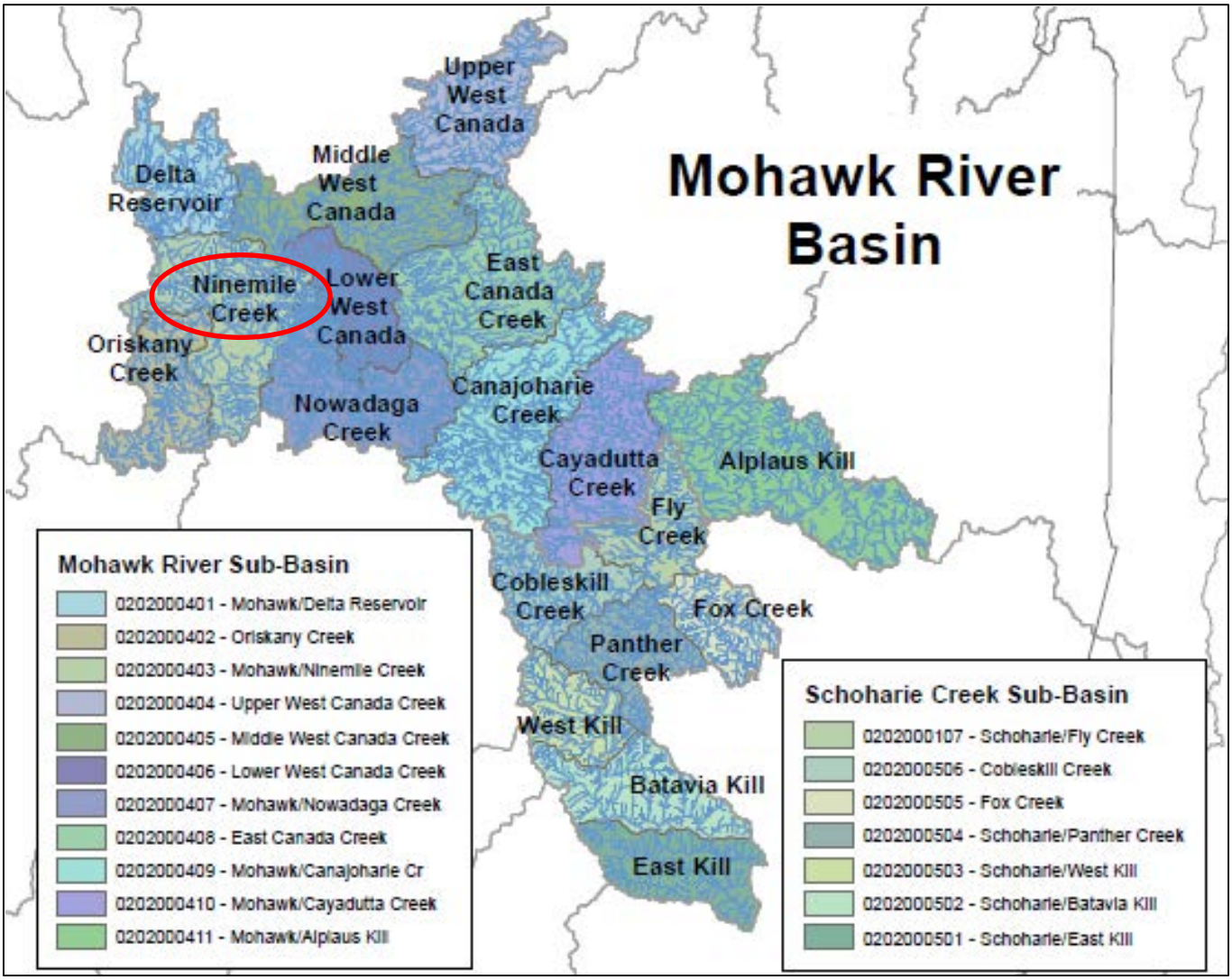

Mohawk/Ninemile Creek Watershed
(0202000403)

Water Index Number	Waterbody Segment	Category
H-240 (portion 12)	Mohawk River, Main Stem (1201-0093)	Impaired Seg
H-240 (portion 12a)	NYS Barge Canal (portion 7) (1201-0064)	MinorImpacts
H-240 (portion 12b)	Utica Harbor (1201-0228)	Impaired Seg
H-240 (portion 13)	Mohawk River, Main Stem (1201-0010)	Impaired Seg
H-240 (portion 14)	Mohawk River, Main Stem (1201-0094)	Impaired Seg
H-240 (portion 15)	Mohawk River, Upper, Main Stem (1201-0070)	NoKnownImpct
H-240-207	Starch Factory Creek and tribs (1201-0067)	MinorImpacts
H-240-207-7-P952	Graffenburg Reservoir (1201-0202)	UnAssessed
H-240-211,214	Ballou, Nail Creeks and tribs (1201-0203)	Impaired Seg
H-240-211-P953,P954,P955	South (Utica) Reservoirs (1201-0204)	UnAssessed
H-240-212,213,215,216	Minor Tribs to Mohawk River (1201-0205)	Need Verific
H-240-212-P955a	North Utica Reservoir (1201-0206)	UnAssessed
H-240-219	Sauquoit Creek, Lower, and minor tribs (1201-0069)	Impaired Seg
H-240-219	Sauquoit Creek, Middle, and tribs (1201-0207)	Impaired Seg
H-240-219	Sauquoit Creek, Upper, and tribs (1201-0208)	NoKnownImpct

(con't)

Mohawk/Ninemile Creek Watershed (con't)
(0202000403)

Water Index Number	Waterbody Segment	Category
H-240-219- 4	Mud Creek and tribs (1201-0062)	MinorImpacts
H-240-219-24	Trib of Sauquoit Creek, Upper (1201-0209)	UnAssessed
H-240-220 thru 239	Minor Tribs to Mohawk River (1201-0224)	NoKnownImpct
H-240-222-P955e	Marcy Reservoir (1201-0210)	UnAssessed
H-240-227	Ninemile Creek, Lower, and tribs (1201-0014)	MinorImpacts
H-240-227	Ninemile Creek, Upper, and tribs (1201-0211)	UnAssessed
H-240-227-21- 1	Beaver Brook and tribs (1201-0229)	NoKnownImpct
H-240-231	Sixmile Creek and tribs (1201-0212)	Need Verific
H-240-234	Threemile Creek and tribs (1201-0223)	Impaired Seg
H-240-240	Wheelers Creek and tribs (1201-0213)	Need Verific
H-240-241 thru 244	Minor Tribs to Mohawk River (1201-0214)	Need Verific

Mohawk River, Main Stem (1201-0093) Impaired Seg

Waterbody Location Information

Revised: 01/26/2010

Water Index No: H-240 (portion 12)
Hydro Unit Code: 02020004/ **Str Class:** C
Waterbody Type: River (High Flow)
Waterbody Size: 13.6 Miles
Seg Description: from East Schuyler to Whitesboro

Drain Basin: Mohawk River
Mohawk River
Reg/County: 6/Herkimer Co. (22) ...
Quad Map: ILION (I-20-3)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
FISH CONSUMPTION	Precluded	Known
AQUATIC LIFE	Impaired	Known
RECREATION	Impaired	Known
Aesthetics	Stressed	Known

Type of Pollutant(s)

Known: AESTHETICS (odors, floatables), PRIORITY ORGANICS (PCBs), PATHOGENS, Metals (copper, other)
Suspected: D.O./OXYGEN DEMAND, Nutrients, Silt/Sediment
Possible: - - -

Source(s) of Pollutant(s)

Known: COMB. SEWER OVERFLOW, LANDFILL/LAND DISP. (Utica/Leland Ave Landfill), TOX/CONTAM. SEDIMENT
Suspected: INDUSTRIAL, URBAN/STORM RUNOFF, Other Sanitary Disch
Possible: - - -

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))
Verification Status: 4 (Source Identified, Strategy Needed)
Lead Agency/Office: DOW/Reg6 **Resolution Potential:** Medium
TMDL/303d Status: 1,2b (Individual Waterbody Impairment Requiring a TMDL, more)

Further Details

Overview
Fish consumption, aquatic life support, recreational uses (fishing, boating) and aesthetics in this reach of the Mohawk River are considered impaired by contaminated sediments, sanitary and combined sewer overflows (SSOs and CSOs), various former industrial point sources and continuing urban nonpoint runoff.

Fish Consumption
Fish consumption in the Mohawk River from Oriskany to West Canada Creeks is impaired due to a NYS DOH health advisory that recommends eating no carp and no more than one meal per month of largemouth bass and tiger muskellunge because of elevated PCB levels. The sources of PCBs are attributed to contaminated sediments. Industrial hazardous waste sites and landfills along the river corridor may be contributing some additional loading. This advisory was first issued prior to 1998-99. (2009-10 NYS DOH Health Advisories and DEC/DFWMR, Habitat, October 2002).
Water Quality Sampling

NYSDEC Rotating Intensive Basin Studies (RIBS) Routine Network monitoring (water chemistry) of the Mohawk River in West Schuyler, Oneida County, is conducted annually at Dyke Road. In addition, when RIBS Intensive Network monitoring is conducted in a targeted basin every five years, additional sampling methods are employed to gain an overall assessment of water quality. This Intensive Network sampling typically includes macroinvertebrate community analysis, sediment assessment, macroinvertebrate tissue analysis and toxicity testing, in addition to water chemistry. The most recent Intensive Network monitoring was conducted during 2005 (multiplates) and 2006. Biological (macroinvertebrate) sampling revealed moderately impacted water quality, with municipal and industrial discharge identified as the primary source of the impacts. Water column chemistry sampling indicates pathogens (total and fecal coliform), chloroform, phenols and iron to be present at levels that constitute parameters of concern, although the median values for these substances are below the applicable assessment criteria. 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 slightly elevated sediment toxicity but not at a level where impacts are expected. Bottom sediments collected from this site in previous years revealed somewhat elevated levels of PAHs and some metals. PAHs and PCBs were also noted in macroinvertebrate tissue collected at this site. Based on the consensus of these established assessment methods, overall water quality at this site reflects impaired conditions. (DEC/DOW, BWAM/RIBS, January 2010)

NYSDEC Rotating Integrated Basin Studies (RIBS) Intensive Network monitoring of the Mohawk River was also conducted in Utica, Oneida County, (at Barnes Avenue) in 2005 and 2006. Water column chemistry also indicated pathogens (total and fecal coliform) to be a parameter of concern. 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)

Biological community assessments along this reach of the Mohawk River have consistently shown aquatic life to be moderately impacted over recent years. Impact Source Determination, an analytical tool that uses invertebrate community composition to identify types of stressors, indicated the communities are most similar to those influenced by municipal and/or industrial discharges; results that are consistent with the known SSO and CSO issues. Though still impaired, these results show some indication of steady water quality improvement over previous years. Historically (1970s thru mid 80s), water quality in this reach of the river was severely impacted by raw sewage, and samples were dominated by pollution tolerant worms and midges indicating gross degradation. Improvements were first noted in 1986 and 1989 and were attributed to construction and upgrade of the Oneida County WWTP. (Twenty Year Trends in Water Quality, Bode et.al., DEC/DOW, BWAR/SBU, 1993).

