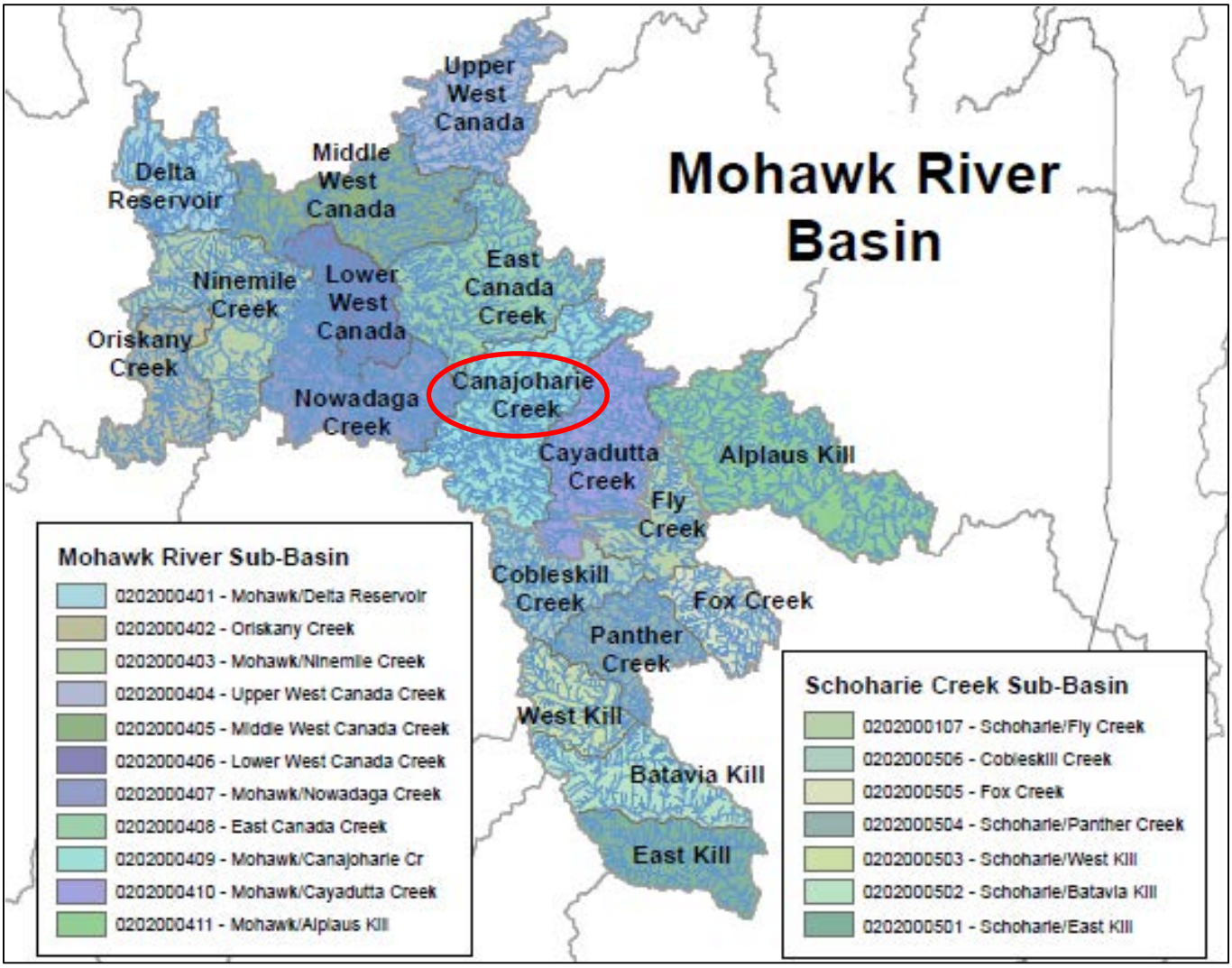

Mohawk/Canajoharie Creek Watershed
(0202000409)

Water Index Number	Waterbody Segment	Category
H-240 (portion 9)	Mohawk River/NYS Barge Canal, Main Stem (1201-0090)	MinorImpacts
H-240-112	Canajoharie Creek, Lower, and tribs (1201-0027)	MinorImpacts
H-240-112	Canajoharie Creek, Upper, and tribs (1201-0127)	NoKnownImpct
H-240-112-14	Brimstone Creek and tribs (1201-0128)	Need Verific
H-240-119	Otsquago Creek, Lower, and minor tribs (1201-0028)	MinorImpacts
H-240-119	Otsquago Creek, Upper, and tribs (1201-0078)	NoKnownImpct
H-240-119- 4	Otsquene Creek and tribs (1201-0129)	NoKnownImpct
H-240-119- 5	Otstungo Creek and tribs (1201-0130)	UnAssessed
H-240-127	Caroga Creek, Lower, and tribs (1201-0076)	MinorImpacts
H-240-127	Caroga Creek, Upper, and minor tribs (1201-0131)	NoKnownImpct
H-240-127- P683a	Ephratah Reservoir (1201-0132)	UnAssessed
H-240-127- P685a	Rockwood Lake (1201-0133)	NoKnownImpct
H-240-127-13	North Creek, Upper, and tribs (1201-0047)	NoKnownImpct
H-240-127-15	Sprite Creek, Lower, and tribs (1201-0134)	MinorImpacts
H-240-127-15	Sprite Creek, Upper, and tribs (1201-0135)	UnAssessed

(con't)

Mohawk/Canajoharie Creek Watershed (con't)
(0202000409)

Water Index Number	Waterbody Segment	Category
H-240-127-23-P685	Mud Lake (1201-0136)	UnAssessed
H-240-127-25	Peck Creek and tribs (1201-0137)	NoKnownImpct
H-240-127-25-P686	Peck Lake (1201-0016)	NoKnownImpct
H-240-127-25-P686-	Tribs to Peck Lake (1201-0138)	UnAssessed
H-240-127-25-P686-4-P689	Vandenburg Pond (1201-0139)	UnAssessed
H-240-127-25-P686-4-P689-2-P690	Woodworth Lake (1201-0140)	UnAssessed
H-240-127-25-P686-4-P689-3-P690a	Hinds Pond (1201-0141)	UnAssessed
H-240-127-25-P686-4-P689-4-P691	Mountain Lake (1201-0142)	NoKnownImpct
H-240-127-P697	East Caroga Lake (1201-0046)	NoKnownImpct
H-240-127-P697/P698-	Tribs to East/West Caroga Lakes (1201-0143)	UnAssessed
H-240-127-P698	West Caroga Lake (1201-0144)	NoKnownImpct
H-240-128 thru 143 (selected)	Minor Tribs to Mohawk River (1201-0145)	Need Verific
H-240-139	Zimmerman Creek, Lower, and tribs (1201-0029)	NoKnownImpct
H-240-139	Zimmerman Creek, Upper, and tribs (1201-0146)	NoKnownImpct
H-240-139-P698b	St. Johnsville Reservoir (1201-0147)	UnAssessed
H-240-141	Timmerman Creek and tribs (1201-0148)	NoKnownImpct
H-240-143	Crum Creek and tribs (1201-0149)	NoKnownImpct

