



Mohawk/Alplaus Kill Watershed (0202000411)

Water Index Number	Waterbody Segment	Category
H-240 (portion 1)	Mohawk River, Lower, Main Stem (1201-0085)	MinorImpacts
H-240 (portion 2)	Mohawk River, Lower, Main Stem (1201-0042)	MinorImpacts
H-240 (portion 3)	NYS Barge Canal (portion 8) (1201-0086)	UnAssessed
H-240 (portion 4)	Mohawk River/NYS Barge Canal, Main Stem (1201-0073)	MinorImpacts
H-240 (portion 5)	Mohawk River/NYS Barge Canal, Main Stem (1201-0006)	MinorImpacts
H-240 (portion 6)	Mohawk River/NYS Barge Canal, Main Stem (1201-0087)	MinorImpacts
H-240 (portion 7)	Mohawk River/NYS Barge Canal, Main Stem (1201-0088)	MinorImpacts
H-240- 1 thru 12 (selected)	Minor Tribs to Mohawk River (1201-0095)	UnAssessed
H-240- 11	Shaker Creek and trib (1201-0079)	MinorImpacts
H-240- 11-P496/P498	Ann Lee (Shakers) Pond, Stump Pond (1201-0096)	Impaired Seg
H-240- 13	Lisha Kill and trib (1201-0074)	MinorImpacts
H-240- 14	Stony Creek, Lower, and trib (1201-0097)	NoKnownImpct
H-240- 14	Stony Creek, Upper, and trib (1201-0051)	Need Verific
H-240- 14-P503a	Stony Creek (Colonie) Reservoir (1201-0098)	Need Verific

(con't)

Mohawk/Alplaus Kill Watershed (con't)

(0202000411)

Water Index Number	Waterbody Segment	Category
H-240- 15 thru 19	Minor Tribs to Mohawk River (1201-0022)	UnAssessed
H-240- 20	Alplaus Kill and minor trib (1201-0099)	MinorImpacts
H-240- 20- 2	Indian Kill and trib (1201-0100)	MinorImpacts
H-240- 21 thru 28	Minor Tribs to Mohawk River (1201-0040)	Impaired Seg
H-240- 22-P519	Collins Lake (1201-0077)	Impaired Seg
H-240- 24-P525	Iroquios Lake (1201-0101)	UnAssessed
H-240- 26	Poentic Kill and trib (1201-0005)	MinorImpacts
H-240- 29	Plotter Kill and trib (1201-0102)	MinorImpacts
H-240- 30 thru 50	Minor tribs to Mohawk River (1201-0226)	UnAssessed
H-240- 45	Sandsea Kill and trib (1201-0103)	NoKnownImpct
H-240- 51 thru 68	Minor Tribs to Mohawk River (1201-0104)	Need Verific
H-240- 61	Cranes Hollow Creek and trib (1201-0105)	NoKnownImpct
H-240- 69	North Chuctanunda Cr, Lower, and trib (1201-0031)	MinorImpacts
H-240- 69	North Chuctanunda Cr, Middle, and trib (1201-0106)	MinorImpacts
H-240- 69	North Chuctanunda Cr, Upper, and trib (1201-0107)	Need Verific
H-240- 69- 1	Bunn Creek, Upper, and trib (1201-0108)	MinorImpacts
H-240- 69-P556	Harhower Pond (1201-0109)	UnAssessed
H-240- 69-P563	Galway Lake (Amsterdam Reservoir) (1201-0110)	NoKnownImpct
H-240- 69-P564	Lake Butterfield (1201-0111)	UnAssessed
H-240- 70	South Chuctanunda Cr, Lower, and trib (1201-0082)	NoKnownImpct
H-240- 70	South Chuctanunda Cr, Upper, and trib (1201-0112)	Need Verific
H-240- 70-P570	Mariaville Lake (1201-0113)	Impaired Seg
H-240- 70-P570- 4-P571	Featherstonhaugh Lake (1201-0114)	UnAssessed
H-240- 71 thru 88 (selected)	Minor Tribs to Mohawk River (1201-0030)	Need Verific
H-240- 76	Kayaderosseras/McQueen Creeks and trib (1201-0115)	NoKnownImpct

Mohawk River, Lower, Main Stem (1201-0085)

MinorImpacts

Waterbody Location Information

Revised: 03/20/2003

Water Index No:	H-240 (portion 1)	Drain Basin:	Mohawk River
Hydro Unit Code:	02020004/400	Str Class:	C Mohawk River
Waterbody Type:	River (High Flow)	Reg/County:	4/Albany Co. (1) ...
Waterbody Size:	4.4 Miles	Quad Map:	TROY NORTH (J-26-4)
Seg Description:	from mouth to dam above Cohoes Falls		

