



Schoharie/Batavia Kill Watershed (0202000502)

| Water Index Number | Waterbody Segment | Category |
|-----------------------------|--|--------------|
| H-240- 82 (portion 5) | Schoharie Creek, Middle, Main Stem (1202-0025) | Need Verific |
| H-240- 82 (portion 6)/P638a | Schoharie Reservoir (1202-0012) | Impaired Seg |
| H-240- 82-110 thru 115 | Minor Tribs to Schoharie Reservoir (1202-0054) | Need Verific |
| H-240- 82-112 | Manor Kill and tribs (1202-0017) | NoKnownImpct |
| H-240- 82-113-P643 | Mayham Pond (1202-0055) | UnAssessed |
| H-240- 82-116 | Huntersfield Creek, Upper, and tribs (1202-0056) | NoKnownImpct |
| H-240- 82-116 thru 140 | Minor Tribs to Schoharie Creek (1202-0057) | MinorImpacts |
| H-240- 82-117 | Batavia Kill, Lower, and tribs (1202-0001) | MinorImpacts |
| H-240- 82-117 | Batavia Kill, Middle, and tribs (1202-0058) | MinorImpacts |
| H-240- 82-117 | Batavia Kill, Upper, and tribs (1202-0059) | NoKnownImpct |
| H-240- 82-117-14-P647a | Lake Heloise (1202-0060) | UnAssessed |
| H-240- 82-117-P647b | Silver Lake (1202-0061) | UnAssessed |

Schoharie Creek, Middle, Main Stem (1202-0025)

Need Verific

Waterbody Location Information

Revised: 08/21/2002

Water Index No: H-240- 82 (portion 5) **Drain Basin:** Mohawk River
Hydro Unit Code: 02020005/070 **Str Class:** B Schoharie Creek
Waterbody Type: River (Low Flow) **Reg/County:** 4/Schoharie Co. (48)
Waterbody Size: 11.9 Miles **Quad Map:** GILBOA (L-23-1)
Seg Description: from Blenheim-Gilboa Reservoir to Schoharie Reservoir

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

| Use(s) Impacted | Severity | Problem Documentation |
|-------------------|----------|-----------------------|
| Aquatic Life | Stressed | Possible |
| Habitat/Hydrology | Stressed | Known |

Type of Pollutant(s)

Known: WATER LEVEL/FLOW, SILT/SEDIMENT
Suspected: Thermal Changes
Possible: - - -

Source(s) of Pollutant(s)

Known: HYDRO MODIFICATION, STREAMBANK EROSION
Suspected: Agriculture
Possible: - - -

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

Overview

Natural resources (fishery) habitat in Lower Schoharie Creek is affected by hydrologic modification and silt and sediment loadings. Much of the impact is a result of the operation of the upstream water supply reservoirs. Aquatic life support may also be limited by these impacts, but such impacts need to be verified.

Source Assessment

Stream flow is significantly influenced by operation of the Schoharie Reservoir. Flow from the reservoir is restricted when the dam is not spilling. The lack of flow is a particular problem during the summer when low flow and resulting increase in water temperature affect the fishery. (DEC/DOW, Region 4, April 2002)

The creek flows through an intensive agricultural (vegetables, grain and silage) valley. These activities contribute sediment loads (and likely nutrients) to the creek. The fluctuating water levels also exacerbate streambank erosion and sediment loadings. Gravel beds are exposed during low flow, but during spring runoff and other high flow events low lying agricultural fields are flooded. During high flows, the creek becomes quite turbid. (Schoharie County SWCD/WQCC, April 2002)

Segment Description

This segment includes the portion of the Schoharie Creek from the Blenheim-Gilboa Reservoir to the Schoharie Reservoir. The waters of this portion of the stream are Class B.

