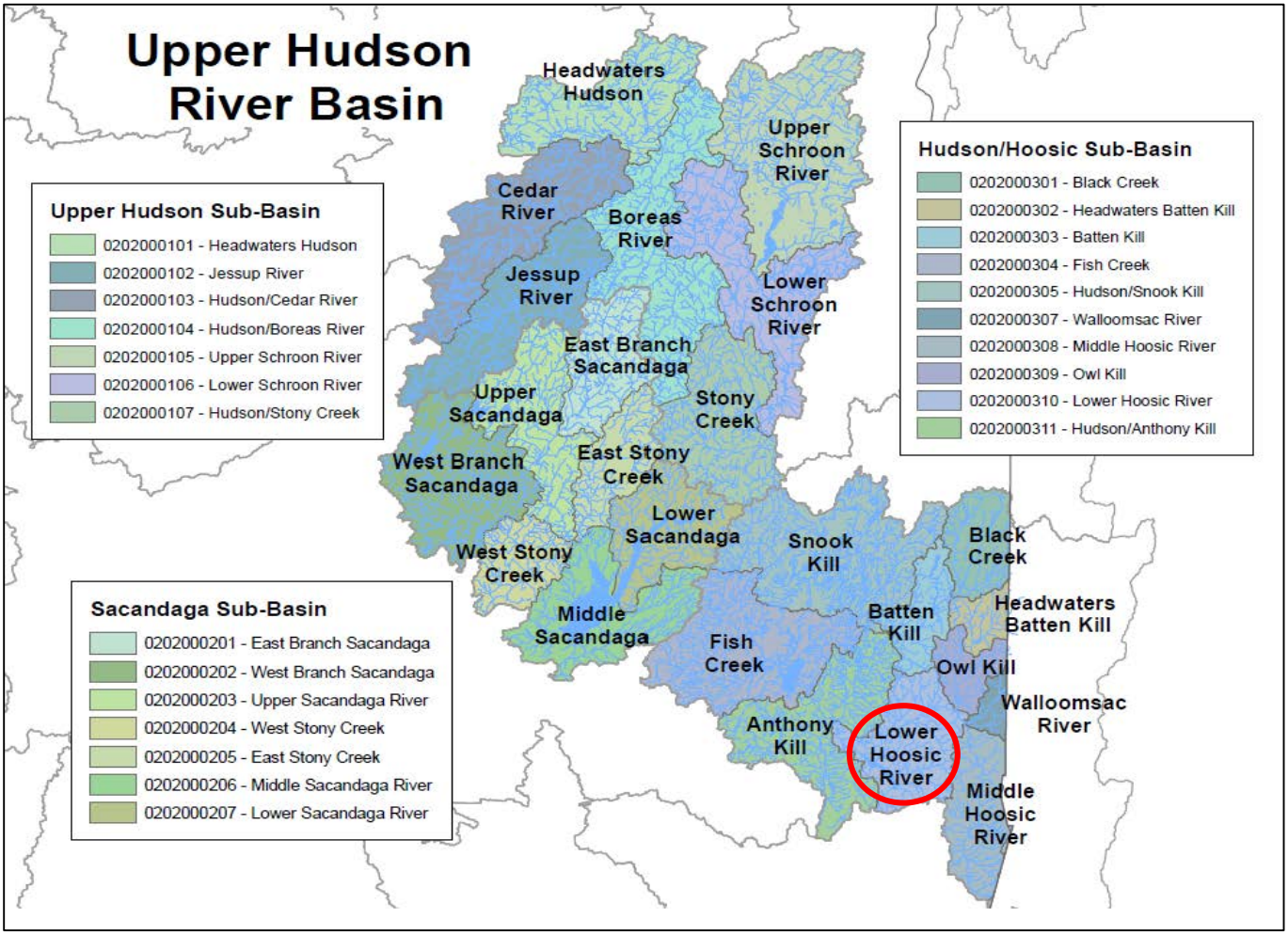

Lower Hoosic River Watershed
(0202000310)

Water Index Number	Waterbody Segment	Category
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- 1 thru 9 (selected)	Minor Tribs to Lower Hoosic River (1102-0019)	UnAssessed
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

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

Waterbody Location Information

Revised: 11/06/2006

Water Index No: H-264 (portion 1)
Hydro Unit Code: 02020003/230 **Str Class:** B
Waterbody Type: River
Waterbody Size: 15.8 Miles
Seg Description: from mouth to Johnsonville Dam

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
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 Johnsoneville, 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. This reach of the river 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. This reach of the river 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).

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	Severity	Problem Documentation
Water Supply	Threatened	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
Hydro Unit Code: 02020003/230 **Str Class:** A
Waterbody Type: Lake
Waterbody Size: 44.7 Acres
Seg Description: entire lake

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

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 **Resolution Potential:**
TMDL/303d Status: n/a ())

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 aqautic 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)