Mohawk River/NYS Barge Canal, Main Stem (1201-0090) MinorImpacts

Waterbody Location Information

Revised: 02/11/2010

Water Index No: H-240 (portion 9)
Drain Basin: Mohawk River
Hydro Unit Code: 02020004/ **Str Class:** B Mohawk River
Waterbody Type: River (High Flow) **Reg/County:** 4/Montgomery Co. (29)
Waterbody Size: 30.9 Miles **Quad Map:** RANDALL (J-23-1)
Seg Description: from Fonda/Fultonville to below Little Falls

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

Known: - - -
Suspected: NUTRIENTS, Silt/Sediment
Possible: Pesticides

Source(s) of Pollutant(s)

Known: - - -
Suspected: AGRICULTURE, Urban/Storm Runoff
Possible: - - -

Resolution/Management Information

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

Further Details

Overview

Aquatic life support and recreational uses (fishing, boating) in this reach are thought to experience minor impacts from agricultural runoff and other nonpoint sources. Municipal point sources (Herkimer, Little Falls) may contribute to water quality impacts as well.

Water Quality Sampling

NYSDEC Rotating Integrated Basin Studies (RIBS) Intensive Network monitoring of the Mohawk River in Fort Plain, Montgomery County, (at route 80) was conducted in 2005 and 2006. Intensive Network sampling typically includes macroinvertebrate community analysis, water column chemistry, toxicity testing, sediment assessment and macroinvertebrate tissue analysis. Biological (macroinvertebrate) sampling was not conducted at this site, but was conducted at a long-term site in Fonda. This sampling revealed slightly impacted water quality conditions. (see below). Water column chemistry indicates only iron to be present in concentrations that constitute parameters of concern. However, iron is considered to be naturally occurring and not a source of water quality impacts. Toxicity testing using water from this location detected no significant mortality or reproductive effects on the test organism. Sediments were not collected at this site. (DEC/DOW, BWAM/RIBS, January 2010) Biological (macroinvertebrate) assessments of the Mohawk River in Little Falls (at Lock 17) and in Fonda (at Route 30A) were conducted as part of the RIBS biological screening effort in 2005. Though these sites are just above and just below the actual

reach, they are considered to be representative of water quality conditions in this segment. Sampling results indicated slightly impacted conditions at both sites. In such samples some replacement of sensitive ubiquitous species by more tolerant species occurs, although the sample also includes a balanced distribution of all expected species. Aquatic life is considered to be fully supported in the stream, however the community composition suggest conditions that cause some stress to aquatic life. The results from the site at Fonda show some variation from results collected in previous years. Samples collected at this site in 1990 and 1995 were moderately impacted. Then in 2000, results reflected non-impacted water quality; an improvement that was attributed to improved water quality in Cayadutta Creek. Additional sampling is necesary to determine if the 2000 or 2005 sampling is most reflective of long-term conditions. (DEC/DOW, BWAM/SBU, January 2010)

Based on the consensus of these established assessment methods, overall water quality at this site shows that in spite of some concerns regarding nutrient loading in this large watershed, aquatic life and recreational uses are considered to be fully supported in the stream. (DEC/DOW, BWAM/RIBS, January 2010)

Source Assessment

Agricultural management practices in small watersheds tributary to this reach of the Mohawk contribute to livestock waste loadings to the river. Some barnyard boundaries permit unrestricted access to streams, resulting in nutrient and pathogen loads and also contributing to streambank destabilization. Improper manure application on these fields is also a concern. Most of area farms have no silage leachate, manure or milkhouse wastewater treatment facilities. Some of the streams flow through intensively cultivated row croplands. Nutrient (fertilizer) and pesticides applied to these field in the absence of approved nutrient/pesticide management plans may have an impact on water quality. (Montgomery County SWCD/WQCC, April 2002)

Water Quality Management

The NYSDEC has recently initiated a focused effort to conserve, preserve, and restore the environmental quality of the Mohawk River and its watershed, while helping to manage the resources of the region for a sustainable future. The establishment of a Mohawk River Basin Program to act as coordinator of basin-wide activities to achieve these goals is a key component of this effort. However the success of the program will require the involvement of stakeholders and the creation of partnerships with established programs and organizations throughout the basin. To this end, the Mohawk River Basin Program will follow the successful model of the Hudson River Estuary Program. Adopting a similar model will help accomplish the goal of developing a "whole Hudson" ecosystem-based management approach to managing the Hudson River Estuary. At the same time, a separate Mohawk River Basin Program promotes needed focus on the Mohawk Valley and its own unique culture, history, resources and concerns and a regional approach would help to address the unique challenges of the Basin. The first steps in fulfilling this mission are outlined in the Mohawk River Basin Program Action Agenda 2009-2014. (DEC/DOW, BWAM, January 2009).

Segment Description

This segment includes the portion of the river/canal from Cayadutta Creek (-89) near Fonda/Fultonville to Crum Creek (-149) below Little Falls (near Indian Castle).

Canajoharie Creek, Lower, and tribs (1201-0027) MinorImpacts

Waterbody Location Information

Revised: 01/29/2010

Water Index No: H-240-112
Hydro Unit Code: 02020004/240 **Str Class:** C
Waterbody Type: River (Low Flow)
Waterbody Size: 43.5 Miles
Seg Description: stream and tribs, from mouth to near Ames

Drain Basin: Mohawk River
Mohawk River
Reg/County: 4/Montgomery Co. (29)
Quad Map: CANAJOHARIE (J-22-2)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Recreation	Stressed	Known

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

Known: AGRICULTURE
Suspected: Urban/Storm Runoff
Possible: - - -

Resolution/Management Information

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

Further Details

Overview
Recreational uses (fishing, swimming) in Canajohaire Creek are stressed by silt/sediment and slightly elevated pathogens attributed primarily to extensive agricultural activity in the watershed.