Schoharie Reservoir (1202-0012)

Impaired Seg

Waterbody Location Information

Revised: 11/13/2002

Water Index No: H-240- 82 (portion 6)/P638a
Hydro Unit Code: 02020005/010 **Str Class:** AA(TS)
Waterbody Type: Lake(R) (Unknown Trophic) **Reg/County:** 4/Greene Co. (20) ...
Waterbody Size: 1131.5 Acres **Quad Map:** GILBOA (L-23-1)
Seg Description: entire reservoir

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

| Use(s) Impacted | Severity | Problem Documentation |
|------------------|----------|-----------------------|
| WATER SUPPLY | Impaired | Known |
| FISH CONSUMPTION | Impaired | Known |

Type of Pollutant(s)

Known: METALS (mercury), SILT/SEDIMENT
Suspected: - - -
Possible: - - -

Source(s) of Pollutant(s)

Known: STREAMBANK EROSION
Suspected: ATMOSPH. DEPOSITION, Agriculture
Possible: - - -

Resolution/Management Information

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

Further Details

Overview

Fish consumption and water supply use in Schoharie Reservoir are impaired due to mercury levels and high turbidity. The mercury is a results of atmospheric deposition. The high turbidity is a result of excessive silt and sediment loadings from streambank erosion and other nonpoint sources in the reservoir watershed.

Water Supply Assessment

Excessive silt and sediment loads to the reservoir from watershed tributaries results in high turbidity in the reservoir. The Schoharie Reservoir is part of the New York City Water Supply's Catskill District, which makes up about 24% of the entire water supply, and which serves nearly half the population of the state. The turbidity in the reservoir is sufficiently high as to limit its use as a drinking water supply. These problems are primarily the result of the erosion of glacial clay deposits indigenous to the watershed. Some in-reservoir processes, such as near shore wave action, can contribute to reservoir turbidity. However the ultimate source of most turbidity in the reservoir is watershed streams. NYCDEP has studied the issue of turbidity in the Catskill Watershed and identified the West Kill, Batavia Kill and Upper Schoharie Creek as major contributors of silt, sediment and turbidity. The water quality problems in these tribs, and NYCDEP's management of these streams, are discussed in further detail on the appropriate individual waterbody segment data sheets. (NYCDEP, October 2002)

Fish Consumption

Fish consumption in Schoharie Reservoir is impaired due to a NYS DOH health advisory that recommends eating no more than one meal per month of walleye because of elevated mercury levels. The source of mercury is considered to be atmospheric deposition, as there are not other apparent sources in the lake watershed. The advisory for this lake was first issued in 2002-03. (2009-10 NYS DOH Health Advisories and DEC/DFWMR, Habitat, December 2009).

Water Quality Sampling

NYCDEP conducts year-round monitoring at 13 stream locations throughout the basin in addition to in-reservoir and aqueduct monitoring. DEP has also conducted biological monitoring at 22 Schoharie watershed stream sites. In spite of the turbidity and atmospheric mercury issues, these monitoring efforts reveal generally high water quality and non-impacted aquatic life in the watershed. (NYCDEP, October 2002)

New York City Watershed

The Schoharie Reservoir is a part of the Catskill/Delaware System of New York City water supply reservoirs. The Catskill/Delaware System provides about 90% of New York City water supply, the other 10% is supplied by the Croton System. The Ashokan Reservoir receives water from the 250 square mile watershed of the Upper Esopus Creek and serves as a collecting reservoir for the water from the other reservoir - Schoharie Reservoir - in the Catskill system. Water quality in this upstream reservoir influences water quality in the Ashokan Reservoir. (Water quality issues in the Ashokan Reservoir and its watershed are discussed more fully in the Mohawk River Waterbody Inventory and Priority Waterbody List.) The capacity of the Catskill water system is 550 MGD. Water from the Schoharie Reservoir travels through the Shandaken Tunnel and the Upper Esopus Creek to the Ashokan Reservoir, and then via the Catskill Aqueduct to the Kensico Reservoir. In order to protect the New York City water supply, a comprehensive long-range watershed protection program is in place. These protections enable the city to receive a series of waivers from a federal requirement to filter water from the Catskill/Delaware supply. (NYCDEP, July 2006)

Water Quality Management

To help protect this resource, NYC DEP has developed and entered into a Watershed Agreement with local Watershed communities. This agreement sets forth protection goals and programs and funding to address water quality issues. Programs to address and improve water quality in the Schoharie Watershed include agricultural BMPs, upgrading of WWTPs, septic system rehabilitation (including remediating failed/inadequate systems and/or connecting failed or marginal systems to WWTPs), improved urban stormwater controls, stream management planning and stream restoration projects. A Phase II TMDL for phosphorus for all the NYC reservoirs including the Schoharie was approved by USEPA in October 2000. Phosphorus levels in the Schoharie do not exceed limits set forth in the TMDL. (NYC DEP, April 2002)