Previous NYSDEC sampling using PISCES samplers along much of this reach of the Mohawk River/Barge Canal found a number of PCB sources in current and former industrial areas. (DEC/DFWMR, Habitat, April 2002)

Source Assessment

The Oneida County WWTP which was constructed in 1972 and upgraded in 1987 replaced 13 primary sewage treatment plants that served area communities and significantly reduced raw sewage discharge from the Utica area. However sanitary and combined sewer overflows (SSOs and CSOs) remain a source of water quality problems. Work by the City of Utica and Oneida County to eliminate some overflow points and reduce overflows continues. However limited capacity at the WWTP and carrying capacity bottlenecks in the sewer collection system results in significant wet-weather discharges, particularly from the Sauquoit Creek Pump Station sanitary sewer overflow and the railroad and Grace Creek interceptors. These overflows are responsible for high levels of pathogens and floatables discharges which impair recreational uses. The SSO and CSOs also contribute other pollutants that result in reduced dissolved oxygen and other impacts that affect aquatic life in the Mohawk River. (DEC/DOW, Region 6, January 2010)

Environmental remediation sites may also impact water quality in the river. There are a number of class 2 sites (i.e., sites where hazardous wastes have been confirmed and which pose a threat to the environment) in the area including NiMo Harbor Point (6-33-021), the Utica City Dump (6-33-015), Monarch Chemical (6-33-030), and others. These sites are in varying stages of remediation. (DEC/DER, Environmental Remediation Database, January 2010)

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).

Section 303(d) Listing

This reach of the Mohawk River is included on the NYS 2008 Section 303(d) List of Impaired Waters. The lake is included on Part 1 of the List as a waterbody segment requiring the development of a TMDL or other strategy to attain water quality standards for pathogens, dissolved oxygen and floatables. The segment is also included on Part 2b as a Fish Consumption Water. This waterbody was first listed on the 2004 Section 303(d) List. (DEC/DOW, BWAM/WQAS, January 2010)

Segment Description

This segment includes the portion of the river from Bonny Brook (-195) near East Schuyler to Sauquoit Creek (-219) in Whitesboro. The NYS Barge Canal and Utica Harbor are listed separately.

NYS Barge Canal (portion 7) (1201-0064) MinorImpacts

Waterbody Location Information

Revised: 04/16/2010

Water Index No: H-240 (portion 12a)
Hydro Unit Code: 02020004/ **Str Class:** C
Waterbody Type: River (High Flow)
Waterbody Size: 21.3 Miles
Seg Description: from East Schuyler to Rome

Drain Basin: Mohawk River
Mohawk River
Reg/County: 6/Oneida Co. (33) ...
Quad Map: ILION (I-20-3)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Fish Consumption	Stressed	Suspected
AQUATIC LIFE	Impaired	Suspected
RECREATION	Impaired	Suspected
Habitat/Hydrolgy	Stressed	Suspected

Type of Pollutant(s)

Known: D.O./OXYGEN DEMAND, PATHOGENS
Suspected: Water Level/Flow, Nutrients, Priority Organics (PCBs), Silt/Sediment
Possible: Oil and Grease

Source(s) of Pollutant(s)

Known: COMB. SEWER OVERFLOW
Suspected: LANDFILL/LAND DISP., OTHER SANITARY DISCH, URBAN/STORM RUNOFF, Agriculture, Hydro Modification, Streambank Erosion, Tox/Contam. Sediment
Possible: - - -

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))
Verification Status: 1 (Waterbody Nominated, Problem Not Verified)
Lead Agency/Office: DOW/Reg6 **Resolution Potential:** Medium
TMDL/303d Status: n/a

Further Details

Overview

Aquatic life, recreational uses (fishing, boating) and aesthetics in this reach of the Mohawk River/Barge Canal are known to experience some impacts due to sanitary and combined sewer overflows (SSOs and CSOs), various former industrial point sources and continuing urban nonpoint runoff. Fish consumption is also considered to experience minor impacts. These sources are known to impair uses in the parallel reach of the Mohawk River, however it is not clear that the impacts in this portion of the canal reach the level of impairment.

Water Quality Sampling

NYSDEC Rotating Intensive Basin Studies (RIBS) Routine Network monitoring (water chemistry) of the Mohawk River in West Schuyler, Oneida County, is conducted annually at Dyke Road. In addition, when RIBS Intensive Network monitoring is conducted in a targeted basin every five years, additional sampling methods are employed to gain an overall assessment of water quality. This Intensive Network sampling typically includes macroinvertebrate community analysis, sediment assessment, macroinvertebrate tissue analysis and toxicity testing, in addition to water chemistry. The most recent Intensive Network

monitoring was conducted during 2005 (multiplates) and 2006. Biological (macroinvertebrate) sampling revealed moderately impacted water quality, with municipal and industrial discharge identified as the primary source of the impacts. Water column chemistry sampling indicates pathogens (total and fecal coliform), chloroform, phenols and iron to be present at levels that constitute parameters of concern. 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 slightly elevated sediment toxicity but not at a level where impacts are expected. Bottom sediments collected from this site in previous years revealed somewhat elevated levels of PAHs and some metals. PAHs and PCBs were also noted in macroinvertebrate tissue collected at this site. Based on the consensus of these established assessment methods, overall water quality at this site reflects impaired conditions. Although this site lies outside the bounds of this segment on the adjoining Mohawk River, it is considered to be somewhat representative of water quality conditions in the canal. (DEC/DOW, BWAM/RIBS, January 2010)

Biological community assessments along this reach of the Mohawk River/Barge Canal have consistently shown aquatic life to be moderately impacted over recent years. Impact Source Determination, an analytical tool that uses invertebrate community composition to identify types of stressors, indicated the communities are most similar to those influenced by municipal and/or industrial discharges; results that are consistent with the known SSO and CSO issues. Though still impaired, these results show some indication of steady water quality improvement over previous years. Historically (1970s thru mid 80s), water quality in this reach of the river was severely impacted by raw sewage, and samples were dominated by pollution tolerant worms and midges indicating gross degradation. Improvements were first noted in 1986 and 1989 and were attributed to construction and upgrade of the Oneida County WWTP. (Twenty Year Trends in Water Quality, Bode et.al., DEC/DOW, BWAR/SBU, 1993).

Source Assessment

The Oneida County WWTP which was constructed in 1972 and upgraded in 1987 replaced 13 primary sewage treatment plants that served area communities and significantly reduced raw sewage discharge from the Utica area. However sanitary and combined sewer overflows (SSOs and CSOs) remain a source of water quality problems. Work by the City of Utica and Oneida County to eliminate some overflow points and reduce overflows continues. However limited capacity at the WWTP and carrying capacity bottlenecks in the sewer collection system results in significant wet-weather discharges, particularly from the Sauquoit Creek Pump Station sanitary sewer overflow and the railroad and Grace Creek interceptors. These overflows are responsible for high levels of pathogens and floatables discharges which impair recreational uses. The SSO and CSOs also contribute other pollutants that result in reduced dissolved oxygen and other impacts that affect aquatic life in the Mohawk River. (DEC/DOW, Region 6, January 2010)

Water quality in the harbor is also affected by the Niagara Mohawk Harbor Point hazardous waste site (6-33-021). The site is a former coal gas production facility, which operated between 1845 and the 1950s. The site is located on a peninsula between the NYS Barge Canal and the neck of the harbor and harbor itself. Dredge spoils areas consisting of sediments dredged from the harbor and canal border the harbor and harbor neck. The primary contaminants in the spoils and harbor sediments are polycyclic aromatic hydrocarbons (PAHs), benzene, xylene and other organics. A Remedial Investigation and Feasibility Study was completed and a Record of Decision was issued for the site in 2002. The ongoing cleanup is being conducted in phases over several years. (DEC/DER, January 2010)

Fish Consumption

Fish consumption in the Mohawk River along and connected to this reach is impaired due to a NYS DOH health advisory that recommends eating no carp and no more than one meal per month of largemouth bass and tiger muskellunge because of elevated PCB levels. The sources of PCBs are attributed to contaminated sediments. Industrial hazardous waste sites and landfills along the river corridor may be contributing some additional loading. The advisory is based on sampling conducted in the river rather than the canal, but the contamination is thought to result in some impacts on the canal segment as well. (2009-10 NYS DOH Health Advisories and DEC/DFWMR, Habitat, October 2002).