Water Quality Sampling
A biological (macroinvertebrate) assessment of Canajoharie Creek in Canajoharie (at Montgomery Road) was conducted as part of the RIBS biological screening effort in 2005. Sampling results indicated slightly impacted conditions, but near the range of non-impacted. In such samples the community is slightly altered from natural conditions. Some sensitive species are not present and a the overall abundance of macroinvertebrates is lower. However, the effects on the fauna are relatively insignificant and water quality is considered to be good. The nutrient biotic index and impact source determination indicate no enrichment in the stream and fauna that is most similar to natural communities. These results are consistent with results of a field assessment conducted at this site in 2000 which found a fauna that satisfied field screening criteria indicating non-impacted water quality. Aquatic life support is considered to be fully supported in the stream. (DEC/DOW, BWAM/SBU, January 2010)

NYSDEC Rotating Intensive Basin Studies (RIBS) Intensive Network monitoring of Canajoharie Creek in Canajoharie (at Montgomery Street) was conducted in 2001. Sampling of the water column, sediments, and invertebrate tissues was

conducted, as well as macroinvertebrate community analysis. Water column sampling results showed that high total dissolved solids occurred and fecal coliform values were elevated. These findings likely reflect the high level of agriculture in the watershed, and perhaps some inputs from the Village of Canajoharie other than the wastewater treatment facility, which discharges directly to the Mohawk River, In addition, no organic compounds were found in the sediments above levels of concern, and no acute or chronic toxicity was seen in two laboratory bioassays. (DEC/DOW, BWAR/RIBS, April 2003)

The US Geological Survey has conducted extensive pesticide monitoring in the watershed as part of its 1994-96 NAWQA effort. The study was part of an effort to characterize pesticide levels associated with various land use conditions. Pesticides were detected in the watershed, but at concentrations well below levels of human health concern. (USGS, New York District, January 2002)

Water Quality Management

Local agencies have done considerable work with area farms to prevent nutrient loadings and other nonpoint source impacts. (Montgomery County SWCD/WQCC, April 2002)

Segment Description

This segment includes the portion of the stream and tribs from the mouth to Brimstone Creek (-14) near Ames. The waters of this portion of the stream are Class C. Tribs to this reach/segment are also Class C. Brimstone Creek (-14) is listed separately.

Canajoharie Creek, Upper, and tribs (1201-0127) NoKnownImpct

Waterbody Location Information

Revised: 01/29/2010

Water Index No: H-240-112
Hydro Unit Code: 02020004/240 **Str Class:** C
Waterbody Type: River (Low Flow)
Waterbody Size: 58.3 Miles
Seg Description: stream and tribs, above Ames

Drain Basin: Mohawk River
Mohawk River
Reg/County: 4/Montgomery Co. (29)
Quad Map: SPROUT BROOK (J-22-4)

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:** n/a
TMDL/303d Status: n/a

Further Details

Water Quality Sampling
A biological (macroinvertebrate) assessment of Canajoharie Creek in Canajoharie (at Montgomery Road) was conducted as part of the RIBS biological screening effort in 2005. Sampling results indicated slightly impacted conditions, but near the range of non-impacted. In such samples the community is slightly altered from natural conditions. Some sensitive species are not present and a the overall abundance of macroinvertebrates is lower. However, the effects on the fauna are relatively insignificant and water quality is considered to be good. The nutrient biotic index and impact source determination indicate no enrichment in the stream and fauna that is most similar to natural communities. These results are consistent with results of a field assessment conducted at this site and in a trib to this reach (Sprout Creek) in 2000 which found a fauna that satisfied field screening criteria indicating non-impacted water quality. Aquatic life support is considered to be fully supported in the stream, and there are no other apparent water quality impacts to designated uses. Though this sampling point is below the described segment, it is considered representative of water quality in the upper reach. This segment is listed as being evaluated rather than monitored. (DEC/DOW, BWAM/SBU, January 2010)

The US Geological Survey has conducted extensive pesticide monitoring in the watershed as part of its 1994-96 NAWQA effort. The study was part of an effort to characterize pesticide levels associated with various land use conditions. Pesticides were detected in the watershed, but at concentrations well below levels of human health concern. (USGS, New York District, January 2002)

Water Quality Management

Local agencies have done considerable work with area farms to prevent nutrient loadings and other nonpoint source impacts. (Montgomery County SWCD/WQCC, April 2002)

Segment Description

This segment includes the portion of the stream and tribs above Brimstone Creek (-14) near Ames. The waters of this portion of the stream are Class C,C(T). Tribs to this reach/segment, including Sprout Brook (-17), Bowmans Creek (-19) and Takaharawa Brook (-20), are also Class C. Brimstone Creek (-14) is listed separately.

Brimstone Creek and tribs (1201-0128) Need Verific

Waterbody Location Information

Revised: 04/06/2010

Water Index No: H-240-112-14
Hydro Unit Code: 02020004/240 **Str Class:** C
Waterbody Type: River (Low Flow)
Waterbody Size: 19.1 Miles
Seg Description: entire stream and tribs

Drain Basin: Mohawk River
Mohawk River
Reg/County: 4/Montgomery Co. (29)
Quad Map: FORT PLAIN (J-22-1)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

Known: - - -
Suspected: - - -
Possible: PATHOGENS, Nutrients

Source(s) of Pollutant(s)

Known: - - -
Suspected: - - -
Possible: MUNICIPAL (Sharon Springs WWTP)

Resolution/Management Information

Issue Resolvability: 6 (Problem Thought to be Abated)
Verification Status: (Not Applicable for Selected RESOLVABILITY)
Lead Agency/Office: DOW/BWAM **Resolution Potential:** High
TMDL/303d Status: n/a

Further Details

Overview
Recreational uses (swimming, fishing) and aquatic life support in Brimstone Creek may experience minor impacts from pathogens and other pollutants from inadequate treatment and discharge of municipal wastewater to the creek. However this assessment was based on sampling results and evaluation prior to municipal wastewater system work that appears to have addressed previously identified sources. Follow-up monitoring to verify current conditions in the stream is recommended.

Water Quality Sampling
A biological (macroinvertebrate) assessment of Brimstone Creek near the mouth at Ames was conducted in 2000. Sampling results indicated slightly impacted water quality conditions. The impact was minor nutrient enrichment; mayflies, stoneflies, and caddisflies were represented. This sampling was conducted prior to municipal sewer system rehabilitation efforts in 2008 and follow-up monitoring to verify current conditions in the stream is recommended. (DEC/DOW, BWAR/SBU, April 2010)

These results are consistent with sampling conditions found during a 1996 biological survey of the stream. This survey found slight impacts that were attributed to the Sharon Springs discharge and agricultural activities in the watershed.

(Brimstone Creek Biological Assessment Report, Bode et al., DEC/DOW, BWAR/SBU, September 1997)

Previous Assessment

Concerns were noted during the previous assessment effort in 2002 regarding the impact of the Sharon Springs WWTP discharge which had difficultly meeting effluent discharge limits. Discharge monitoring reports showed frequent violations of fecal coliform and other parameters. As a result, recreational uses in Wintergreen Park (just downstream of the discharge) and other parts of the stream are diminished. Excessive infiltration into to collection system had been documented. However Sharon Springs completed a sewer system infiltration and inflow remediation project in Fall of 2008 which appears to have address the previous sporadic violations at the WWTP. The plant has been in compliance since, and there have been no reported impacts the Wintergreen Park beach. (DEC/DOW, Region 4, April 2010)

Segment Description

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

Otsquago Creek, Lower, and minor tribs (1201-0028) MinorImpacts

Waterbody Location Information

Revised: 01/06/2003

Water Index No: H-240-119
Hydro Unit Code: 02020004/210 **Str Class:** C
Waterbody Type: River (Low Flow)
Waterbody Size: 11.0 Miles
Seg Description: stream and tribs, from mouth to Hallsville

Drain Basin: Mohawk River
Mohawk River
Reg/County: 4/Montgomery Co. (29)
Quad Map: FORT PLAIN (J-22-1)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Recreation	Stressed	Known

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

Known: AGRICULTURE
Suspected: Urban/Storm Runoff
Possible: - - -

Resolution/Management Information

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

Further Details

Overview

Recreational uses in Otsquago Creek are thought to experience minor impacts due to elevated silt/sediment loadings and pathogens attributed primarily to agricultural activity in the watershed. Urban runoff in the Village of Fort Plain may also be a contributing source.