Currently NYCDEP is managing turbidity in the reservoir and its impact on the water supply operationally, by regulating (limiting) the amount of water being diverted from the Schoharie to the Ashokan Reservoir. However this approach represents a trade of water quantity for quality and does not address the underlying sources of turbidity in the watershed. (NYCDEP, October 2002)

Reservoir water is diverted from the Schoharie/Mohawk Basin to the Upper Esopus Creek and the Ashokan Reservoir in the Lower Hudson Basin via the Shandaken Tunnel. The water discharged through the Shandaken Tunnel, has the potential to be a major contributor of suspended sediment to the Esopus Creek. The discharge was a matter of litigation in federal court that resulted in control measures through the SPDES permit process. (DEC/DOW and NYCDEP, January 2010)

Water Quality Management/TMDL

In 2007, The New England Interstate Water Pollution Control Commission (NEIWPC), on behalf of its member states including New York, submitted and USEPA approved a TMDL to address mercury deposition in lakes throughout the Northeastern United States, including Ferris Lake. The Northeast Regional Mercury TMDL notes that between 1998 and 2002 the Northeast states reduced in-region deposition of mercury by more than 70 percent. In addition these state have enforceable controls in place to meet the remaining reduction goals. Despite these reductions water quality impairment due to mercury still exists and elevated mercury levels in certain fish species remain great concern. The TMDL shows the demonstrates that the need for significant reductions in the mercury reaching waters of the Northeast from sources outside the region by way of

atmospheric deposition is essential to restoring these waters. (Northeast Regional Mercury TMDL, NEIWPC, 2007)

Section 303(d) Listing The reservoir is included on the NYS 2008 Section 303(d) List of Impaired/TMDL Waters. The reservoir was included on Part 1 as an impaired water with high priority for TMDL development due to silt/sediment concerns. The reservoir was included on previous Section 303(d) List of Impaired Waters due to impairments resulting from fish consumption advisories. However the lake was delisted with regard to this impairment in 2008 due to the Northeast Regional Mercury TMDL, and Part 2b of the List as a Fish Consumption Water.

Segment Description

This segment includes the total area of the entire reservoir.

Minor Tribs to Schoharie Reservoir (1202-0054)

Need Verific

Waterbody Location Information

Revised: 11/01/2002

Water Index No: H-240- 82-110 thru 115
Hydro Unit Code: 02020005/010 **Str Class:** C*
Waterbody Type: River (Low Flow) **Reg/County:** 4/Greene Co. (20)
Waterbody Size: 56.6 Miles **Quad Map:** GILBOA (L-23-1)
Seg Description: total length of selected tribs to the reservoir

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: NUTRIENTS (phosphorus), PATHOGENS
Possible: ---

Source(s) of Pollutant(s)

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

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

Overview

Aquatic life support and recreation in some of these tributaries to the Schoharie Reservoir (a New York City Water Supply reservoir) may be affected by nonpoint agricultural runoff. One particular trib that has been previously identified with water quality concerns is Johnson Hollow Brook. Sampling at another trib (Bear Kill) has indicated no water quality impacts.

Water Quality Assessment

Past (1997-2000) routine water quality monitoring of Johnson Hollow Brook by NYCDEP revealed elevated phosphorus concentrations and high "spike" values for coliform. The most likely source of these pollutants is livestock farms adjacent to the stream. To address watershed protection issues throughout the NYC Water Supply System the NYCDEP has entered into a Watershed Agreement with local communities. This agreement outlines the watershed protection goals and funds various watershed protection programs to meet these goals. One such program is the NYC Watershed Agricultural Program. All four farms in the Johnson Hollow Brook watershed have developed Whole Farms Plans that have been approved by this program and BMPs in these plans are currently being implemented. Water quality impacts in the creek need to be verified in light of these efforts. (NYCDEP, October 2002)