Previous NYSDEC sampling using PISCES samplers along much of this reach of the Mohawk River/Barge Canal found a number of PCB sources in current and former industrial areas. (DEC/DFWMR, Habitat, April 2002)

Section 303(d) Listing

This portion of the Barge Canal is not currently included on the NYS 2010 Section 303(d) List of Impaired Waters. Although

monitoring in the adjoining Mohawk River suggests impacts and possible impairment, monitoring within this segment is necessary to determine if a future listing is appropriate. (DEC/DOW, BWAM/WQAS, January 2010)

Segment Description

This segment includes the portion of the canal from Pratt Creek (-196) confluence with the NYS Barge Canal near East Schuyler to the edge of the drainage basin at the confluence of the Upper Mohawk River in Rome. The Mohawk River is listed separately.

Utica Harbor (1201-0228) Impaired Seg

Waterbody Location Information

Revised: 01/26/2010

Water Index No: H-240 (portion 12b)
Drain Basin: Mohawk River
Hydro Unit Code: **Str Class:** C
Waterbody Type: Bay
Reg/County: 6/Oneida Co. (33)
Waterbody Size: 21.7 Acres
Quad Map: UTICA EAST (I-20-4)
Seg Description: entire harbor

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
FISH CONSUMPTION	Precluded	Known
AQUATIC LIFE	Impaired	Known
RECREATION	Impaired	Known
Aesthetics	Stressed	Known

Type of Pollutant(s)

Known: AESTHETICS (odors, floatables), PRIORITY ORGANICS (PCBs,PAHs,etc), PATHOGENS
Suspected: D.O./OXYGEN DEMAND, Metals, Silt/Sediment
Possible: - - -

Source(s) of Pollutant(s)

Known: COMB. SEWER OVERFLOW, LANDFILL/LAND DISP. (NiMo/Harbor Point), TOX/CONTAM. SEDIMENT
Suspected: URBAN/STORM RUNOFF
Possible: - - -

Resolution/Management Information

Issue Resolvability: 3 (Strategy Being Implemented)
Verification Status: 5 (Management Strategy has been Developed)
Lead Agency/Office: DEC/DER **Resolution Potential:** Medium
TMDL/303d Status: 1,2b (Individual Waterbody Impairment Requiring a TMDL, more)

Further Details

Overview
Fish consumption, aquatic life support, recreational uses (fishing, boating) and aesthetics in this reach of the Mohawk River are considered impaired by contaminated sediments, sanitary and combined sewer overflows (SSOs and CSOs), various former industrial point sources and continuing urban nonpoint runoff.

Fish Consumption
Fish consumption in the Mohawk River from Oriskany to West Canada Creeks is impaired due to a NYS DOH health advisory that recommends eating no carp and no more than one meal per month of largemouth bass and tiger muskellunge because of elevated PCB levels. The sources of PCBs are attributed to contaminated sediments. Industrial hazardous waste sites and landfills along the river corridor may be contributing some additional loading. This advisory was first issued prior to 1998-99. (2009-10 NYS DOH Health Advisories and DEC/DFWMR, Habitat, October 2002).

Water Quality Sampling

NYSDEC Rotating Intensive Basin Studies (RIBS) Routine Network monitoring (water chemistry) of the Mohawk River in West Schuyler, Oneida County, is conducted annually at Dyke Road. In addition, when RIBS Intensive Network monitoring is conducted in a targeted basin every five years, additional sampling methods are employed to gain an overall assessment of water quality. This Intensive Network sampling typically includes macroinvertebrate community analysis, sediment assessment, macroinvertebrate tissue analysis and toxicity testing, in addition to water chemistry. The most recent Intensive Network monitoring was conducted during 2005 (multiplates) and 2006. Biological (macroinvertebrate) sampling revealed moderately impacted water quality, with municipal and industrial discharge identified as the primary source of the impacts. Water column chemistry sampling indicates pathogens (total and fecal coliform), chloroform, phenols and iron to be present at levels that constitute parameters of concern. 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 slightly elevated sediment toxicity but not at a level where impacts are expected. Bottom sediments collected from this site in previous years revealed somewhat elevated levels of PAHs and some metals. PAHs and PCBs were also noted in macroinvertebrate tissue collected at this site. Based on the consensus of these established assessment methods, overall water quality at this site reflects impaired conditions. Although this site is downstream of this reach of the river, it is considered to be representative of water quality conditions in the upper reach. (DEC/DOW, BWAM/RIBS, January 2010)

Biological community assessments along this reach of the Mohawk River have consistently shown aquatic life to be moderately impacted over recent years. Impact Source Determination, an analytical tool that uses invertebrate community composition to identify types of stressors, indicated the communities are most similar to those influenced by municipal and/or industrial discharges; results that are consistent with the known SSO and CSO issues. Though still impaired, these results show some indication of steady water quality improvement over previous years. Historically (1970s thru mid 80s), water quality in this reach of the river was severely impacted by raw sewage, and samples were dominated by pollution tolerant worms and midges indicating gross degradation. Improvements were first noted in 1986 and 1989 and were attributed to construction and upgrade of the Oneida County WWTP. (Twenty Year Trends in Water Quality, Bode et.al., DEC/DOW, BWAR/SBU, 1993).

Previous NYSDEC sampling using PISCES samplers along much of this reach of the Mohawk River/Barge Canal found a number of PCB sources in current and former industrial areas. (DEC/DFWMR, Habitat, April 2002)

Source Assessment

The Oneida County WWTP which was constructed in 1972 and upgraded in 1987 replaced 13 primary sewage treatment plants that served area communities and significantly reduced raw sewage discharge from the Utica area. However sanitary and combined sewer overflows (SSOs and CSOs) remain a source of water quality problems. Work by the City of Utica and Oneida County to eliminate some overflow points and reduce overflows continues. However limited capacity at the WWTP and carrying capacity bottlenecks in the sewer collection system results in significant wet-weather discharges, particularly from the Sauquoit Creek Pump Station sanitary sewer overflow and the railroad and Grace Creek interceptors. These overflows are responsible for high levels of pathogens and floatables discharges which impair recreational uses. The SSO and CSOs also contribute other pollutants that result in reduced dissolved oxygen and other impacts that affect aquatic life in the Mohawk River. (DEC/DOW, Region 6, January 2010)

Water quality in the harbor is also affected by the Niagara Mohawk Harbor Point hazardous waste site (6-33-021). The site is a former coal gas production facility, which operated between 1845 and the 1950s. The site is located on a peninsula between the NYS Barge Canal and the neck of the harbor and harbor itself. Dredge spoils areas consisting of sediments dredged from the harbor and canal border the harbor and harbor neck. The primary contaminants in the spoils and harbor sediments are polycyclic aromatic hydrocarbons (PAHs), benzene, xylene and other organics. A Remedial Investigation and Feasibility Study was completed and a Record of Decision was issued for the site in 2002. The ongoing cleanup is being conducted in phases over several years. (DEC/DER, January 2010)

Section 303(d) Listing

The Utica Harbor section of the Mohawk River is included on the NYS 2008 Section 303(d) List of Impaired Waters. The lake is included on Part 1 of the List as a waterbody segment requiring the development of a TMDL or other strategy to attain water quality standards for pathogens, Dissolved Oxygen and floatables. The segment is also included on Part 2b as a Fish

Consumption Water. This waterbody was first listed on the 2004 Section 303(d) List. (DEC/DOW, BWAM/WQAS, January 2010)

Segment Description
This segment includes the entire harbor and harbor neck. The NYS Barge Canal and Mohawk River are listed separately.

Mohawk River, Main Stem (1201-0010) Impaired Seg

Waterbody Location Information

Revised: 01/26/2010

Water Index No: H-240 (portion 13)
Hydro Unit Code: 02020004/060 **Str Class:** B
Waterbody Type: River (High Flow)
Waterbody Size: 7.6 Miles
Seg Description: from Whitesboro to Oriskany

Drain Basin: Mohawk River
Mohawk River
Reg/County: 6/Oneida Co. (33)
Quad Map: ORISKANY (I-19-2)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
FISH CONSUMPTION	Precluded	Known
AQUATIC LIFE	Impaired	Known
RECREATION	Impaired	Known
Aesthetics	Stressed	Known

Type of Pollutant(s)

Known: AESTHETICS (odors, floatables), PRIORITY ORGANICS (PCBs), Metals (copper)
Suspected: D.O./OXYGEN DEMAND, PATHOGENS, Nutrients, Silt/Sediment
Possible: - - -

Source(s) of Pollutant(s)

Known: TOX/CONTAM. SEDIMENT
Suspected: COMB. SEWER OVERFLOW, URBAN/STORM RUNOFF, Agriculture
Possible: - - -

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))
Verification Status: 4 (Source Identified, Strategy Needed)
Lead Agency/Office: DOW/Reg6 **Resolution Potential:** Medium
TMDL/303d Status: 1,2b (Individual Waterbody Impairment Requiring a TMDL, more)

Further Details

Overview
Fish consumption, aquatic life support, recreational uses (fishing, boating) and aesthetics in this reach of the Mohawk River are considered impaired by contaminated sediments, sanitary and combined sewer overflows (SSOs and CSOs), various former industrial point sources and continuing urban nonpoint runoff.

Fish Consumption
Fish consumption in the Mohawk River from Oriskany to West Canada Creeks is impaired due to a NYS DOH health advisory that recommends eating no carp and no more than one meal per month of largemouth bass and tiger muskellunge because of elevated PCB levels. The sources of PCBs are attributed to contaminated sediments. Industrial hazardous waste sites and landfills along the river corridor may be contributing some additional loading. This advisory was first issued prior to 1998-99. (2009-10 NYS DOH Health Advisories and DEC/DFWMR, Habitat, October 2002).