Water Quality Sampling

NYSDEC Rotating Intensive Basin Studies (RIBS) Intensive Network monitoring of Otsquago Creek in Fort Plain (at State Route 5S) was conducted in 2001. Sampling of the water column, sediments, and invertebrate tissues was conducted, as well as macroinvertebrate community analysis. Biological (macroinvertebrate) assessments of Otsquago Creek near the mouth in Fort Plain were conducted in 2000 and 2001 as part of the RIBS effort. Sampling results indicated non-impacted water quality conditions for both years. The 2000 assessment was based on a field assessment. The 2001 assessment was based on a laboratory-processed sample. Water column sampling identified high total dissolved solids and slightly elevated fecal coliform values. These findings reflect the high level agricultural activity in the watershed and, perhaps some inputs from the Village of Fort Plain. One of three toxicity tests indicated chronic toxicity. Sediment analysis did not identify elevated levels of any organic compounds, but cadmium was found in concentrations that are above the level of concern. Invertebrate tissues do not contain organic compounds or metals in concentrations above the guidance values set by NYSDEC. (DEC/DOW, BWAR/RIBS, April 2003)

Other Issues

Local/county agencies have identified management practices at several dairy and other farms near the streams as potential problems. Some barnyard boundaries permit unrestricted access to the river, resulting in lack of riparian vegetation and contributing to elevated temperatures. (Montgomery County SWCD/WQCC, April 2002)

Segment Description

This segment includes the portion of the stream and selected/smaller tribs from the mouth to Otstungo Creek (-5) near Hallsville. The waters of this portion of the stream are Class C. Tribs to this reach/segment are also Class C. Otsquene Creek (-4) and Otstungo Creek (-5) are listed separately.

Otsquago Creek, Upper, and tribs (1201-0078) NoKnownImpct

Waterbody Location Information

Revised: 04/02/2010

Water Index No: H-240-119
Hydro Unit Code: 02020004/210 **Str Class:** C(T)
Waterbody Type: River (Low Flow)
Waterbody Size: 58.9 Miles
Seg Description: stream and tribs, above Hallsville

Drain Basin: Mohawk River
Mohawk River
Reg/County: 4/Montgomery Co. (29)
Quad Map: FORT PLAIN (J-22-1)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
NO USE IMPAIRMNT		

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

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

Resolution/Management Information

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

Further Details

Water Quality Sampling
NYSDEC Rotating Integrated Basin Studies (RIBS) Intensive Network monitoring of Otsquago Creek near Starkville, Herkimer County, (at Moyer Road) was conducted in 2005 and 2006. Intensive Network sampling typically includes macroinvertebrate community analysis, water column chemistry, toxicity testing, sediment assessment and macroinvertebrate tissue analysis. Biological (macroinvertebrate) sampling indicated non- to the upper range of slightly impacted conditions. In such samples the community is slightly altered from natural conditions. Some sensitive species are not present and the overall abundance of macroinvertebrates is lower. However, the effects on the fauna appear to be relatively minor and water quality is considered to be good. The nutrient biotic index and impact source determination indicate some enrichment in the stream and fauna that is most similar to communities influenced by nonpoint nutrients and agricultural sources. Water column chemistry indicates occasionally high total dissolved solids, however siltation effects are not reflected in the biological sampling. There are no other contaminants present at levels that constitute parameters of concern. Toxicity testing using water from this location detected no significant mortality however reproductive effects were noted in one of the three tests. Sediment screening for acute toxicity indicated on sediment toxicity and no porewater toxicity was indicated. Based on the consensus of these established assessment indicators, overall water quality at this site shows that aquatic life and recreational uses are considered to be fully supported in the stream, and there are no other apparent water quality impacts to recreational uses). (DEC/DOW, BWAM/RIBS, January 2010)

Previous Assessments

Suspected impacts to uses due to a NYSDEC fish hatchery, onsite wastewater treatment (septic) systems and agricultural nonpoint sources were reported as needing to be verified in a previous (2003) assessment effort. It was also noted at that time that many of suspected sources were or had been addressed. An upgrade of the hatchery WWTP was completed in 1989. Onsite septic systems serving homes in Van Hornesville were found to be operating satisfactorily. Previously reported impacts (fishkills) attributed to runoff from a chicken farm had also been addressed. The results of the more recent monitoring effort suggest that there are no significant impacts to uses. (DEC/DOW, BWAM/WQAS, April 2010)

Segment Description

This segment includes the portion of the stream and all tribs above Otstungo Creek (-5) near Hallsville. The waters of this portion of the stream are Class C(T). Tribs to this reach/segment are Class C. Otstungo Creek (-5) is listed separately.

Otsquene Creek and tribs (1201-0129) NoKnownImpct

Waterbody Location Information

Revised: 08/16/2002

Water Index No: H-240-119- 4
Hydro Unit Code: 02020004/210 **Str Class:** C
Waterbody Type: River (Low Flow)
Waterbody Size: 24.0 Miles
Seg Description: entire stream and tribs

Drain Basin: Mohawk River
Mohawk River
Reg/County: 4/Montgomery Co. (29)
Quad Map: FORT PLAIN (J-22-1)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
NO USE IMPAIRMNT		

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

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

Resolution/Management Information

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

Further Details

Water Quality Sampling
A biological (macroinvertebrate) assessment of Otsquene Creek near the mouth near Valley Brook 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)

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

Caroga Creek, Lower, and tribs (1201-0076) MinorImpacts

Waterbody Location Information

Revised: 08/16/2002

Water Index No: H-240-127
Hydro Unit Code: 02020004/230 **Str Class:** C
Waterbody Type: River (Low Flow)
Waterbody Size: 41.8 Miles
Seg Description: stream and minor tribs, from mouth to Ephratah

Drain Basin: Mohawk River
Mohawk River
Reg/County: 4/Montgomery Co. (29)
Quad Map: CANAJOHARIE (J-22-2)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

Known: WATER LEVEL/FLOW
Suspected: Thermal Changes
Possible: - - -

Source(s) of Pollutant(s)

Known: HYDRO MODIFICATION (NiMo Ephratah Hydropower)
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: n/a

Further Details

Overview

Natural resources (fishery) habitat in this portion of Caroga Creek experiences minor impacts due to fluctuating water levels caused by a hydropower generating facility upstream.