Water Quality Sampling

A biological (macroinvertebrate) assessment of Bear Kill below Grand Gorge (at Cottone Road) was conducted as part of the RIBS biological screening effort in 2005. Sampling results indicated non-impacted conditions. Such samples are dominated by clean-water species and are most similar to a natural community with minimal human impacts. Some additional species, including sensitive non-native species, and additional biomass may be present; the samples reveal no, or only incidental, anomalies. These results are consistent with field sampling conducted at the site in 2000 which found a sample that meet field screening criteria for a non-impacted stream. Aquatic life community is fully supported. (DEC/DOW, BWAM/SBU, January 2010)

Segment Description

This segment includes the total length of selected/smaller tribs to the Schoharie Reservoir. Tribs within this segment, including Bear Kill (-113) and Johnson Hollow Brook (-115), are primarily Class C, C(T), C(TS) with some portions designated as Class A, A(T). Manor Kill (-112) is listed separately.

Manor Kill and tribs (1202-0017)

NoKnownImpct

Waterbody Location Information

Revised: 11/01/2002

| | | | |
|-------------------------|-------------------------|---------------------|-------------------|
| Water Index No: | H-240- 82-112 | Drain Basin: | Mohawk River |
| Hydro Unit Code: | 02020005/030 | Str Class: | C(T)* |
| Waterbody Type: | River (Low Flow) | Reg/County: | 4/Greene Co. (20) |
| Waterbody Size: | 62.2 Miles | Quad Map: | GILBOA (L-23-1) |
| 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
TMDL/303d Status: n/a

Resolution Potential: n/a

Further Details

Water Quality Sampling

A biological (macroinvertebrate) assessment of Manorkill near the mouth in West Conesville was conducted in 2000. Field sampling results indicated non-impacted water quality conditions. The sample satisfied field screening criteria and was returned to the stream. (DEC/DOW, BWAR/SBU, July 2002)

Routine monitoring by NYCDEP also indicates good water quality with no identified impairments to the stream. The Manor Kill, like many streams in the area, is prone to turbidity problems but is not considered by NYCDEP to be a major source of sediment/turbidity to the Schoharie Reservoir. Though streambank erosion is of some concern, NYCDEP is not involved with the development of a stream management plan for the Manor Kill because the stream clears quickly after storm events and it is not considered a high priority. (NYCDEP, October 2002)

The most recent fishery survey information (1996) indicates that the stream supports a wild trout population. (DEC/DFWMR, Region 4, April 2002)

Water Quality Management

Agricultural nonpoint source concerns are being addressed by the New York City Watershed Agricultural Program. Most farms are developing whole farm plans and receiving funding for implementation. (Schoharie County SWCD/WQCC, April 2002)

Segment Description

This segment includes the entire stream and all tribs. The waters of the stream are Class A(T) from the mouth to County Route 39 and Class C(T), C(TS) for the remainder of the reach. Tribs to this reach/segment, including Bear Kill (-5), are primarily Class C, C(T), C(TS); with some tribs designated Class A.

Huntersfield Creek, Upper, and tribs (1202-0056)

NoKnownImpct

Waterbody Location Information

Revised: 02/01/2010

Water Index No: H-240- 82-116
Hydro Unit Code: 02020005/010 **Str Class:** A
Waterbody Type: River (Low Flow) **Reg/County:** 4/Greene Co. (20)
Waterbody Size: 9.8 Miles **Quad Map:** PRATTSVILLE (L-23-4)
Seg Description: stream and tribs, above Prattsville Water Supply

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: n/a

Further Details

Water Quality Sampling

A biological (macroinvertebrate) assessment of Hunterfield Creek in Prattsville (at Route 10) was conducted as part of the RIBS biological screening effort in 2005. Sampling results indicated non-impacted conditions. Such samples are dominated by clean-water species and conditions that reflect a natural community with minimal, if any, human impacts. Aquatic life community is clearly fully supported. (DEC/DOW, BWAM/SBU, January 2010)

Segment Description

This segment includes the portion of the stream and all tribs above the Prattsville Public Water Supply intake. The waters of this portion of the stream are Class A. Tribs to this reach/segment are Class A(T).