Water Quality Sampling
NYSDEC Rotating Intensive Basin Studies (RIBS) Routine Network monitoring (water chemistry) of the Mohawk River in

West Schuyler, Oneida County, is conducted annually at Dyke Road. In addition, when RIBS Intensive Network monitoring is conducted in a targeted basin every five years, additional sampling methods are employed to gain an overall assessment of water quality. This Intensive Network sampling typically includes macroinvertebrate community analysis, sediment assessment, macroinvertebrate tissue analysis and toxicity testing, in addition to water chemistry. The most recent Intensive Network monitoring was conducted during 2005 (multiplates) and 2006. Biological (macroinvertebrate) sampling revealed moderately impacted water quality, with municipal and industrial discharge identified as the primary source of the impacts. Water column chemistry sampling indicates pathogens (total and fecal coliform), chloroform, phenols and iron to be present at levels that constitute parameters of concern. 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 slightly elevated sediment toxicity but not at a level where impacts are expected. Bottom sediments collected from this site in previous years revealed somewhat elevated levels of PAHs and some metals. PAHs and PCBs were also noted in macroinvertebrate tissue collected at this site. Based on the consensus of these established assessment methods, overall water quality at this site reflects impaired conditions. Although this site is downstream of this reach of the river, it is considered to be representative of water quality conditions in the upper reach. (DEC/DOW, BWAM/RIBS, January 2010)

NYSDEC Rotating Integrated Basin Studies (RIBS) Intensive Network monitoring of the Mohawk River was also conducted just below this segment in Utica, Oneida County, (at Barnes Avenue) in 2005 and 2006. Water column chemistry also indicated pathogens (total and fecal coliform) to be a parameter of concern. 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)

Biological community assessments along this reach of the Mohawk River have consistently shown aquatic life to be moderately impacted over recent years. Impact Source Determination, an analytical tool that uses invertebrate community composition to identify types of stressors, indicated the communities are most similar to those influenced by municipal and/or industrial discharges; results that are consistent with the known SSO and CSO issues. Though still impaired, these results show some indication of steady water quality improvement over previous years. Historically (1970s thru mid 80s), water quality in this reach of the river was severely impacted by raw sewage, and samples were dominated by pollution tolerant worms and midges indicating gross degradation. Improvements were first noted in 1986 and 1989 and were attributed to construction and upgrade of the Oneida County WWTP. (Twenty Year Trends in Water Quality, Bode et.al., DEC/DOW, BWAR/SBU, 1993).

Previous NYSDEC sampling using PISCES samplers along much of this reach of the Mohawk River/Barge Canal found a number of PCB sources in current and former industrial areas. (DEC/DFWMR, Habitat, April 2002)

Source Assessment

The Oneida County WWTP which was constructed in 1972 and upgraded in 1987 replaced 13 primary sewage treatment plants that served area communities and significantly reduced raw sewage discharge from the Utica area. However sanitary and combined sewer overflows (SSOs and CSOs) remain a source of water quality problems. Work by the City of Utica and Oneida County to eliminate some overflow points and reduce overflows continues. However limited capacity at the WWTP and carrying capacity bottlenecks in the sewer collection system results in significant wet-weather discharges, particularly from the Sauquoit Creek Pump Station sanitary sewer overflow and the railroad and Grace Creek interceptors. These overflows are responsible for high levels of pathogens and floatables discharges which impair recreational uses. The SSO and CSOs also contribute other pollutants that result in reduced dissolved oxygen and other impacts that affect aquatic life in the Mohawk River. (DEC/DOW, Region 6, January 2010)

Environmental remediation sites may also impact water quality in the river. There are a number of class 2 sites (i.e., sites where hazardous wastes have been confirmed and which pose a threat to the environment) in the area including NiMo Harbor Point (6-33-021), the Utica City Dump (6-33-015), Monarch Chemical (6-33-030), and others. These sites are in varying stages of remediation. (DEC/DER, Environmental Remediation Database, January 2010)

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).

Section 303(d) Listing

This reach of the Mohawk River is included on the NYS 2008 Section 303(d) List of Impaired Waters. The lake is included on Part 1 of the List as a waterbody segment requiring the development of a TMDL or other strategy to attain water quality standards for pathogens, dissolved oxygen/oxygen demand and floatables. The segment is also included on Part 2b as a Fish Consumption Water. This waterbody was first listed on the 2004 Section 303(d) List. (DEC/DOW, BWAM/WQAS, January 2010)

Segment Description

This segment includes the portion of the river from Sauquoit Creek (-219) in Whitesboro to the Floyd-Marcy Town line near Oriskany. The NYS Barge Canal is listed separately.

Mohawk River, Main Stem (1201-0094) Impaired Seg

Waterbody Location Information

Revised: 01/27/2010

Water Index No: H-240 (portion 14)
Hydro Unit Code: 02020004/060 **Str Class:** C
Waterbody Type: River (High Flow)
Waterbody Size: 7.2 Miles
Seg Description: from Oriskany to Rome

Drain Basin: Mohawk River
Mohawk River
Reg/County: 6/Oneida Co. (33)
Quad Map: ORISKANY (I-19-2)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Fish Consumption	Stressed	Suspected
AQUATIC LIFE	Impaired	Suspected
RECREATION	Impaired	Suspected
Aesthetics	Stressed	Known

Type of Pollutant(s)

Known: AESTHETICS (odors, floatables), METALS (copper)
Suspected: D.O./OXYGEN DEMAND, PATHOGENS, Nutrients, Silt/Sediment
Possible: Priority Organics

Source(s) of Pollutant(s)

Known: TOX/CONTAM. SEDIMENT
Suspected: URBAN/STORM RUNOFF, Agriculture, Industrial, Municipal
Possible: - - -

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))
Verification Status: 4 (Source Identified, Strategy Needed)
Lead Agency/Office: DOW/Reg6 **Resolution Potential:** Medium
TMDL/303d Status: 3b (Waterbody Requiring Verification of Cause/Pollutant)

Further Details

Overview

Aquatic life support, recreational uses (fishing, boating) and aesthetics in this reach of the Mohawk River are though to be impaired by heavy metals (copper) in sediments (the result of past discharges to the river) and continuing urban and some agricultural nonpoint source runoff. More recent sampling suggests water quality improvement, but these suggested trends need to be verified.

Water Quality Sampling

A biological (macroinvertebrate) assessment of the Mohawk River below Rome was also conducted at Chaminade Road, just downstream of this reach, in 2000. Multiplate sampling results at that time indicated moderately impacted water quality conditions. These results represented substantially improved water quality from previous sampling (1972, 78, 86). Improvements at the site were attributed to the upgrading of industrial (met al finishing) WWTPs and the upgrade from primary to secondary of the Rome WWTP in 1974 and facility expansion in 1997. A review of discharge monitoring data indicates that all permitted facilities (both municipal and industrial) are in substantial compliance with conditions and requirements of their SPDES effluent permit. Macroinvertebrate tissue was found to have very high levels of copper. This is largely attributed to

legacy discharges from met al finishing industries in the area. (DEC/DOW, BWAR/SBU, July 2002)

More recent NYSDEC Rotating Integrated Basin Studies (RIBS) Intensive Network monitoring of the Mohawk River was also conducted a little farther downstream of this segment in Utica, Oneida County, (at Barnes Avenue) in 2005 and 2006. Water column chemistry also indicated pathogens (total and fecal coliform) to be a parameter of concern. 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)

Previous Sampling

During a 1995 field survey (PISCES sampling) NYSDEC fisheries staff reported significant visible oily sheen and obvious petroleum odors (diesel or fuel oil) in the river. The problem was judged to be severe although the exact source of the impact remains unknown. (DEC/DFWMR, Region 6, 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).

Section 303(d) Listing

This portion of the Mohawk River is included on the NYS 2008 Section 303(d) List of Impaired Waters. The segment is included on Part 3b of the List as an Impaired Water for which TMDL Development May be Deferred due to the need to verify the specific cause/pollutant. The need for verification is due to the available sampling results being either older or from sampling sites that are located downstream but outside this actual segment. This waterbody was first listed on the 2004 Section 303(d) List.

Segment Description

This segment includes the portion of the river south of the NYS Barge Canal from the Floyd-Marcy Town line near Oriskany to Rome. The waters of this portion of the stream are Class C. The NYS Barge Canal is listed separately.

Mohawk River, Upper, Main Stem (1201-0070) NoKnownImpct

Waterbody Location Information

Revised: 08/20/2002

Water Index No: H-240 (portion 15)
Hydro Unit Code: 02020004/060 **Str Class:** C(T)
Waterbody Type: River (Med. Flow)
Waterbody Size: 6.5 Miles
Seg Description: from Rome to Delta Lake

Drain Basin: Mohawk River
Mohawk River
Reg/County: 6/Oneida Co. (33)
Quad Map: ROME (I-19-1)

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 the Mohawk River in Rome (at Floyd Avenue) was conducted as part of the RIBS biological screening effort in 2005. Multiplate samplers were deployed and collected four times during the sampling season. 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 appear to be 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 communities influenced by impoundment effects. These sampling results are consistent with results from sampling at this site in 2000 and with kick sampling results at a nearby site (East Bloomfield Street). 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, November 2009)

Source Assessment

There are additional minor concerns regarding the effects of sediment loads to the stream from stream bank erosion, hydrologic modification at the Delta Dam and urbanization in the Rome area on the cold water fishery. These conditions do not currently result in any use restrictions. (DEC/DFWMR, Region 6, 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 from (north of) the NYS Barge Canal in Rome to Delta Lake. The waters of this portion of the stream are Class C from the NYS Barge Canal to the Floyd Avenue bridge, and Class C(T) for the remainder of the reach.

Starch Factory Creek and tribs (1201-0067) MinorImpacts

Waterbody Location Information

Revised: 02/10/2010

Water Index No: H-240-207
Hydro Unit Code: 02020004/060 **Str Class:** B
Waterbody Type: River (Low Flow)
Waterbody Size: 8.9 Miles
Seg Description: entire stream and tribs

Drain Basin: Mohawk River
Mohawk River
Reg/County: 6/Oneida Co. (33)
Quad Map: UTICA EAST (I-20-4)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

Known: NUTRIENTS (phosphorus)
Suspected: Aesthetics, D.O./Oxygen Demand, Pathogens, Silt/Sediment
Possible: Thermal Changes

Source(s) of Pollutant(s)

Known: URBAN/STORM RUNOFF
Suspected: Habitat Modification
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, recreational uses natural resources habitat and aesthetics of Starch Factory Creek are considered to be stressed by urban runoff and various other nonpoint sources. Previously CSOs were also identified as a contributing source; however the CSO to the creek that was of concern has been eliminated.