Fishery Assessment

Operation of the Niagara Mohawk Ephratah Power Plant and Dam causes daily fluctuations in water/flow levels in the lower reach of the stream. Changing the operation of the facility to run-of-river mode would alleviate the impact on the fishery. DEC Fishery staff has indicated resolution of this problem is a priority and is being pursued with the facility operator. DEC Fisheries is interested in the potential for stocking in the stream. (DEC/DFWMR, Region 4 and Bureau of Habitat, April 2010)

Water Quality Sampling

NYSDEC Rotating Integrated Basin Studies (RIBS) Intensive Network monitoring of Caroga Creek in Palatine, Montgomery County, (at Route 5) was conducted in 2005 and 2006. Intensive Network sampling typically includes macroinvertebrate community analysis, water column chemistry, toxicity testing, sediment assessment and macroinvertebrate tissue analysis. Biological (macroinvertebrate) sampling 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. Water column chemistry indicates only iron to be present at levels that constitute a parameter of concern. However, iron the median iron value is well below the assessment criteria and iron is considered to be naturally occurring and not a source of water quality impacts. Toxicity testing using water from this location detected no significant mortality or reproductive effects on the test organism. Sediment screening for acute toxicity indicated some sediment toxicity and no porewater toxicity was indicated. Bottom sediments analysis based on sediment quality guidelines developed for freshwater ecosystems revealed overall sediment quality is not likely to cause chronic toxicity to sediment-dwelling organisms. (DEC/DOW, BWAM/RIBS, January 2010)

A biological (macroinvertebrate) assessment of Caroga Creek in Ephratah (above Sprite Creek confluence) 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 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. These results are consistent with results of a field assessment conducted at this site in 2000 which found a fauna that satisfied field screening criteria indicating non-impacted water quality. (DEC/DOW, BWAM/SBU, January 2010)

Based on the consensus of these established assessment indicators, overall water quality at this site shows that aquatic life and recreational uses are considered to be fully supported in the stream, and there are no other apparent water quality impacts to recreational uses.

Water Quality Management

Although water quality in the stream currently supports aquatic life, local/county agencies see management practices at several dairy and other farms near the streams as potential problems. Some barnyard boundaries permit unrestricted access to the river, resulting in nutrient and pathogen loads and also contributing to streambank destabilization. Improper manure application on these fields is also a concern. Most of area farms have no silage leachate, manure or milkhouse wastewater treatment facilities. Some of the streams flow through intensively cultivated row croplands. Nutrient (fertilizer) and pesticides applied to these field in the absence of approved nutrient/pesticide management plans may have an impact on water quality. (Fulton County SWCD/WQCC, April 2002

Segment Description

This segment includes the portion of the stream and selected/smaller tribs from the mouth to Sprite Creek (-15) in Ephratah. The waters of this portion of the stream are Class C,C(T). Tribs to this reach/segment, including Mill Creek (-5) and Lower North Creek (-13), are also Class C,C(T). Upper North Creek and Sprite Creek (-15) are listed separately.

Caroga Creek, Upper, and minor tribs (1201-0131) NoKnownImpct

Waterbody Location Information

Revised: 02/03/2010

Water Index No: H-240-127
Hydro Unit Code: 02020004/230 **Str Class:** C
Waterbody Type: River (Low Flow)
Waterbody Size: 39.3 Miles
Seg Description: stream and minor tribs, above Ephratah

Drain Basin: Mohawk River
Mohawk River
Reg/County: 5/Fulton Co. (18)
Quad Map: LASSELLSVILLE (I-22-3)

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

Further Details

Water Quality Sampling

A biological (macroinvertebrate) assessment of Caroga Creek in Ephratah (above Sprite Creek confluence) 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. (DEC/DOW, BWAM/SBU, January 2009)

Segment Description

This segment includes the portion of the stream and selected/smaller tribs above Sprite Creek (-15) in Ephratah. The waters of this portion of the stream are Class C,C(T). Tribs to this reach/segment, including Beaverdam Creek (-23) and Durey Creek (-26), are Class C,C(T),C(TS). Sprite Creek (-15) is listed separately.

Rockwood Lake (1201-0133) NoKnownImpct

Waterbody Location Information

Revised: 08/19/2002

Water Index No: H-240-127- P685a
Hydro Unit Code: 02020004/230 **Str Class:** C
Waterbody Type: Lake (Unknown Trophic)
Waterbody Size: 29.8 Acres
Seg Description: entire lake

Drain Basin: Mohawk River
Mohawk River
Reg/County: 5/Fulton Co. (18)
Quad Map: PECK LAKE (I-23-4)

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:** n/a
TMDL/303d Status: n/a

Further Details

Water Quality Sampling
Rockwood Lake was included in the 2001 Lake Classification and Inventory study effort. Results of this study found no evidence of water quality impairment. (DEC/DOW, BWM/Lake Services, August 2000)

North Creek, Upper, and tribs (1201-0047) NoKnownImpct

Waterbody Location Information

Revised: 02/08/2010

Water Index No:	H-240-127-13	**Drain Basin:**	Mohawk River
Hydro Unit Code:	02020004/230 **Str Class:** AA(T)		Mohawk River
Waterbody Type:	River (Low Flow)	**Reg/County:**	5/Fulton Co. (18)
Waterbody Size:	9.1 Miles	**Quad Map:**	LASSELLSVILLE (I-22-3)
Seg Description:	stream and tribs, above/including Fort Plain Reservoir		

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 North Creek in Saint Johnsville (at ATV trail off Tillboro Road) was conducted as part of the RIBS biological screening effort in 2005. Sampling results indicated slightly impacted conditions. In such samples the community is slightly altered from natural conditions. Some sensitive species are not present and a the overall abundance of macroinvertebrates is lower. However, the effects on the fauna are relatively insignificant and water quality is considered to be good. The nutrient biotic index and impact source determination indicate low enrichment in the stream and fauna that is most similar to natural communities. Aquatic life support is considered to be fully supported in the stream, and there are no other apparent water quality impacts to designated uses. (DEC/DOW, BWAM/SBU, January 2009)

Source (Drinking) Water Assessment

North Creek has been designated a Class AA water, suitable for use as a drinking water supply. The Class AA designation means the waters require minimal additional treatment (including disinfection) to remove only naturally occurring impurities in order to be considered safe and satisfactory for drinking water use. As a result of this designation, the stream is considered a highly valued resource and may be subject to special protections from possible threats to water quality.

Segment Description

This segment includes the portion of the stream and all tribs above/including the Fort Plain Reservoir (P681a). The waters

of this portion of the stream are Class AA(T). Tribs to this reach/segment, including Edwards Creek (-4), are Class AA,AA(T). Lower North Creek is listed separately.