Minor Tribs to Schoharie Creek (1202-0057)

MinorImpacts

Waterbody Location Information

Revised: 08/14/2002

Water Index No: H-240- 82-116 thru 140
Hydro Unit Code: 02020005/010 **Str Class:** C
Waterbody Type: River (Low Flow)
Waterbody Size: 58.2 Miles
Seg Description: total length of select tribs fr Schoharie Res to Hunter

Drain Basin: Mohawk River
Schoharie Creek
Reg/County: 4/Greene Co. (20)
Quad Map: PRATTSVILLE (L-23-4)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

| Use(s) Impacted | Severity | Problem Documentation |
|-------------------|----------|-----------------------|
| Habitat/Hydrology | Stressed | Suspected |

Type of Pollutant(s)

Known: AESTHETICS (turbidity), SILT/SEDIMENT
Suspected: - - -
Possible: - - -

Source(s) of Pollutant(s)

Known: STREAMBANK EROSION
Suspected: Habitat Modification
Possible: Hydro Modification

Resolution/Management Information

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

Resolution Potential: Medium

Further Details

Overview

Natural resources (fishery) habitat in these smaller tribs to Schoharie Creek is thought to be affected by silt/sediment loads from excessive stream bank erosion along the stream. The Little West Kill has been specifically cited. Impacts of the sediment loadings to the Schoharie Reservoir and the New York City Water Supply System are of particular concern.

Source Assessment

Streambank failures/collapses are fairly common in the watershed. These streams have been the focus of significant streambank assessment and restoration activity by both the NYCDEP and the Greene County SWCD. Extensive water quality and erosion rate data is available from the county. (Greene County SWCD/WQCC, April 2002)

Water Quality Sampling

A biological (macroinvertebrate) assessment of Little West Kill in Mosquito Point (at Route 2) was conducted as part of the RIBS biological screening effort in 2005. Sampling results indicated non-impacted conditions. Such samples are dominated by clean-water species and are most similar to a natural community with minimal human impacts. Some additional species, including sensitive non-native species, and additional biomass may be present; the samples reveal no, or only incidental, anomalies. Aquatic life community is fully supported. Though Little West Kill is just one of several streams that make up this waterbody segment, it is considered representative of water quality in the segment as a whole. This segment is listed as being

evaluated rather than monitored. (DEC/DOW, BWAM/SBU, January 2010)

A biological assessment of Hunterfield Creek in Prattsville (at Route 10) was also conducted as part of the RIBS biological screening effort in 2005. Sampling results indicated non-impacted conditions. Such samples are dominated by clean-water species and conditions that reflect a natural community with minimal, if any, human impacts. Aquatic life community is clearly fully supported. (DEC/DOW, BWAM/SBU, January 2010)

Segment Description

This segment includes the total length of selected/smaller tribs to Schoharie Creek between Schoharie Reservoir and unnamed trib (-140) in Hunter. Tribs within this segment, including Lower Huntersfield Creek (-116), Little West Kill (-123), are Class C, C(T), C(TS). Upper Huntersfield Creek (-116), Batavia Kill (-117), West Kill (-128) and East Kill (-133) are listed separately.

Batavia Kill, Lower, and tribs (1202-0001)

MinorImpacts

Waterbody Location Information

Revised: 10/31/2002

Water Index No: H-240- 82-117
Hydro Unit Code: 02020005/020 **Str Class:** C(T)
Waterbody Type: River (Low Flow)
Waterbody Size: 48.2 Miles
Seg Description: stream and tribs, from mouth to Windham

Drain Basin: Mohawk River
Schoharie Creek
Reg/County: 4/Greene Co. (20)
Quad Map: ASHLAND (L-23-3)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

Known: SILT/SEDIMENT, Problem Species (Japanese knotweed)
Suspected: ---
Possible: ---

Source(s) of Pollutant(s)

Known: STREAMBANK EROSION, Habitat Modification
Suspected: ---
Possible: Construction, On-Site/Septic Syst

Resolution/Management Information

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

Resolution Potential: n/a

Further Details

Overview

Natural resources (fishery) habitat in the Batavia Kill is affected by silt/sediment loads from excessive stream bank erosion along the stream. Impacts of the sediment loadings to and the resulting turbidity in the Schoharie Reservoir and the New York City Water Supply System are of particular concern. Habitat/biodiversity issues have also been raised.