Water Quality Sampling

A biological (macroinvertebrate) assessment of Starch factory Creek in Utica (at Post Office) 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 urban, industrial runoff sources. These results are consistent with results from sampling conducted at this site in 2001. That sampling also resulted in an assessment of slightly impacted due to toxic effects. Macroinvertebrate tissue sample analysis from 2001 also revealed elevated levels of a number of PAHs. (DEC/DOW, BWAM/SBU, January 2010)

A RIBS water quality study was conducted on four Utica area tribs, including Starch Factory Creek, in 2001. The sampling site on this trib was located in Proctor Park (about a one-eighth mile above the former CSO). This monitoring found no notable water quality problems in the water column of the upper reach. (DEC/DOW, BWAR/RIBS, April 2002)

Section 303(d) Listing

Starch Factory Creek was included on the NYS 2004 Section 303(d) List of Impaired Waters due to the impacts from the CSO discharge. However, because the impacts to the creek were limited to the lower half mile of the stream, this impairment was more appropriately included (as a footnote) with a listing for the Mohawk River which was also the result of CSOs in the Utica area in the 2006 List. Based on the elimination of the CSO discharge, removal of the reference to Starch Factory Creek in the Mohawk River segment listing should be considered for the 2010 List. (DEC/DOW, BWAM/WQAS, January 2010)

Segment Description

This segment includes the entire stream and all tribs. The waters of the stream are primarily Class B; with the upper reach designated Class C. Tribs to this reach/segment are Class C,C(TS).

Ballou, Nail Creeks and tribs (1201-0203) Impaired Seg

Waterbody Location Information

Revised: 02/03/2010

Water Index No: H-240-211,214
Hydro Unit Code: 02020004/060 **Str Class:** C
Waterbody Type: River (Low Flow)
Waterbody Size: 5.9 Miles
Seg Description: total length of both tribs

Drain Basin: Mohawk River
Mohawk River
Reg/County: 6/Oneida Co. (33)
Quad Map: UTICA EAST (I-20-4)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Fish Consumption	Stressed	Known
AQUATIC LIFE	Precluded	Known
RECREATION	Precluded	Known
HABITAT/HYDROLGY	Impaired	Known
Aesthetics	Stressed	Known

Type of Pollutant(s)

Known: D.O./OXYGEN DEMAND, NUTRIENTS (phosphorus), Aesthetics, Priority Organics (PCBs), Pathogens
Suspected: Ammonia, Unknown Toxicity
Possible: - - -

Source(s) of Pollutant(s)

Known: COMB. SEWER OVERFLOW, HABITAT MODIFICATION
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: DOW/Reg6 **Resolution Potential:** Medium
TMDL/303d Status: 1 (Individual Waterbody Impairment Requiring a TMDL)

Further Details

Overview

Aquatic life support, recreational uses and aesthetics of Ballou and Nail Creeks are impaired by combined sewer overflows, stormwater drainage, various other urban/industrial nonpoint sources and the overall urbanization of the stream. Both streams travel underground for significant distances and large paved, impervious areas abut the streams. The Utica area CSOs have a significant impact on water quality on these tribs as well as the Mohawk River itself.

Water Quality Sampling

Biological (macroinvertebrate) assessments of Ballou and Nail Creeks in Utica (at the CSO outlet and at Haak Road, respectively) were conducted as part of the RIBS biological screening effort in 2005. Sampling results indicated severely impacted conditions. In such samples the fauna is extremely altered and comprised of tolerant species. Diversity and abundance of organisms is significantly reduced. The nutrient biotic index indicates highly elevated enrichment and impact source determination reveals a fauna that is most similar to communities strongly influenced by municipal and industrial

discharges. Water quality is considered to be very poor and aquatic life is not supported in the stream. This segment is considered to be impaired. These results are consistent with previous sampling at the site in 2000 and 2001. (DEC/DOW, BWAM/SBU, January 2010)

NYSDEC Rotating Intensive Basin Studies (RIBS) monitoring of Nail and Ballou Creek in Utica were conducted in 2001. This sampling was part of a mini-study of four urban streams in the Utica area. Sampling of the water column, sediments, and invertebrate tissues was conducted, as well as macroinvertebrate community analysis. Biological assessments of both Nail and Ballou Creek indicated severely impacted water quality conditions. The fauna consisted almost entirely of pollution-tolerant worms and midges. Impact Source Determination denoted municipal and/or industrial discharges as the likely source of impact. A strong sewage smell was noted at the sites. In Nail Creek parameters of concern in the water column were zinc, ammonia, total dissolved solids, fecal coliform, and total coliform. Sediments contained cadmium, PAHs, and DDE at levels of concern. A strong sewage smell was noted at the site. In Ballou Creek Water column samples identified ammonia, total dissolved solids, low dissolved oxygen, fecal coliform, and total coliform as parameters of concern. Sediments contained cadmium and copper above levels of concern, and 6 PAHs in concentrations above the level at which effects on aquatic organisms are considered likely to occur. Water quality in both these streams are considered to be very poor and not supporting of its designated uses. (DEC/DOW, BWAR/RIBS, April 2003)

NYSDEC conducted a contamination trackdown study of Nail Creek in 1999. The study found the creek to be contaminated with PCBs. Although there may be additional sources, PISCES sampling in 1999-2001 in conjunction with DOW water sampling have traced significant PCB contamination in a Nail Creek trib in Town of New Hartford, to the former Bendix Plant/TRW Corporation site (Site No. 6-33-020). The lower reach of Nail Creek (below the RR tracks) deserves some additional attention due to nearby storm sewers, trash from the old Utica City dump area, and oily sediment which may also be a source of PCBs. This area is below both the Bendix and the remediated Bossert hazardous waste sites. (DEC/DFWMR, Region 6, August 2000)

Source Assessment

The Oneida County WWTP which was constructed in 1972 and upgraded in 1987 replaced 13 primary sewage treatment plants that served area communities and significantly reduced raw sewage discharge from the Utica area. However sanitary and combined sewer overflows (SSOs and CSOs) remain a source of water quality problems. Work by the City of Utica and Oneida County to eliminate some overflow points and reduce overflows continues. However limited capacity at the WWTP and carrying capacity bottlenecks in the sewer collection system results in significant wet-weather discharges, including discharges to Ballou and Nail Creeks. These overflows are responsible for high levels of pathogens and floatables discharges which impair recreational uses. The SSO and CSOs also contribute other pollutants that result in reduced dissolved oxygen and other impacts that affect aquatic life in the Mohawk River. (DEC/DOW, Region 6, January 2010)

Section 303d Listing

The Ballou, Nail Creek segment is included on the NYS 2008 Section 303(d) List of Impaired Waters. The lake is included on Part 1 of the List as a waterbody segment requiring the development of a TMDL or other strategy to attain water quality standards for phosphorus and D.O./oxygen demanding substances. This waterbody was first listed on the 2004 Section 303(d) List.

Segment Description

This segment includes the total length of both tribs to the Mohawk River in Utica. Ballou Creek (-211) and Nail Creek (-211), and their tribs, are Class C.

Minor Tribs to Mohawk River (1201-0205) Need Verific

Waterbody Location Information

Revised: 12/04/2009

Water Index No: H-240-212,213,215,216
Hydro Unit Code: 02020004/060 **Str Class:** C
Waterbody Type: River (Low Flow)
Waterbody Size: 39.0 Miles
Seg Description: entire stream and tribs

Drain Basin: Mohawk River
Mohawk River
Reg/County: 6/Oneida Co. (33)
Quad Map: UTICA EAST (I-20-4)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
AQUATIC LIFE	Impaired	Suspected

Type of Pollutant(s)

Known: - - -
Suspected: NUTRIENTS (phosphorus)
Possible: D.O./Oxygen Demand

Source(s) of Pollutant(s)

Known: - - -
Suspected: URBAN/STORM RUNOFF, 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/BWAM **Resolution Potential:** Medium
TMDL/303d Status: n/a

Further Details

Overview
Aquatic life in Reall Creek are known to experience minor impacts/threats due to elevated nutrients and possibly organic inputs. Nonpoint sources, including urban/storm runoff and agricultural activities, are the likely sources.

Water Quality Sampling
A biological (macroinvertebrate) assessment of Reall Creek in Deerfield (at Firehouse Road) was conducted as part of the RIBS biological screening effort in 2005. Sampling results indicated moderately impacted conditions. In such samples sensitive species are markedly reduced or missing and the distribution of major groups is significantly unbalanced relative to what would be expected. Samples are dominated by more tolerant species. The nutrient biotic index indicates some enrichment. However low flow at the time of the sampling may have been the reason the assessment at this site slipped into the range of moderate impact. Further investigation and/or other indicators are required to determine the extent of water quality impacts. (DEC/DOW, BWAM/SBU, December 2009)

NYSDEC Rotating Intensive Basin Studies (RIBS) Intensive Network monitoring of Reall Creek in Utica was conducted in 2001. This sampling was part of a mini-study of four urban streams in the Utica area. Sampling of the water column, sediments, and invertebrate tissues was conducted, as well as macroinvertebrate community analysis. Analysis of water column samples indicated that high pH was a parameter of concern for this stream. A biological (macroinvertebrate)

assessment of Reall Creek in Deerfield was conducted in 2000 as part of the RIBS effort. Sampling results indicated slightly impacted water quality conditions. The fauna was diverse, but dominated by facultative midges, although clean-water mayflies, stoneflies, and caddisflies were collected at this site. Impact Source Determination indicated possible effects of organic wastes, but no sources are known. (DEC/DOW, BWAR/SBU, April 2003)

Segment Description

This segment includes the total length of selected/smaller tribs to and north of the Mohawk River near Utica. Tribs within this segment, including Reall Creek (-212), are Class C.