Sprite Creek, Lower, and tribs (1201-0134) MinorImpacts

Waterbody Location Information

Revised: 01/14/2010

Water Index No:	H-240-127-15			**Drain Basin:**	Mohawk River
Hydro Unit Code:	02020004/230	**Str Class:**	C(T)		Mohawk River
Waterbody Type:	River (Low Flow)			**Reg/County:**	5/Fulton Co. (18)
Waterbody Size:	14.9 Miles			**Quad Map:**	LASSELLSVILLE (I-22-3)
Seg Description:	stream and tribs, from mouth to Canajoharie Reservoir				

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

Known:	- - -
Suspected:	NUTRIENTS
Possible:	Silt/Sediment

Source(s) of Pollutant(s)

Known:	- - -
Suspected:	AGRICULTURE
Possible:	Hydro Modification

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))
Verification Status: 2 (Problem Verified, Cause Unknown)
Lead Agency/Office: ext/WQCC **Resolution Potential:** Medium
TMDL/303d Status: n/a

Further Details

Overview
Aquatic life support in this portion of Sprite Creek is thought to experience minor impacts from may be affected by elevated nutrient loadings from nonpoint sources.

Water Quality Sampling
A biological (macroinvertebrate) assessment of Sprite Creek in Ephratah (at Route 10) was conducted as part of the RIBS biological screening effort in 2005. Sampling results indicated slightly impacted conditions. In such samples some replacement of sensitive ubiquitous species by more tolerant species occurs, although the sample also includes a balanced distribution of all expected species. Aquatic life is considered to be fully supported in the stream, however the community composition and nutrient biotic evaluation suggest conditions and levels of enrichment are sufficient to cause some stress to aquatic life. Impact source determination found the fauna to be most similar to communities influenced by impoundment effects, which may be skewing the results of this sampling, and nonpoint sources. Sampling habitat was noted as being less than ideal. An alternate site on this stream at Mud Road was also sampled but found to be highly influenced by upstream impoundment and was not considered to be representative of water quality conditions. (DEC/DOW, BWAM/SBU, January 2010)

Previous Assessment

In the 1980s copper sulfate treatment levels and chlorinated filter backwash from the Canajoharie Sprite Creek Water Works were demonstrated to cause mortality and reproductive effects in laboratory and in-situ bioassays with fish and water fleas (Preddice, et al, 1985). At that time biota in Sprite Creek were found to be affected. More recent (2005) biological monitoring found only slight impact on the in stream biological community. (DEC/DFWMR, Habitat, January 2010)

Segment Description

This segment includes the portion of the stream and all tribs from the mouth to the Canajoharie Reservoir (P683c). The waters of this portion of the stream are Class C(T). Tribs to this reach/segment, including Spenable Creek (-2), are Class C,C(T),C(TS). Upper Sprite Creek is listed separately.

Peck Creek and tribs (1201-0137) NoKnownImpct

Waterbody Location Information

Revised: 08/16/2002

Water Index No: H-240-127-25
Hydro Unit Code: 02020004/230 **Str Class:** C(T)
Waterbody Type: River (Low Flow)
Waterbody Size: 6.0 Miles
Seg Description: entire stream and tribs

Drain Basin: Mohawk River
Mohawk River
Reg/County: 5/Fulton Co. (18)
Quad Map: PECK LAKE (I-23-4)

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:** n/a
TMDL/303d Status: n/a

Further Details

Water Quality Sampling
A biological (macroinvertebrate) assessment of Pack Creek near the mouth in North Bush 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)

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

Peck Lake (1201-0016) NoKnownImpct

Waterbody Location Information

Revised: 02/10/2010

Water Index No: H-240-127-25-P686
Hydro Unit Code: 02020004/230 **Str Class:** C
Waterbody Type: Lake (Unknown Trophic)
Waterbody Size: 1425.8 Acres
Seg Description: entire lake

Drain Basin: Mohawk River
Mohawk River
Reg/County: 5/Fulton Co. (18)
Quad Map: PECK LAKE (I-23-4)

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:** n/a
TMDL/303d Status: n/a

Further Details

Water Quality Sampling

Peck Lake has been sampled as part of the NYSDEC Citizen Statewide Lake Assessment Program (CSLAP) beginning in 1992 through 2001 and again in 2008. An Interpretive Summary report of the findings of this sampling was published in 2009. These data indicate that the lake continues to be best characterized as mesoligotrophic, or moderately to highly unproductive. Phosphorus levels in the lake consistently fall below state guidance values indicating impacted/stressed recreational uses. Corresponding transparency measurements typically exceed the recommended minimum for swimming beaches. Measurements of pH typically fall within the state water quality range of 6.5 to 8.5. The lake water is weakly to moderately colored, but this is considered to reflect natural conditions and does not limit water transparency. (DEC/DOW, BWAM/CSLAP, January 2009)

Recreational Assessment

Public perception of the lake and its uses is also evaluated as part of the CSLAP program. This assessment indicates recreational suitability of the lake to be very favorable. The recreational suitability of the lake is described most frequently as "could not be nicer" or "excellent." The lake itself is most often described as "crystal clear." Assessments have noted that aquatic plants occasionally grow to the lake surface, but have not been cited as impacting recreational uses. (DEC/DOW, BWAM/CSLAP, January 2009)

Lake Uses

This lake waterbody is designated class C, suitable for use as a general recreation water and aquatic life support, but not for water supply use or public bathing. 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.

Fishery Assessment

A fishery survey of Peck Lake was conducted in 2000 by the SUNY Oneonta Biological Field Station. The survey found balanced and self-sustaining bass (warmwater) population. Summer temperature and dissolved oxygen measurements indicate the lake may not be suitable for cold water species. However the lake in not classified as a trout water and is considered to fully support appropriate aquatic life. (Fishery Survey of Peck Lake, SUNY, Oneonta Biological Field Station, June 2002)

Segment Description

This segment includes the total area of the entire lake.

Mountain Lake (1201-0142) NoKnownImpct

Waterbody Location Information

Revised: 08/19/2002

Water Index No: H-240-127-25-P686-4-P689-4-P691
Hydro Unit Code: 02020004/230 **Str Class:** C
Waterbody Type: Lake (Mesotrophic)
Waterbody Size: 41.2 Acres
Seg Description: entire lake

Drain Basin: Mohawk River
Mohawk River
Reg/County: 5/Fulton Co. (18)
Quad Map: GLOVERSVILLE (I-23-3)

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

Further Details

Water Quality Sampling

Mountain Lake has been sampled as part of the NYSDEC Citizen Statewide Lake Assessment Program (CSLAP) beginning in 1998 and continuing through 2001. An Interpretive Summary report of the findings of this sampling was published in 2002. These data indicate that the lake continues to be best characterized as mesoligotrophic, or moderately to highly unproductive. Phosphorus levels in the lake consistently fall below state guidance values indicating impacted/stressed recreational uses. Corresponding transparency measurements typically exceed the recommended minimum for swimming beaches. Measurements of pH typically fall within the state water quality range of 6.5 to 8.5. The lake water is moderately colored, but this is considered to reflect natural conditions and does not limit water transparency. (DEC/DOW, BWAM/CSLAP, November 2002)

Recreational Assessment

Public perception of the lake and its uses is also evaluated as part of the CSLAP program. This assessment indicates recreational suitability of the lake to be very favorable. The recreational suitability of the lake is described most frequently as "could not be nicer" or "excellent." The lake itself is most often described as "crystal clear" or "not quite crystal clear." Assessments have noted that aquatic plants occasionally grow to the lake surface, but have not been cited as impacting recreational uses. (DEC/DOW, BWAM/CSLAP, November 2002)

Lake Uses

This lake waterbody is designated class C, suitable for use as a general recreation water and aquatic life support, but not for water supply use or public bathing. 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.