Water Quality Sampling

A biological (macroinvertebrate) assessment of Batavia Kill below Windham (at Route 12) was conducted as part of the RIBS biological screening effort in 2005. Sampling results indicated non-impacted conditions. Such samples are dominated by clean-water species and are most similar to a natural community with minimal human impacts. Some additional species, including sensitive non-native species, and additional biomass may be present; the samples reveal no, or only incidental, anomalies. These results are consistent with results from sampling conducted at this site in 2000 and 2001. Aquatic life community is fully supported. (DEC/DOW, BWAM/SBU, January 2010)

NYSDEC Rotating Intensive Basin Studies (RIBS) Intensive Network monitoring of the Batavia Kill in Prattsville (at State Route 23A) was conducted in 2001. Sampling of the water column, sediments, and invertebrate tissues was conducted, as well as macroinvertebrate community analysis. While aluminum and lead were elevated in a portion of the water column samples, no metals or organics were detected in the bottom sediments, no organic compounds were found to be elevated over background

levels in invertebrate tissues, and no significant mortality or reproductive impairment was found in the three toxicity tests conducted. (DEC/DOW, BWAR/RIBS, April 2003)

Routine monitoring by NYCDEP also indicates good water quality with no chronic water quality problems. DEP biological monitoring of two locations on the stream found no impairment to aquatic life. (NYCDEP, October 2002)

Water Quality Management

The Batavia Kill has been identified by NYCDEP as the principal contributor of sediment and turbidity to the Schoharie Reservoir, one of the NYC Water Supply reservoirs. As such, the stream was selected by DEP to pilot both an extensive experiments treatment with natural channel design BMPs and the development of a stream management plan. DEP has been working with the Greene County SWCD to implement these projects. (NYCDEP and Greene County SWCD, October 2002)

Extensive populations of Japanese knotweed also contributes to the streambank erosion problem. This species out competes more beneficial plants, but the shallow root structure provides little or not bank protection. (Greene County SWCD/WQCC, April 2002)

Potential impacts from on-site septic systems in small hamlets along the stream either have been or are being addressed by New York City Watershed protection initiatives. A new wastewater treatment plant and collection systems to serve the Hamlet of Prattsville went on line in 2008. A WWTP and collection system for the Hamlet of Ashland is currently under construction with an anticipated completion date of 2001. (DEC/DOW, NYCW, April 2010)

Segment Description

This segment includes the portion of the stream and all tribs from the mouth to/including unnamed trib (-11a) near Windham. The waters of this portion of the stream are Class C(T). Tribs to this reach/segment, including Brandow Brook (-2), Lewis Creek (-3) and West Hollow Brook (-6), are Class C, C(T), C(TS).

Batavia Kill, Middle, and tribs (1202-0058)

MinorImpacts

Waterbody Location Information

Revised: 10/31/2002

Water Index No: H-240- 82-117
Hydro Unit Code: 02020005/020 **Str Class:** A(T)
Waterbody Type: River (Low Flow) **Reg/County:** 4/Greene Co. (20)
Waterbody Size: 48.1 Miles **Quad Map:** ASHLAND (L-23-3)
Seg Description: stream and tribs, from Windham to near Maplecrest

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

Known: SILT/SEDIMENT, Problem Species (Japanese knotweed)
Suspected: ---
Possible: ---

Source(s) of Pollutant(s)

Known: STREAMBANK EROSION, Habitat Modification
Suspected: ---
Possible: Construction, On-Site/Septic Syst, Roadbank Erosion

Resolution/Management Information

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

Resolution Potential: n/a

Further Details

Overview

Natural resources (fishery) habitat in the Batavia Kill is affected by silt/sediment loads from excessive stream bank erosion along the stream. Impacts of the sediment loadings to and the resulting turbidity in the Schoharie Reservoir and the New York City Water Supply System are of particular concern. Habitat/biodiversity issues have also been raised.