Sauquoit Creek, Lower, and minor tribs (1201-0069) Impaired Seg

Waterbody Location Information

Revised: 01/17/2003

Water Index No: H-240-219
Drain Basin: Mohawk River
Hydro Unit Code: 02020004/050 **Str Class:** C(T) Mohawk River
Waterbody Type: River (Low Flow) **Reg/County:** 6/Oneida Co. (33)
Waterbody Size: 20.7 Miles **Quad Map:** UTICA WEST (I-19-3)
Seg Description: stream and selected tribs, fr mouth to Washington Mills

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
FISH CONSUMPTION	Precluded	Known
Aquatic Life	Stressed	Suspected
Recreation	Stressed	Known
Habitat/Hydrolgy	Stressed	Known

Type of Pollutant(s)

Known: PRIORITY ORGANICS (PCBs), Metals
Suspected: Water Level/Flow, Nutrients, Silt/Sediment, Thermal Changes
Possible: Oil and Grease

Source(s) of Pollutant(s)

Known: INDUSTRIAL (nonpoint runoff), TOX/CONTAM. SEDIMENT, Streambank Erosion
Suspected: Landfill/Land Disp., Urban/Storm Runoff
Possible: Chemical Leak/Spill

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))
Verification Status: 4 (Source Identified, Strategy Needed)
Lead Agency/Office: DEC/FWMR **Resolution Potential:** Medium
TMDL/303d Status: 2b (Multiple Segment/Categorical Water, Fish Consumption)

Further Details

Overview
Fish consumption use in this portion of Sauquoit Creek is impaired by PCBs from contaminated sediments, the result of past industrial discharges. Recreational uses are also considered stressed due to fish consumption advisories. Aquatic life may experience minor impacts due to various urban point and nonpoint impacts.

Fish Consumption Fish consumption in Sauquoit Creek is impaired due to a NYS DOH health advisory that recommends eating no brown trout because of elevated PCB levels. The advisor extends from the mouth at the Mohawk River to the Old Silk Mill Dam (near the New Hartford/Paris town line). The advisory for this lake was first issued in 1998-99. (2009-10 NYS DOH Health Advisories)

Source Assessment
The NYS DEC Division of Fish Wildlife and Marine Resources has been using passive-in-situ chemical extraction samplers (PISCES) to trackdown bioaccumulative substances (PCBs) in the creek since 1994. The current advisory is based on this work which traced PCB contamination to the old bleachery site in Chadwicks. The site has since been

investigated by DEC Environmental Remediation staff and is expected to be added to the NYS Registry of Inactive Hazardous Waste Disposal Sites. (DEC/DFWMR, Hale Creek Field Station, March 2002)

A study of Sauquoit Creek sediments prior to the implementation of a flood control project was also conducted in 1999. This study found elevated levels of metals (lead, cadmium, chromium), PCBs and PAHs in the sediments that would prevent unrestricted disposal. (DEC/DOW, BWAR/Sediment Assessment, September 1999)

Water Quality Sampling

NYSDEC Rotating Integrated Basin Studies (RIBS) Intensive Network monitoring of Sauquoit Creek in Whitesboro, Oneida County, (at Main Street) 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 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 high enrichment in the 2005 sampling, but low nutrient levels in 2006. The stream and fauna appeared most similar to natural communities, with some nonpoint source influences. Water column chemistry indicates total dissolved solids to have just reached the threshold as a parameter of concern. Toxicity testing using water from this location detected no mortality or reproductive effects on the test organism. Sediment screening for acute toxicity indicated some slight 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. Based on the consensus of these established assessment indicators, overall water quality at this site shows that although nutrient impacts should continue to be monitored, aquatic life and recreational uses are considered to be fully supported in the stream. (DEC/DOW, BWAM/RIBS, January 2010)

Biological (macroinvertebrate) assessments of Sauquoit Creek in Whitesboro and Clayville were also conducted in 2000. Slightly impacted water quality was assessed for both sites. Nonpoint nutrient enrichment is the likely source of impact. (DEC/DOW, BWAR/SBU, July 2002)

The more recent sampling results are fairly consistent with conditions reported in a 1995 biological survey of Sauquoit Creek. This survey found slightly impacted water quality along the entire reach from the mouth to Clayville; non-impacted conditions were found at the most upstream site in Greens Crossing. Various nonpoint sources were indicated. (Sauquoit Creek Biological Assessment Report, Bode et al., DEC/DOW, BWAR/SBU, December 1995)

Previous Assessment

Local agencies have noted concerns regarding increased peak flows (due to increasing urbanization) and the resulting heavy sediment loads, stream scour and bank erosion. The local health department has particular concerns about an area near Brookline Drive where the creek bank is receding and there is inward bank erosion of 3 to 5 feet, tree cutting and high flows. (Oneida County Health Department, March 2002)

Section 303d Listing

Sauquoit Creek is included on the NYS 2008 Section 303(d) List of Impaired Waters. The lake is included on Part 2b of the List as a Fish Consumption Water. (DEC/DOW, BWAM/WQAS, January 2010)

Segment Description

This segment includes the portion of the stream and selected/smaller tribs from the mouth to/including an unnamed trib (-7) in Washington Mills. The waters of this portion of the stream are Class C(T). Tribs to this reach/segment are Class C,C(T). Mud Creek (-4) is listed separately.

Sauquoit Creek, Middle, and tribs (1201-0207) Impaired Seg

Waterbody Location Information

Revised: 08/08/2002

Water Index No: H-240-219
Drain Basin: Mohawk River
Hydro Unit Code: 02020004/050 **Str Class:** C(T) Mohawk River
Waterbody Type: River (Low Flow) **Reg/County:** 6/Oneida Co. (33)
Waterbody Size: 55.3 Miles **Quad Map:** UTICA WEST (I-19-3)
Seg Description: stream and tribs, fr Washington Mills to Clayville

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
FISH CONSUMPTION	Precluded	Known
Aquatic Life	Stressed	Suspected
Recreation	Stressed	Known

Type of Pollutant(s)

Known: PRIORITY ORGANICS (PCBs), Metals
Suspected: Nutrients, Silt/Sediment
Possible: - - -

Source(s) of Pollutant(s)

Known: LANDFILL/LAND DISP., TOX/CONTAM. SEDIMENT
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: DEC/FWMR **Resolution Potential:** Medium
TMDL/303d Status: 2b (Multiple Segment/Categorical Water, Fish Consumption)

Further Details

Overview
Fish consumption use in this portion of Sauquoit Creek is impaired by PCBs from contaminated sediments, the result of past industrial discharges. Recreational uses are also considered stressed due to fish consumption advisories. Aquatic life may experience minor impacts due to various urban point and nonpoint impacts.

Fish Consumption Fish consumption in Sauquoit Creek is impaired due to a NYS DOH health advisory that recommends eating no brown trout because of elevated PCB levels. The advisor extends from the mouth at the Mohawk River to the Old Silk Mill Dam (near the New Hartford/Paris town line). The advisory for this lake was first issued in 1998-99. (2009-10 NYS DOH Health Advisories)

Source Assessment
The NYS DEC Division of Fish Wildlife and Marine Resources has been using passive-in-situ chemical extraction samplers (PISCES) to trackdown bioaccumulative substances (PCBs) in the creek since 1994. The current advisory is based on this work which traced PCB contamination to the old bleachery site in Chadwicks. The site has since been investigated by DEC Environmental Remediation staff and is expected to be added to the NYS Registry of Inactive

Hazardous Waste Disposal Sites. (DEC/DFWMR, Hale Creek Field Station, March 2002)

Water Quality Sampling

NYSDEC Rotating Integrated Basin Studies (RIBS) Intensive Network monitoring of Sauquoit Creek a few miles downstream of this reach in Whitesboro, Oneida County, (at Main Street) 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 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 high enrichment in the 2005 sampling, but low nutrient levels in 2006. The stream and fauna appeared most similar to natural communities, with some nonpoint source influences. Water column chemistry indicates total dissolved solids to have just reached the threshold as a parameter of concern. Toxicity testing using water from this location detected no mortality or reproductive effects on the test organism. Sediment screening for acute toxicity indicated some slight 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. Based on the consensus of these established assessment indicators, overall water quality at this site shows that although nutrient impacts should continue to be monitored, aquatic life and recreational uses are considered to be fully supported in the stream. These conditions at this downstream sites are considered to be mostly representative of conditions in the middle reach of the stream as well. (DEC/DOW, BWAM/RIBS, January 2010)

Biological (macroinvertebrate) assessments of Sauquoit Creek in Whitesboro and Clayville were conducted in 2000. Slightly impacted water quality was assessed for both sites. Nonpoint nutrient enrichment is the likely source of impact. (DEC/DOW, BWAR/SBU, July 2002)

These results are fairly consistent with conditions reported in a 1995 biological survey of Sauquoit Creek. This survey found slightly impacted water quality along the entire reach from the mouth to Clayville; non-impacted conditions were found at the most upstream site in Greens Crossing. Various nonpoint sources were indicated. (Sauquoit Creek Biological Assessment Report, Bode et al., DEC/DOW, BWAR/SBU, December 1995)

Section 303d Listing

Sauquoit Creek is included on the NYS 2008 Section 303(d) List of Impaired Waters. The stream is included on Part 2b of the List as a Fish Consumption Water. (DEC/DOW, BWAM/WQAS, January 2010)

Segment Description

This segment includes the portion of the stream and selected/smaller tribs from an unnamed trib (-7) in Washington Mills to the Superfine Paper Company dam in Clayville. The waters of this portion of the stream are Class C(T). Tribs to this reach/segment, including The Glen (-10), are Class C,C(T). The upper reach of an unnamed trib (-24) is listed separately.