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

Known: AMMONIA, NUTRIENTS (phosphorus), PATHOGENS, Silt/Sediment
Suspected: Water Level/Flow
Possible: - - -

Source(s) of Pollutant(s)

Known: URBAN/STORM RUNOFF, Comb. Sewer Overflow
Suspected: AGRICULTURE, Hydro Modification
Possible: - - -

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))
Verification Status: 4 (Source Identified, Strategy Needed)
Lead Agency/Office: DOW/Reg4
TMDL/303d Status: n/a

Resolution Potential: Medium

Further Details

Overview

Aquatic life support and recreational uses (fishing, swimming) in this portion of the Mohawk River, are affected by silt/sediment loads, elevated nutrient concentrations and pathogens. Urban runoff and municipal CSOs are considered the primary sources. Although there is no agriculture along this reach of the river, nonpoint source loadings from agricultural activities throughout the basin are also thought to contribute to impacts in this reach. Hydromodification and flow diversions also impact water uses.

Water Quality Sampling

NYSDEC Rotating Intensive Basin Studies (RIBS) Routine Network monitoring (water chemistry) of the Mohawk River in Cohoes, Albany County, is conducted annually at the Route 32 bridge. 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; such sampling was last conducted at this site in 2006. Intensive Network sampling typically includes macroinvertebrate

community analysis, water column chemistry, toxicity testing, sediment assessment and macroinvertebrate tissue analysis. Biological (macroinvertebrate) sampling using multiplate samplers indicated non- to slightly impacted conditions. Water column chemistry indicates iron to be present at levels that constitute a parameter of concern. However, iron is considered to be naturally occurring and not a source of water quality impacts. Dissolved aluminum and water temperature both exceeded assessment criteria in one of 6 samples, but median values for these parameters are well below applicable criteria. Toxicity testing using water from this location detected no mortality or reproductive effects on the test organism. Sediment screening for acute toxicity indicated 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, although PCB, PAHs, pesticides and metals levels were found to be somewhat elevated. Based on the consensus of these established assessment indicators, overall water quality at this site shows that in spite of some concerns that should continue to be monitored, aquatic life and recreational uses are considered to be fully supported in the stream, and there are no other apparent water quality impacts to recreational uses. (DEC/DOW, BWAM/RIBS, January 2010)

Previous Sampling

Water quality (chemical) sampling has been conducted annually at the Route 32 Bridge in Cohoes as part of the NYSDEC/DOW RIBS Routine Network sampling program. In addition, when RIBS Intensive Network monitoring is conducted every five years in the Mohawk basin, additional sampling methods are employed to gain an overall assessment of water quality. The most recent overall assessments are from 2000 and 2001. Water column sampling found elevated nutrient (ammonia) concentrations and high total and fecal coliform levels. Some of the coliform values could be the result of a large resident population of geese along the river near the site. (DEC/DOW, BWAR/RIBS, April 2003)

A biological (macroinvertebrate) assessment of the Mohawk River in Cohoes was conducted in 2000 as part of the RIBS sampling. Multiplate sampling results indicated slightly impacted water quality conditions. This is consistent results obtained during the period from 1972 to the present. The communities are dominated by filter-feeding midges and caddisflies, indicative of rivers that are nutrient-rich and high in suspended particulates; conditions that describe the Mohawk. In spite of these minor impacts, aquatic life is considered to be fully supported in the stream. (DEC/DOW, BWAR/SBU, July 2002)

Water Quality Management

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

Segment Description

This segment includes the portion of the river/canal from the mouth to the dam above Cohoes Falls.

Mohawk River, Lower, Main Stem (1201-0042)

MinorImpacts

Waterbody Location Information

Revised: 04/01/2010

Water Index No:	H-240 (portion 2)	Drain Basin:	Mohawk River
Hydro Unit Code:	02020004/400	Str Class:	A Mohawk River
Waterbody Type:	River (High Flow)	Reg/County:	4/Albany Co. (1) ...
Waterbody Size:	0.8 Miles	Quad Map:	TROY NORTH (J-26-4)
Seg Description:	from dam above Cohoes Falls to Crescent Dam		

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Water Supply	Stressed	Suspected
Recreation	Stressed	Suspected

Type of Pollutant(s)

Known: ---
Suspected: NUTRIENTS (phosphorus), PATHOGENS, Silt/Sediment
Possible: ---

Source(s) of Pollutant(s)

Known: ---
Suspected: AGRICULTURE, MUNICIPAL, 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/Reg4

TMDL/303d Status: n/a

Resolution Potential: Medium

Further Details

Overview

Drinking water supply and recreational uses (fishing, swimming) in this portion of the Mohawk River, are known to experience minor impacts and threats from silt/sediment loads, elevated nutrient concentrations and pathogens. Urban runoff and municipal wastewater discharges in the watershed are considered the primary sources. Although there is no agriculture along this reach of the river, nonpoint source loadings from agricultural activities throughout the basin are also thought to contribute to impacts in this reach. Hydromodification and flow diversions also impact water uses.