Water Quality Sampling

A biological (macroinvertebrate) assessment of Batavia Kill in Windham (at Route 12) was conducted as part of the RIBS biological screening effort in 2005. Sampling results indicated non-impacted conditions. Such samples are dominated by clean-water species and are most similar to a natural community with minimal human impacts. Some additional species, including sensitive non-native species, and additional biomass may be present; the samples reveal no, or only incidental, anomalies. These results are consistent with results from sampling conducted on the stream in 2000 and 2001. Aquatic life community is fully supported. (DEC/DOW, BWAM/SBU, January 2010)

NYSDEC Rotating Intensive Basin Studies (RIBS) Intensive Network monitoring of the Batavia Kill in Prattsville (at State Route 23A) was conducted in 2001. Sampling of the water column, sediments, and invertebrate tissues was conducted, as well as macroinvertebrate community analysis. While aluminum and lead were elevated in a portion of the water column samples, no metals or organics were detected in the bottom sediments, no organic compounds were found to be elevated over background

levels in invertebrate tissues, and no significant mortality or reproductive impairment was found in the three toxicity tests conducted. (DEC/DOW, BWAR/RIBS, April 2003)

A biological survey was also conducted on the Batavia Kill from Hensonville to Windham in June, 1989. The survey included five sampling sites on the main stem, and four on tributaries (Silver Lake Outlet, Lake Heloise Outlet, Mitchell Hollow, and North Settlement tributary). All sites sampled were assessed as non-impacted and water quality was considered to be excellent. (Batavia Kill Biological Assessment Report, Bode et al., DEC/DOW, BWAR/SBU, March 1990)

Routine monitoring by NYCDEP also indicates good water quality with no chronic water quality problems. DEP biological monitoring of two locations on the stream found no impairment to aquatic life. (NYCDEP, October 2002)

Water Quality Management

The Batavia Kill has been identified by NYCDEP as the principal contributor of sediment and turbidity to the Schoharie Reservoir, one of the NYC Water Supply reservoirs. As such, the stream was selected by DEP to pilot both an extensive experiments treatment with natural channel design BMPs and the development of a stream management plan. DEP has been working with the Greene County SWCD to implement these projects. (NYCDEP and Greene County SWCD, October 2002)

Extensive populations of Japanese knotweed also contributes to the streambank erosion problem. This species out competes more beneficial plants, but the shallow root structure provides little or not bank protection. (Greene County SWCD/WQCC, April 2002)

Potential impacts from on-site septic systems in small hamlets along the stream either have been or are being addressed by New York City Watershed protection initiatives. A new wastewater treatment plant and collection systems to serve the Hamlet of Prattsville went on line in 2008. A WWTP and collection system for the Hamlet of Ashland is currently under construction with an anticipated completion date of 2001. (DEC/DOW, NYCW, April 2010)

Segment Description

This segment includes the portion of the stream and all tribs from unnamed trib (-11a) near Windham to/including unnamed trib (-22a) above Maplecrest. The waters of this portion of the stream are Class A(T), A(TS). Tribs to this reach/segment, including Mad Brook (-13), are Class C, C(T), C(TS).

Batavia Kill, Upper, and tribs (1202-0059)

NoKnownImpct

Waterbody Location Information

Revised: 01/29/2010

| | | | |
|-------------------------|----------------------------------|---------------------|----------------------|
| Water Index No: | H-240- 82-117 | Drain Basin: | Mohawk River |
| Hydro Unit Code: | 02020005/020 | Str Class: | C(TS) |
| Waterbody Type: | River (Low Flow) | Reg/County: | 4/Greene Co. (20) |
| Waterbody Size: | 9.6 Miles | Quad Map: | HENSONVILLE (L-24-4) |
| Seg Description: | stream and tribs, abv Maplecrest | | |

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

Water Quality Sampling

A biological (macroinvertebrate) assessment of Batavia Kill below Windham (at Route 12) was conducted as part of the RIBS biological screening effort in 2005. Sampling results indicated non-impacted conditions. Such samples are dominated by clean-water species and are most similar to a natural community with minimal human impacts. Some additional species, including sensitive non-native species, and additional biomass may be present; the samples reveal no, or only incidental, anomalies. Though these sampling points are below the described segment, they are considered representative of water quality in the upper reach. Aquatic life community is fully supported. These results are consistent with sampling conducted at this site in 2000 and 2001. (DEC/DOW, BWAM/SBU, January 2010)

Segment Description

This segment includes the portion of the stream and all tribs above unnamed trib (-22a) above Maplecrest. The waters of this portion of the stream are Class C(TS). Tribs to this reach/segment are Class C, C(T), C(TS).