Sauquoit Creek, Upper, and tribs (1201-0208) NoKnownImpct

Waterbody Location Information

Revised: 08/07/2002

Water Index No: H-240-219
Hydro Unit Code: 02020004/050 **Str Class:** C(TS)
Waterbody Type: River (Low Flow)
Waterbody Size: 22.8 Miles
Seg Description: stream and tribs, above Clayville

Drain Basin: Mohawk River
Mohawk River
Reg/County: 6/Oneida Co. (33)
Quad Map: CASSVILLE (J-19-2)

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 Sauquoit Creek in Clayville was conducted in 2000. Slightly impacted water quality was assessed for this site. Nonpoint nutrient enrichment is the likely source of impact. In spite of these minor impacts, aquatic life is considered to be fully supported in the stream. (DEC/DOW, BWAR/SBU, July 2002)

These results are consistent with conditions reported in a 1995 biological survey of Sauquoit Creek. This survey found slightly impacted water quality along the entire reach from the mouth to Clayville; non-impacted conditions were found at the most upstream site in Greens Crossing. Various nonpoint sources were indicated. There have been complaints regarding on-site septic problems in the hamlet of Cassville. (Sauquoit Creek Biological Assessment Report, Bode et al., DEC/DOW, BWAR/SBU, December 1995)

Segment Description
This segment includes the portion of the stream and all tribs above the Superfine Paper Company dam in Clayville. The waters of this portion of the stream are Class C(TS). Tribs to this reach/segment are Class C,C(TS).

Mud Creek and tribs (1201-0062) MinorImpacts

Waterbody Location Information

Revised: 02/04/2010

Water Index No: H-240-219- 4
Hydro Unit Code: 02020004/050 **Str Class:** C(T)
Waterbody Type: River (Low Flow)
Waterbody Size: 17.5 Miles
Seg Description: entire stream and tribs

Drain Basin: Mohawk River
Mohawk River
Reg/County: 6/Oneida Co. (33)
Quad Map: UTICA WEST (I-19-3)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Aquatic Life	Stressed	Suspected
Habitat/Hydrolgy	Stressed	Possible

Type of Pollutant(s)

Known: - - -
Suspected: NUTRIENTS, SILT/SEDIMENT, THERMAL CHANGES
Possible: - - -

Source(s) of Pollutant(s)

Known: - - -
Suspected: HABITAT MODIFICATION, URBAN/STORM RUNOFF
Possible: Construction

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 and natural resources habitat in Mud Creek are thought to experience impacts due to elevated nutrient and sediment loads from urban nonpoint runoff, commercial and residential development and wetlands encroachment. Urbanization has resulted in more significant hydrologic modifications, increased silt/sediment loadings and thermal stresses.

Water Quality Sampling

A biological (macroinvertebrate) assessment of Mud Creek in Whitesboro (at Henderson Street) was conducted in 2000. Slightly impacted water quality was assessed for this site. Nonpoint nutrient enrichment is the likely source of impact. In spite of these minor impacts, aquatic life is considered to be fully supported in the stream. (DEC/DOW, BWAR/SBU, July 2002)

These results are consistent with conditions reported in a 1995 biological survey of Sauquoit Creek, which included sampling on Mud Creek. This survey found slightly impacted water quality at sites on Mud Creek. Various nonpoint sources were indicated. (Sauquoit Creek Biological Assessment Report, Bode et al., DEC/DOW, BWAR/SBU, December 1995)

Water Quality Management

A stormwater treatment system to address PCB contamination from Special Met als Corporation was constructed in 1999. A review of available data indicates that the facility is in substantial compliance with the conditions and requirements of its SPDES permit. (DEC/DOW, Region 6, April 2002)

Previous Assessment

Concerns were raised during previous assessment efforts regarding impacts on fish consumption due to a health advisory for downstream waters (Sauquoit Creek). Though this advisory extends into a portion of Mud Creek, a trib of Sauquoit, up to the first impassible barrier, since the impact originates in Sauquoit Creek it is reflected in the Sauquoit Creek assessment and is discussed more fully there. (DEC/DOW, BWAM/WQAS, January 2010)

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 also/primarily Class C(T),C(TS).

Minor Tribs to Mohawk River (1201-0224) NoKnownImpct

Waterbody Location Information

Revised: 08/08/2002

Water Index No: H-240-220 thru 239
Drain Basin: Mohawk River
Hydro Unit Code: 02020004/060 **Str Class:** C Mohawk River
Waterbody Type: River (Low Flow) **Reg/County:** 6/Oneida Co. (33)
Waterbody Size: 52.1 Miles **Quad Map:** ORISKANY (I-19-2) ...
Seg Description: total length of selected tribs, from Utica to Rome

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 Crane Creek in Marcy was conducted in 2000. Sampling results indicated non-impacted water quality conditions. Mayflies, stoneflies and caddisflies were well-represented. (DEC/DOW, BWAR/SBU, July 2002)

Segment Description
This segment includes the total length of selected/smaller tribs to the Mohawk River between Utica and Rome. Tribs within this segment, including Crane Creek (-222), are Class C,C(T),C(TS). Oriskany Creek (-223), Ninemile Creek (-227), Sixmile Creek (-231), Threemile Creek (-234) and Wheelers Creek (-240) are listed separately.

Ninemile Creek, Lower, and tribs (1201-0014) MinorImpacts

Waterbody Location Information

Revised: 04/13/2010

Water Index No: H-240-227
Hydro Unit Code: 02020004/020 **Str Class:** B(T)
Waterbody Type: River (Low Flow)
Waterbody Size: 96.7 Miles
Seg Description: stream and tribs, from mouth to South Trenton

Drain Basin: Mohawk River
Mohawk River
Reg/County: 6/Oneida Co. (33)
Quad Map: ORISKANY (I-19-2)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

Known: THERMAL CHANGES
Suspected: SILT/SEDIMENT
Possible: PATHOGENS, Water Level/Flow, Nutrients

Source(s) of Pollutant(s)

Known: HABITAT MODIFICATION, Hydro Modification
Suspected: Agriculture, Streambank Erosion
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: 1->n/a?,4c

Further Details

Overview
Natural resources (fishery) habitat in Ninemile Creek due to the loss of riparian vegetation and other habitat modifications. Agricutural activity in the watershed is the source of the problem. Increasing urbanization and development are also concerns. However more recent sampling suggests these threats are not atypical of many other streams in the state.

Source Assessment
Agricultural activity, including unrestricted cattle access to the stream, destabilize banks and eliminated bank vegetation and cover. Due to the loss of streambank vegetation, the stream has become wider and shallower. As a result the shallower, non-shaded waters experience higher temperatures in the summer and provide insufficient cover for fish. The trout fishery is managed as a "put and take" fishery due to the poor habitat and high temperatures. Fishery surveys over the years have documented poor survival of spring stocked trout by mid-summer. Despite the loss, stocking is continued because of good public access. The Region has done work to replace the riparian vegetation. However, increasing urbanization and open agriculture continue to destroy stream bank vegetation. This stream also receives water from West Canada Creek to supplement flow to the barge canal. (DEC/DFWMR, Region 6, April 2002)

Water Quality Sampling
A biological (macroinvertebrate) assessment of Ninemile Creek in Marcy (at River 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. Aquatic life community is fully supported. These results represent an improvement from conditions found during sampling at this site in 2000 and 2001. (DEC/DOW, BWAM/SBU, January 2010)

NYSDEC Rotating Intensive Basin Studies (RIBS) Intensive Network monitoring of Ninemile Creek in Marcy (at Richie Road) was also conducted in 2000 and 2001. Sampling of the water column, sediments, and invertebrate tissues was conducted, as well as macroinvertebrate community analysis. Biological sampling indicated slightly impacted water quality in 2000, from nonpoint source nutrient enrichment. The 2001 sampling resulted in an assessment of non-impacted, although nutrient enrichment was still indicated to be present. No significant parameters of concern were identified in the water column. Sediments contained cadmium and DDE at levels considered elevated, and of concern, but not above concentrations known to affect aquatic life. No toxicity was found in two tests conducted on different dates, and no metals or organic compounds were found in invertebrates tissues. (DEC/DOW, BWAR/RIBS, April 2003)

Previous Assessment

Concerns were raised during previous assessment efforts in 2002 regarding the impact of numerous failed on-site septic systems in Holland Patent and raw sewage discharges to tribs of Ninemile Creek. However, since then the village has received funding to implement corrective action, and has sewered the community and connected these residences to the Oneida County sewer system in 2005. (DEC/DOW, Region 6, April 2010)

Section 303d Listing

Ninemile Creek is included on the NYS 2008 Section 303(d) List of Impaired Waters. The lake is included on Part 1 of the List as a waterbody segment requiring the development of a TMDL or other strategy to attain water quality standards for pathogens. However due to the resolution of the failing onsite wastewater (septic) systems in Holland Patent, this waterbody should be considered for delisting. (DEC/DOW, BWAM/WQAS, April 2010)

Segment Description

This segment includes the portion of the stream and all tribs from the mouth to/including the Trenton Falls Feeder Canal (-23a) near South Trenton. The waters of this portion of the stream, are Class B(T). Tribs to this reach/segment, including Dry Creek (-8), Vaughn Brook (-13), Great Gulf Creek (-16) and Willow Creek (-20) are primarily Class C,C(T); the Trenton Falls Feeder Canal (-23a) is designated Class B. Upper Ninemile Creek and Beaver Brook (-21-1) are listed separately.