Source (Drinking) Water Assessment

A source water assessment of this water supply reach of the Mohawk found an elevated (very high) susceptibility to contamination from pathogens and protozoa due to the extensive amount of agricultural pastureland as well as the total amount of wastewater discharges in the watershed. This assessment was conducted through the NYSDOH Source Waters Assessment Program (SWAP) which compiles, organizes, and evaluates information regarding possible and actual threats to the quality of public water supply (PWS) sources. The information contained in SWAP assessment reports assists in the oversight and protection of public water systems. It is important to note that SWAP reports estimate the potential for untreated drinking water sources to be impacted by contamination and do not address the quality of treated finished potable tap water. This reach of the Mohawk River is one of only a handful of surface water supplies in the state that received assessments as high as "very high"

susceptibility. This water supply source provides water to the Town of Latham and City of Cohoes. (NYSDOH, Source Water Assessment Program, 2005)

Water Quality Sampling

NYSDEC Rotating Intensive Basin Studies (RIBS) Routine Network monitoring (water chemistry) of the Mohawk River in Cohoes, Albany County, just below this reach, is conducted annually at the Route 32 bridge. 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; such sampling was last conducted at this site in 2006. Intensive Network sampling typically includes macroinvertebrate community analysis, water column chemistry, toxicity testing, sediment assessment and macroinvertebrate tissue analysis. Biological (macroinvertebrate) sampling using multiplate samplers indicated non- to slightly impacted conditions. Water column chemistry indicates iron to be present at levels that constitute a parameter of concern. However, iron is considered to be naturally occurring and not a source of water quality impacts. Dissolved aluminum and water temperature both exceeded assessment criteria in one of 6 samples, but median values for these parameters are well below applicable criteria. Toxicity testing using water from this location detected no mortality or reproductive effects on the test organism. Sediment screening for acute toxicity indicated 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, although PCB, PAHs, pesticides and metals levels were found to be somewhat elevated. Based on the consensus of these established assessment indicators, overall water quality at this site shows that in spite of some concerns that should continue to be monitored, aquatic life and recreational uses are considered to be fully supported in the stream, and there are no other apparent water quality impacts to recreational uses. Though this sampling point is just below the bounds of this segment, it is considered representative of water quality in the upstream reach of the river. This segment is listed as being evaluated rather than monitored. (DEC/DOW, BWAM/RIBS, January 2010)

Previous Assessment

Previously cited water quality issues, including dissolved oxygen stratification, fish consumption advisories, impacts from airport runoff, have either been addressed or have not been sufficiently documented and have been removed from the listing. Although there is no agriculture along this reach of the river, agriculture is listed as a possible source due to significant nonpoint source loadings from agricultural activities throughout the basin. (DEC/DOW, Region 4, 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 diversion channel from the river to the City of Cohoes public water supply intake.

Mohawk River/NYS Barge Canal, Main Stem (1201-0073) MinorImpacts

Waterbody Location Information

Revised: 02/10/2010

Water Index No:	H-240 (portion 4)	Drain Basin:	Mohawk River
Hydro Unit Code:	02020004/370	Str Class:	A Mohawk River
Waterbody Type:	River (High Flow)	Reg/County:	4/Schenectady Co. (47) ...
Waterbody Size:	19.4 Miles	Quad Map:	NISKAYUNA (J-25-3)
Seg Description:	from Crescent Dam to Schenectady		

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Water Supply	Threatened	Possible
Aquatic Life	Stressed	Suspected
Recreation	Stressed	Suspected

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

Known: - - -
Suspected: AGRICULTURE, URBAN/STORM RUNOFF, Comb. Sewer Overflow,
Possible: - - -

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))

Verification Status: 4 (Source Identified, Strategy Needed)

Lead Agency/Office: DOW/Reg4

Resolution Potential: Medium

TMDL/303d Status: n/a

Further Details

Overview

Water supply use, aquatic life support and recreational use in this portion of the Mohawk are thought to experience minor impacts and threats due to nutrient and sediment loads from various urban and agricultural nonpoint sources. Pathogen contamination from agricultural and municipal wastewater sources is also a concern.