Segment Description

This segment includes the total area of the entire lake.

East Caroga Lake (1201-0046) NoKnownImpct

Waterbody Location Information

Revised: 02/10/2010

Water Index No: H-240-127-P697
Hydro Unit Code: 02020004/230 **Str Class:** B
Waterbody Type: Lake (Mesotrophic)
Waterbody Size: 234.0 Acres
Seg Description: entire lake

Drain Basin: Mohawk River
Mohawk River
Reg/County: 5/Fulton Co. (18)
Quad Map: CAROGA LAKE (I-23-1)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
NO USE IMPAIRMNT		

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

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

Resolution/Management Information

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

Further Details

Water Quality Sampling

East Caroga Lake has been sampled as part of the NYSDEC Citizen Statewide Lake Assessment Program (CSLAP) beginning in 1992 through 1994 and again from 2004 through the present. An Interpretive Summary report of the findings of this sampling was published in 2008. These data indicate that the lake continues to be best characterized as mesoligotrophic, or moderately to highly unproductive. Phosphorus levels in the lake consistently fall below state guidance values indicating impacted/stressed recreational uses. Corresponding transparency measurements typically exceed the recommended minimum for swimming beaches. Measurements of pH typically fall within the state water quality range of 6.5 to 8.5. The lake water is weakly colored and does not limit water transparency. (DEC/DOW, BWAM/CSLAP, January 2008)

Recreational Assessment

Public perception of the lake and its uses is also evaluated as part of the CSLAP program. This assessment indicates recreational suitability of the lake to be favorable. The recreational suitability of the lake is described most frequently as or "excellent." The lake itself is most often described as "not quite crystal clear." Assessments have noted that aquatic plants regularly grow to the lake surface, but not densely and have only occasionally been cited as impacting recreational uses. (DEC/DOW, BWAM/CSLAP, January 2008)

Lake Uses

This lake waterbody is designated class B, suitable for use as a public bathing and general recreation water and aquatic life support, but not for water supply use. 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.

West Caroga Lake (1201-0144) NoKnownImpct

Waterbody Location Information

Revised: 01/29/2010

Water Index No: H-240-127-P698
Hydro Unit Code: 02020004/230 **Str Class:** B(T)
Waterbody Type: Lake (Mesotrophic)
Waterbody Size: 318.4 Acres
Seg Description: entire lake

Drain Basin: Mohawk River
Mohawk River
Reg/County: 5/Fulton Co. (18)
Quad Map: CAROGA LAKE (I-23-1)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
NO USE IMPAIRMNT		

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

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

Resolution/Management Information

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

Further Details

Water Quality Sampling

West Caroga Lake has been sampled as part of the NYSDEC Citizen Statewide Lake Assessment Program (CSLAP) beginning in 1997 through 2001. An Interpretive Summary report of the findings of this sampling was published in 2001. These data indicate that the lake continues to be best characterized as mesoligotrophic, or moderately to highly unproductive. Phosphorus levels in the lake consistently fall below state guidance values indicating impacted/stressed recreational uses. Corresponding transparency measurements typically exceed the recommended minimum for swimming beaches. Measurements of pH typically fall within the state water quality range of 6.5 to 8.5. (DEC/DOW, BWAM/CSLAP, September 2001)

Recreational Assessment

Public perception of the lake and its uses is also evaluated as part of the CSLAP program. This assessment indicates recreational suitability of the lake to be very favorable. The recreational suitability of the lake is described most frequently as "could not be nicer" or "excellent." The lake itself is most often described as "not quite crystal clear." Assessments have noted that aquatic plants occasionally grow to the lake surface, but have not been cited as impacting recreational uses. The West Caroga Lake Association practices weed (Eurasian milfoil) control with general success. (DEC/DOW, BWAM/CSLAP, September 2001)

Lake Uses

This lake waterbody is designated class B, suitable for use as for public bathing, general recreation water and aquatic life support, but not for water supply. Water quality monitoring by NYSDEC focuses primarily on support of general recreation and aquatic life. Samples to evaluate the bacteriological condition and bathing use of the lake or to evaluate contamination from organic compounds, metals or other inorganic pollutants have not been collected as part of the CSLAP monitoring program. Monitoring to assess potable water supply and public bathing use is generally the responsibility of state and/or local health departments.

Minor Tribs to Mohawk River (1201-0145) Need Verific

Waterbody Location Information

Revised: 08/16/2002

Water Index No:	H-240-128 thru 143 (selected)	**Drain Basin:**	Mohawk River
Hydro Unit Code:	02020004/220 **Str Class:** C		Mohawk River
Waterbody Type:	River (Low Flow)	**Reg/County:**	4/Montgomery Co. (29)
Waterbody Size:	22.9 Miles	**Quad Map:**	FORT PLAIN (J-22-1)
Seg Description:	total length of select tribs, Ft Plain to Indian Castle		

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

Known: - - -
Suspected: NUTRIENTS, PATHOGENS, SILT/SEDIMENT
Possible: Pesticides

Source(s) of Pollutant(s)

Known: - - -
Suspected: AGRICULTURE, Streambank Erosion
Possible: - - -

Resolution/Management Information

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

Further Details

Overview

Various agricultural activity in these smaller tribs to the Mohawk River might be affecting water quality. There is very little specific monitoring data on these waters, and the impact on water uses needs to be verified.

Source Assessment

Management practices at several dairy and other farms near the streams contribute to livestock waste loadings to the river. Some barnyard boundaries permit unrestricted access to the river, resulting in nutrient and pathogen loads and also contributing to streambank destabilization. Improper manure application on these fields is also a concern. Most of area farms have no silage leachate, manure or milkhouse wastewater treatment facilities. Some of the streams flow through intensively cultivated row croplands. Nutrient (fertilizer) and pesticides applied to these field in the absence of approved nutrient/pesticide management plans may have an impact on water quality. Mother Creek (-129) and unnamed tribs (-131, -136, -141) have been specifically singled out by the county. (Montgomery County SWCD/WQCC, April 2002)

Segment Description

This segment includes the total length of selected/smaller tribs to the Mohawk River between Caroga Creek (-127) near/above Fort Plain and East Canada Creek (-144) near Indian Castle. Tribs within this segment, including Mother Creek (-129), are Class C. Caroga Creek (-127), Zimmerman Creek (-139), Timmerman Creek (-141) Crum Creek (-143) and

East Canada Creek (-144) are listed separately.

