection of municipal and other wastewater discharges, 2) the reduction of CSO impacts through appropriate control strategies, 3) implementation and compliance with Phase II Stormwater permit program, and 4) continued support of a vessel No Discharge Zone in the Hudson. While the impetus for the Swimmable Hudson initiative was largely focused on the estuary waters of the Lower Hudson, the effort extends into the Upper Hudson Basin as well and includes disinfection of municipal plant discharges impacting this segment. (DEC/HREP and DEC/DOW, BWAM, May 2008)

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.

Upper Hudson, Main Stem (1101-0005)

Impaired Seg

Waterbody Location Information

Revised: 09/09/2008

Water Index No: H (portion 5) **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: 12.6 Miles **Quad Map:** GLENS FALLS (H-26-4)
Seg Description: from Glens Falls to Sherman Isl Dam above Glens Falls

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

Use(s) Impacted	Severity	Problem Documentation
Public Bathing	Stressed	Suspected
FISH CONSUMPTION	Impaired	Known

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

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

Resolution/Management Information

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

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.

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 carp because of elevated PCB levels. This advisory is due to PCB contamination of the river sediment attributed to the nearby Niagara Mohawk hazardous waste site in the Town of Queensbury. Some remediation of this site has begun and additional cleanup efforts are being studied.

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.

Previous assessment for this reach of the river cited impacts from the Sherman Island Hydroelectric project that resulted in the dewatering of a 0.8 mile portion of the natural channel. However an agreement was reached in 2000 as part of the FERC relicensing of the facility to provide a continuous base flow that is adequate to support aquatic life and other uses.

Swimmable Hudson

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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: 09/09/2008

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
Public Bathing	Stressed	Suspected
FISH CONSUMPTION	Impaired	Known

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

Known: ---
 Suspected: ATMOSPHER. DEPOSITION, Municipal
 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/DFWMR, Habitat, October 2005)

Swimmable Hudson

In response to the improvement in Hudson River water quality since the 1970s, there has been a rise in recreational use and a public call for increased swimming opportunities. Currently swimming occurs in popular anchoring spots along the shore, including areas not designated for swimming. However, in spite of growing use publicly available swimming areas in the Hudson remain limited. To reach the goal of a swimmable Hudson River, the NYSDEC Hudson River Estuary Program: and Division of Water are focusing on four primary areas of water quality impact

1) the need for seasonal disinfection of municipal and other wastewater discharges, 2) the reduction of CSO impacts through appropriate control strategies, 3) implementation and compliance with Phase II Stormwater permit program, and 4) continued support of a vessel No Discharge Zone in the Hudson. While the impetus for the Swimmable Hudson initiative was largely focused on the estuary waters of the Lower Hudson, the effort extends into the Upper Hudson Basin as well and includes disinfection of municipal plant discharges impacting this segment. (DEC/HREP and DEC/DOW,

BWAM, May 2008)

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)

NoKnownImpet

Waterbody Location Information

Revised: 09/09/2008

Water Index No:	H (portion 7)	Drain Basin:	Upper Hudson River
Hydro Unit Code:	02020003/	Str Class:	C
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	Resolution Potential: n/a
TMDL/303d Status:	n/a	

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 locate just upstream of the segment and is considered to be representative of water quality. (DEC/DOW, BWAM/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, BWAM/SBU, June 2005)

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

Upper Hudson, Upper, and minor tribs (1104-0054) NoKnownImpct

Waterbody Location Information

Revised: 09/09/2008

Water Index No: H (portion 11) **Drain Basin:** Upper Hudson River
Hydro Unit Code: 02020001/ **Str Class:** C(T) Upper Hudson
Waterbody Type: River **Reg/County:** 5/Essex Co. (16)
Waterbody Size: 224.3 Miles **Quad Map:** NEWCOMB (F-24-0)
Seg Description: stream and select tribs, from North Creek to Newcomb

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

Use(s) Impacted **Severity** **Problem Documentation**
NO USE IMPAIRMNT

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

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

Resolution/Management Information

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

Further Details

Biological (macroinvertebrate) assessments at multiple sites between North Creek and Newcomb were conducted in 2001 and 2002. Sampling results from 2002 indicated non-impacted conditions above the Hudson confluence with Indian River and slightly impacted conditions immediately below the confluence. This impact may be a result of mid-summer rafting releases from Lake Abanakee (see Indian River assessment). It was not determined how far below the confluence the impacts extended. However sampling in North River in 2001 clearly indicated non-impacted water quality conditions. (DEC/DOW, BWAM/SBU, June 2005)

A biological (macroinvertebrate) assessment of Deer Creek near Minerva (at County Route 37) was conducted in 2001. Sampling results indicated non-impacted water quality conditions. The fauna contained many species of clean-water mayflies, stoneflies, and caddisflies. No prior data were available for the stream. (DEC/DOW, BWAM/SBU, June 2005)

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This segment includes the portion of the stream and selected/smaller tribs from North Creek (-419) in North Creek to Harris Lake Outlet in Newcomb. The waters of this portion of the stream are Class C(T). Tribs to this reach/segment, including Deer Creek (-428), Aldous Brook (-430), Raquette Brook (-432) and Griffin Brook (-435), Clear Pond Outlet (463), Beaver Brook (-466), Goodnow River (-484), Wolf Creek (-489) and Harris Lake Outlet (-503), are primarily Class C,C(T),C(TS), with portions in the forest preserve. Thirteenth Brook (-429), Boreas River (-438), Indian River (-461) and Cedar River (-469) are listed separately. This segment was previously identified as 1101-0050.