Beaver Brook and tribs (1201-0229) NoKnownImpct

Waterbody Location Information

Revised: 02/03/2010

Water Index No: H-240-227-21- 1
Hydro Unit Code: 02020004/020 **Str Class:** AA(T)
Waterbody Type: River (Low Flow)
Waterbody Size: 7.7 Miles
Seg Description: entire stream and tribs

Drain Basin: Mohawk River
Mohawk River
Reg/County: 6/Oneida Co. (33)
Quad Map: SOUTH TRENTON (I-20-1)

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 Beaver Creek in Holland Patent (at Fox 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 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 with some influence from nonpoint sources. 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 2010)

Segment Description

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

Sixmile Creek and tribs (1201-0212) Need Verific

Waterbody Location Information

Revised: 12/04/2009

Water Index No: H-240-231
Hydro Unit Code: 02020004/060 **Str Class:** C
Waterbody Type: River (Low Flow)
Waterbody Size: 25.8 Miles
Seg Description: entire stream and tribs

Drain Basin: Mohawk River
Mohawk River
Reg/County: 6/Oneida Co. (33)
Quad Map: ROME (I-19-1)

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: UNKNOWN TOXICITY
Possible: Nutrients, Priority Organics (PCBs, other)

Source(s) of Pollutant(s)

Known: - - -
Suspected: LANDFILL/LAND DISP. (former Griffiss AFB), URBAN/STORM RUNOFF, 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/BWAM **Resolution Potential:** Medium
TMDL/303d Status: n/a

Further Details

Overview
Aquatic life in Sixmile Creek may experience minor impacts/threats due to unknown toxicity from various nonpoint sources.

Water Quality Sampling
A biological (macroinvertebrate) assessment of Sixmile Creek in Rome (at Rickmyer Road) was conducted as part of the RIBS biological screening effort in 2005. Sampling results indicated moderately impacted conditions. In such samples sensitive species are markedly reduced or missing and the distribution of major groups is significantly unbalanced relative to what would be expected. Samples are dominated by more tolerant species. The nutrient biotic index indicates low/some enrichment. However poor sampling habitat was noted at the site and such effects/conditions are known to skew biological sampling results and are not a true reflection of water quality. Further investigation and/or other indicators are required to determine the extent of water quality impacts, if any. A previous biological assessment of Sixmile Creek at this site was conducted in 2000. Sampling results at that time indicated slightly impacted water quality conditions. Impact Source Determination indicated nonpoint source nutrient enrichment and siltation, although clean-water mayflies, stoneflies, and caddisflies were present, and water quality was borderline non-impacted.(DEC/DOW, BWAM/SBU, December 2009)
A biological assessment of Slate Creek in Floyd (at Rickmeyer Road) was also conducted as part of the RIBS biological screening effort in 2003. 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)

Source Assessment

The stream flows through the former Griffiss Air Force Base facility where several former landfills are located. When the Griffiss Air Force Base site (6-33-006) was first listed by the USEPA on the National Priorities List (NPL), the entire Base of approximately 3,550 acres was listed on the NPL. The majority of the Base, 2,900 acres in total, has since been deleted from the NPL. The remaining active sites (approximately 650 acres) remain on the NPL. Early remedial investigations of the site found various organic compounds, pesticides, petroleum products and other substances at the site and the surrounding environment. Solvents and glycols were detected in private water supplies at levels above drinking water standards in a small area southeast of the base. Public water was extended to the impacted area. A groundwater monitoring program found no evidence of a widespread contamination problem. Impacts on both Three and Six Mile Creeks have been documented but have been largely addressed. (DEC/Envir.Remediation, December 2009)

Segment Description

This segment includes the entire stream and all tribs. The waters of the stream are Class C,C(T),C(TS). Tribs to this reach/segment, including Slate Creek (-3) are also Class C.

Threemile Creek and tribs (1201-0223) Impaired Seg

Waterbody Location Information

Revised: 04/05/2010

Water Index No: H-240-234
Hydro Unit Code: 02020004/060 **Str Class:** C
Waterbody Type: River (Low Flow)
Waterbody Size: 2.5 Miles
Seg Description: entire stream and tribs

Drain Basin: Mohawk River
Mohawk River
Reg/County: 6/Oneida Co. (33)
Quad Map: ROME (I-19-1)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
FISH CONSUMPTION	Impaired	Known
AQUATIC LIFE	Impaired	Known
Recreation	Stressed	Known

Type of Pollutant(s)

Known: PRIORITY ORGANICS (PCBs)
Suspected: NUTRIENTS (phosphorus), UNKNOWN TOXICITY, D.O./Oxygen Demand
Possible: Pathogens

Source(s) of Pollutant(s)

Known: LANDFILL/LAND DISP. (former Griffiss AFB), TOX/CONTAM. SEDIMENT
Suspected: INDUSTRIAL, URBAN/STORM RUNOFF, Agriculture
Possible: - - -

Resolution/Management Information

Issue Resolvability: 3 (Strategy Being Implemented)
Verification Status: 5 (Management Strategy has been Developed)
Lead Agency/Office: DEC/DER **Resolution Potential:** Medium
TMDL/303d Status: 2b (Multiple Segment/Categorical Water, Fish Consumption)

Further Details

Overview

Aquatic life and fish consumption in Threemile Creek is known to be impaired by nutrient loadings and toxic pollutants. Elevated nutrient loadings are thought to be the result of urban runoff, industrial impacts and agricultural activities. Industrial landfills are the likely source of the toxic pollutants.

Water Quality Monitoring

A biological (macroinvertebrate) assessment of Threemile Creek in Rome (at Route 365) was conducted as part of the RIBS biological screening effort in 2005. Sampling results indicated moderately impacted conditions. In such samples sensitive species are markedly reduced or missing and the distribution of major groups is significantly unbalanced relative to what would be expected. Samples are dominated by more tolerant species. The nutrient biotic index indicates highly elevated enrichment and impact source determination reveals a community that is most similar to waters with impacts from municipal/industrial sources and impoundment effects. These results are consistent with results found during sampling at this sites in 2000. Water quality is considered to be poor and aquatic life is not fully supported in the stream. This segment is considered to be impaired. (DEC/DOW, BWAM/SBU, January 2010)

Fish Consumption

Fish consumption in Threemile Creek is impaired due to a NYS DOH health advisory that recommends eating no more than one meal per month of white sucker because of elevated levels of PCBs. The source of PCBs is considered to be hazardous waste sites associated with the former Griffiss Air Force Base; other sources are also possible. The advisory for this stream was first issued prior to 1998-99. (2009-10 NYS DOH Health Advisories and DEC/DFWMR, Habitat, January 2010).

Source Assessment

The stream flows through the former Griffiss Air Force Base facility where several former landfills are located. Remedial investigations conducted in 1994 found various organic compounds, pesticides, petroleum products and other substances at the site and the surrounding environment. (DEC/Envir.Remediation, April 2002)

Section 303(d) Listing

Threemile Creek is included on the NYS 2008 Section 303(d) List of Impaired Waters. The stream is included on Part 2b of the List as a Fish Consumption Water. This waterbody was first listed on the 1998 Section 303(d) List. Additional listings due to impairment to aquatic life should also be considered. (DEC/DOW, BWAM/WQAS, April 2010)

Segment Description

This segment includes the entire stream and all tribs. The waters of the stream and tribs are Class C.

Wheelers Creek and tribs (1201-0213) Need Verific

Waterbody Location Information

Revised: 02/10/2010

Water Index No: H-240-240
Hydro Unit Code: 02020004/060 **Str Class:** C
Waterbody Type: River (Low Flow)
Waterbody Size: 27.3 Miles
Seg Description: entire stream and tribs

Drain Basin: Mohawk River
Mohawk River
Reg/County: 6/Oneida Co. (33)
Quad Map: ROME (I-19-1)

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
Possible: D.O./Oxygen Demand

Source(s) of Pollutant(s)

Known: - - -
Suspected: URBAN/STORM RUNOFF, 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/BWAM **Resolution Potential:** Medium
TMDL/303d Status: n/a

Further Details

Overview
Aquatic life in Wheelers Creek may experience impacts due to nutrient enrichment and other pollutants from urban runoff and other nonpoint sources. Biological sampling conducted to date has been inconclusive and additional monitoring for verification of impacts is recommended.

Water Quality Sampling
A biological (macroinvertebrate) assessment of Wheelers Creek in Rome (at Route 26) 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. However impact source determination found the fauna to be most similar to communities influenced by impoundment effects. These effects/conditions are known to skew biological sampling results and are not a true reflection of water quality. Further investigation and/or other indicators are required to determine the extent of water quality impacts, if any. (DEC/DOW, BWAM/SBU, January 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.

Minor Tribs to Mohawk River (1201-0214) Need Verific

Waterbody Location Information

Revised: 11/25/2009

Water Index No:	H-240-241 thru 244	**Drain Basin:**	Mohawk River
Hydro Unit Code:	02020004/060 **Str Class:** C		Mohawk River
Waterbody Type:	River (Low Flow)	**Reg/County:**	6/Oneida Co. (33)
Waterbody Size:	11.2 Miles	**Quad Map:**	ROME (I-19-1)
Seg Description:	total length of tribs, fr NYS Barge Canal to Delta Res.		

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: - - -
Possible: SILT/SEDIMENT, Nutrients

Source(s) of Pollutant(s)

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

Resolution/Management Information

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

Further Details

Overview
Aquatic life in this segment, including Hurlbut Glen Brook, may experience minor impacts. Sampling showed some indication of nonpoint source impacts, but the sampling was conducted during very low flow in this small trib and is considered to be inconclusive. Follow-up monitoring is recommended.

Water Quality Sampling
A biological (macroinvertebrate) assessment of Hurlbut Glen Brook in Holland Patent (at Smith/Wynn Road) was conducted as part of the RIBS biological screening effort in 2005. Sampling results indicated slightly to moderately impacted conditions. However there was very little water in the stream at the time of sampling, (necessitating the use of the Robertson Kick technique). A short duration construction project (retaining wall) was also underway during the sampling. As a result, it is not certain if the sampling results reflect an accurate assessment of water quality in the stream. Follow-up sampling is recommended to verify conditions. (DEC/DOW, BWAM/SBU, November 2009)

Segment Description
This segment includes the total length of selected/smaller tribs to the Mohawk River from the confluence of the Upper Mohawk and NYS Barge Canal in Rome to the Delta Reservoir. Tribs within this segment, including Hurlburt Glen Brook (-244), are Class C,C(T).