Zimmerman Creek, Lower, and tribs (1201-0029) NoKnownImpct

Waterbody Location Information

Revised: 08/16/2002

Water Index No: H-240-139
Drain Basin: Mohawk River
Hydro Unit Code: 02020004/220 **Str Class:** C(TS) Mohawk River
Waterbody Type: River (Low Flow) **Reg/County:** 4/Montgomery Co. (29)
Waterbody Size: 17.9 Miles **Quad Map:** OPPENHEIM (I-22-4)
Seg Description: stream and tribs, from mouth to Lassellsville

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 Zimmerman Creek near the mouth in St. Johnsville 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)

Water Quality Management
Although water quality in the stream currently supports aquatic life, local/county agencies see management practices at several dairy and other farms near the streams as potential problems. Some barnyard boundaries permit unrestricted access to the river, resulting in nutrient and pathogen loads and also contributing to streambank destabilization. Improper manure application on these fields is also a concern. Most of area farms have no silage leachate, manure or milkhouse wastewater treatment facilities. Some of the streams flow through intensively cultivated row croplands. Nutrient (fertilizer) and pesticides applied to these field in the absence of approved nutrient/pesticide management plans may have an impact on water quality. (Fulton County SWCD/WQCC, April 2002

Segment Description
This segment includes the portion of the stream and all tribs from the mouth to the Lower St. Johnsville Reservoir (P698a) near Lassellsville. The waters of this portion of the stream are Class C(TS). Tribs to this reach/segment are Class

C,C(T),C(TS). Upper Zimmerman Creek is listed separately.

Zimmerman Creek, Upper, and tribs (1201-0146) NoKnownImpct

Waterbody Location Information

Revised: 08/16/2002

Water Index No: H-240-139
Hydro Unit Code: 02020004/220 **Str Class:** AA(T)
Waterbody Type: River (Low Flow)
Waterbody Size: 5.0 Miles
Seg Description: stream and tribs, above Lassellsville

Drain Basin: Mohawk River
Mohawk River
Reg/County: 5/Fulton Co. (18)
Quad Map: LASSELLSVILLE (I-22-3)

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

Further Details

Water Qaulity Sampling
A biological (macroinvertebrate) assessment of Zimmerman Creek near the mouth in St. Johnsville 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. Though this sampling point is below the described segment, it is considered representative of water quality in the upper reach. (DEC/DOW, BWAR/SBU, July 2002)

Source (Drinking) Water Assessment
Zimmerman Creek has been designated a Class AA water, suitable for use as a drinking water supply. The Class AA designation means the waters require minimal additional treatment (including disinfection) to remove only naturally occurring impurities in order to be considered safe and satisfactory for drinking water use. As a result of this designation, the stream is considered a highly valued resource and may be subject to special protections from possible threats to water quality.

Segment Description
This segment includes the portion of the stream and all tribs above/including the Lower St. Johnsville Reservoir (P698a) near Lassellsville. The waters of this portion of the stream are Class AA(T). Tribs to this reach/segment are Class AA,AA(T). Lower Zimmerman Creek and the Upper St. Johnsville Reservoir are listed separately.

Timmerman Creek and tribs (1201-0148) NoKnownImpct

Waterbody Location Information

Revised: 08/16/2002

Water Index No: H-240-141
Hydro Unit Code: 02020004/220 **Str Class:** C(T)
Waterbody Type: River (Low Flow)
Waterbody Size: 24.6 Miles
Seg Description: entire stream and tribs

Drain Basin: Mohawk River
Mohawk River
Reg/County: 4/Montgomery Co. (29)
Quad Map: OPPENHEIM (I-22-4)

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:** n/a
TMDL/303d Status: n/a

Further Details

Water Quality Sampling
A biological (macroinvertebrate) assessment of Timmerman Creek near the mouth in St. Johnsville was conducted in 2000. Sampling results indicated non-impacted water quality conditions. A diverse fauna was present, with many mayflies, stoneflies, and caddisflies. (DEC/DOW, BWAR/SBU, July 2002)

Water Quality Management
Although water quality in the stream currently supports aquatic life, local/county agencies see management practices at several dairy and other farms near the streams as potential problems. Some barnyard boundaries permit unrestricted access to the river, resulting in nutrient and pathogen loads and also contributing to streambank destabilization. Improper manure application on these fields is also a concern. Most of area farms have no silage leachate, manure or milkhouse wastewater treatment facilities. Some of the streams flow through intensively cultivated row croplands. Nutrient (fertilizer) and pesticides applied to these field in the absence of approved nutrient/pesticide management plans may have an impact on water quality. (Montgomery County SWCD/WQCC, April 2002

Segment Description
This segment includes the entire stream and all tribs. The waters of the stream are Class C(T),C(TS). Tribs to this reach/segment, including Klock Creek (-9), are Class C,C(T).

Crum Creek and tribs (1201-0149) NoKnownImpct

Waterbody Location Information

Revised: 02/04/2010

Water Index No: H-240-143
Hydro Unit Code: 02020004/220 **Str Class:** C(T)
Waterbody Type: River (Low Flow)
Waterbody Size: 20.3 Miles
Seg Description: entire stream and tribs

Drain Basin: Mohawk River
Mohawk River
Reg/County: 4/Montgomery Co. (29)
Quad Map: OPPENHEIM (I-22-4)

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:** n/a
TMDL/303d Status: n/a

Further Details

Water Quality Sampling
A biological (macroinvertebrate) assessment of Crum Creek in Manheim Center (at Route 5) was conducted as part of the RIBS biological screening effort in 2000. 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. (DEC/DOW, BWAM/SBU, January 2009)

Previous Assessment
Concerns were raised by local agencies and stakeholders during previous assessment efforts regarding impacts from various agricultural activity in the Crum Creek watershed that might be affecting water quality. Management practices at several dairy and other farms near the streams may contribute livestock waste loadings to the river. Some barnyard boundaries permit unrestricted access to the river, resulting in nutrient and pathogen loads and also contributing to streambank destabilization. Improper manure application on these fields is also a concern. Most of area farms have no silage leachate, manure or milkhouse wastewater treatment facilities. Some of the streams flow through intensively cultivated row croplands. Nutrient (fertilizer) and pesticides applied to these field in the absence of approved nutrient/pesticide management plans may have an impact on water quality. The most recent sampling reveals no significant impacts to the stream, so these activities are considered to be potential threats that nonetheless require some attention. (Montgomery

County SWCD/WQCC, April 2002)

Segment Description

This segment includes the entire stream and all tribs. The waters of the stream are Class C(T),C(TS). Tribs to this reach/segment are Class C,C(T),C(TS). There are two tribs to the Mohawk in this area named Crum Creek. This stream enters the Mohawk to the east of East Canada Creek.