



## Middle Hoosic River Watershed (0202000308)

### Water Index Number

H-264 (portion 3)  
H-264 (portion 4)  
H-264 (portion 5)  
H-264-38  
H-264-38  
H-264-38- 5-P1127  
H-264-38-12-P1129  
H-264-38-20-P1130  
H-264-41 thru 60 (selected)

### Waterbody Segment

Hoosic River, Middle, Main Stem (1102-0016)  
Hoosic River, Upper, and tribs (1102-0017)  
Hoosic River, Upper, and minor tribs (1102-0018)  
Little Hoosic River, Lower, and tribs (1102-0027)  
Little Hoosic River, Upper, and tribs (1102-0028)  
Peckham Pond (1102-0031)  
Taconic (Crandall) Pond (1102-0029)  
Kendall Pond (1102-0030)  
Minor Tribs to Hoosic (Vermont drainage) (1102-0032)

### Category

Impaired Seg  
Impaired Seg  
Impaired Seg  
NoKnownImpct  
UnAssessed  
UnAssessed  
UnAssessed  
UnAssessed  
UnAssessed

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

**Impaired**

## Waterbody Location Information

Revised: 10/13/2016

**Water Index No:** H-264 (portion 3)  
**Hydro Unit Code:** Middle Hoosic River (0202000308)  
**Water Type/Size:** River/Stream 3.9 Miles  
**Description:** from Walloomsac River to Hoosic Falls

**Water Class:** C(T)  
**Drainage Basin:** Upper Hudson River  
**Reg/County:** 4/Rensselaer (42)

## Water Quality Problem/Issue Information

Uses Evaluated	Severity	Confidence
Water Supply	Unassessed	-
Public Bathing	Unassessed	-
Recreation	Threatened	Suspected
Aquatic Life	Stressed	Suspected
Fish Consumption	Impaired	Known

### Conditions Evaluated

Habitat/Hydrology	Unassessed
Aesthetics	Unassessed

### Type of Pollutant(s) (CAPS indicate Major Pollutants/Sources that contribute to an Impaired/Precluded Uses)

Known: PRIORITY ORGANICS (PCBS), Priority Organics (PFOA)  
Suspected: Nutrients  
Unconfirmed: Water Level/Flow

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

Known: TOX/CONTAM. SEDIMENT  
Suspected: Agriculture  
Unconfirmed: Hydro Alteration

## Management Information

**Management Status:** Verification of Sources Needed  
**Lead Agency/Office:** DEC/FWMR  
**IR/305(b) Code:** Impaired Water Requiring a TMDL (IR Category 5)

## Further Details

### Overview

This portion of the Hoosic River is assessed as an impaired waterbody due to fish consumption that is known to be impaired by PCBs from past/historic discharges and contaminated sediment. There are additional concerns regarding other industrial organics that have resulted in groundwater contamination and may be impacting uses in the river. 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.

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.

### Use Assessment

This portion of the Hoosic River is a Class C waterbody, suitable for general recreation use and support of aquatic life, but not as a water supply or for public bathing. The waterbody is also designated as a cold water (trout) fishery.

Aquatic life is evaluated as supported but stressed based on biological sampling that shows slight impacts. This

sampling can also be used to infer that there may be minor impacts to recreational (fishing) uses, although more specific sampling is necessary to confirm this is the case. The presence of other priority organics (PFOA) contamination of groundwater in the area from past industrial activity raises concerns about threats to various uses. (DEC, DOW, BWAM, July 2016)

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. (NYS DOH Health Advisories and DEC/FWMR, Habitat, January 2014)

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

#### Water Quality Information

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)

#### Source Assessment

The fish consumption advisory is the result of PCB contamination that originated with past/historic industrial activity and and has resulted in river contaminated sediments. Groundwater contamination from other industrial facilities have also been documented, although it is not certain what if any impacts this has on surface water uses.

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)

#### Management Actions

No specific management actions have been identified to address the fish consumption advisory. The Hoosic River is included on the Section 303(d) List for eventual development of a TMDL or other restoration strategy (see below).

An extensive range of management actions have been put into place regarding the groundwater contamination in this area of the river. Though it is not certain what impacts the groundwater contamination has on surface water quality, the Hoosic Falls WWTP is evaluating additional treatment measures to protect the river from possible additional threats. (DEC/DOW, BWAM/PCPS, September 2016)

#### Section 303(d) Listing

This portion of the Hoosic River is included on the current (2016) NYS Section 303(d) List of Impaired/TMDL Waters. The waterbody is included on Part 2b of the List as an impaired waterbody requiring TMDL development to address PCBs. This waterbody was first listed on the 2008 List. (DEC/DOW, BWAM/WQAS, January 2016)

#### Segment Description

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  
**TMDL/303d Status:** 2b\* ( )

**Resolution Potential:** Medium

## 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.

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

NoKnownImpct

## Waterbody Location Information

Revised: 07/05/2005

**Water Index No:** H-264-38  
**Hydro Unit Code:** 02020003/180      **Str Class:** C(TS)  
**Waterbody Type:** River  
**Waterbody Size:** 35.1 Miles  
**Seg Description:** stream and tribs from mouth to Petersburg

**Drain Basin:** Upper Hudson River  
**Reg/County:** 4/Rensselaer Co. (42)  
**Quad Map:** NORTH POWNAL (J-27-3)

## 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 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).