Source Assessment

This portion of the river flows through a developed urban area and is subject to nutrient and sediment loadings from urban runoff, stormwater discharges and other nonpoint sources. Some water quality improvements have been noted. Implementation of Phase II stormwater regulations are expected to continue this improvement. Occasional intermittent discharges from various industrial facilities -- a problem in the late 1980s and early 1990s -- are largely under control. DEC/DFWMR Bureau of Habitat PISCES sampling in the Poentic Kill (a trib along this reach) in 1995 detected low levels of PCBs from a General Electric property. (DEC/DOW, Region 4, April 2002)

Water Quality Management

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

Segment Description

This segment includes the portion of the river/canal from the Cresent Dam above Cohoes to the Schenectady-Scotia (Route 5) bridge in Schenectady.

Mohawk River/NYS Barge Canal, Main Stem (1201-0006) MinorImpacts

Waterbody Location Information

Revised: 02/10/2010

Water Index No: H-240 (portion 5)
Hydro Unit Code: 02020004/350 **Str Class:** A
Waterbody Type: River (High Flow)
Waterbody Size: 10.2 Miles
Seg Description: from Schenectady to Pattersonville

Drain Basin: Mohawk River
Mohawk River
Reg/County: 4/Schenectady Co. (47)
Quad Map: SCHENECTADY (J-25-4)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Water Supply	Threatened	Possible
Aquatic Life	Stressed	Suspected
Recreation	Stressed	Suspected

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

Known: - - -
Suspected: AGRICULTURE, URBAN/STORM RUNOFF, Comb. Sewer Overflow,
Possible: Industrial

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))

Verification Status: 4 (Source Identified, Strategy Needed)

Lead Agency/Office: DOW/Reg4

Resolution Potential: Medium

TMDL/303d Status: n/a

Further Details

Overview

Water supply use, aquatic life support and recreational use in this portion of the Mohawk are thought to experience minor impacts and threats due to nutrient and sediment loads from various urban and agricultural nonpoint sources. Pathogen contamination from agricultural and municipal wastewater sources is also a concern.

Source Assessment

This portion of the river flows through a developed urban area and is subject to nutrient and sediment loadings from urban runoff, stormwater discharges and other nonpoint sources. Some water quality improvements have been noted. Implementation of Phase II stormwater regulations are expected to continue this improvement. Occasional intermittent discharges from various industrial facilities -- a problem in the late 1980s and early 1990s -- are largely under control. DEC/DFWMR Bureau of Habitat PISCES sampling in the Poentic Kill (a trib along this reach) in 1995 detected low levels of PCBs from a General Electric property. (DEC/DOW, Region 4, April 2002)

Water Quality Management

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

Segment Description

This segment includes the portion of the river/canal from the Schenectady-Scotia (Route 5) bridge in Schenectady to the Schenectady-Montgomery County line near Pattersonville.

Mohawk River/NYS Barge Canal, Main Stem (1201-0087) MinorImpacts

Waterbody Location Information

Revised: 02/10/2010

Water Index No:	H-240 (portion 6)	Drain Basin:	Mohawk River
Hydro Unit Code:	02020004/330	Str Class:	C Mohawk River
Waterbody Type:	River (High Flow)	Reg/County:	4/Schenectady Co. (47)
Waterbody Size:	9.2 Miles	Quad Map:	PATTERSONVILLE (J-24-2)
Seg Description:	from Pattersonville to Fort Johnson		

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

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

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))

Verification Status: 4 (Source Identified, Strategy Needed)

Lead Agency/Office: DOW/Reg4

TMDL/303d Status: n/a

Resolution Potential: Medium

Further Details

Overview

Aquatic life support and recreational uses (fishing, boating) in this reach of the Mohawk River may be affected by various urban and agricultural nonpoint runoff sources. Although this reach provides a productive and popular recreational fishery and the most recent monitoring indicates good water quality, fairly recent monitoring has shown significant water quality impacts. The presence or absence of water quality impacts in this reach need to be verified.

A biological (macroinvertebrate) assessment of the Mohawk River in Fonda, above this reach, was conducted in 2000. Multiplate sampling results indicated non-impacted water quality conditions. Previous sampling at this site has generally resulted in assessments of moderately impacted conditions. Until non-impacted assessment is replicated in future years, aquatic life will continue to be listed as stressed. Note that although this sampling was conducted above the described reach, the sampling results are considered to be reflective of conditions in this segment. (DEC/DOW, BWAR/SBU, July 2002)

Source Assessment

Agricultural management practices in small watershed tributary to this reach of the Mohawk contribute to livestock waste loadings to the river. Some barnyard boundaries permit unrestricted access to the river, resulting in nutrient and pathogen loads and also contributing to streambank destabilization. Improper manure application on these fields is also a concern. Most of area

farms have no silage leachate, manure or milkhouse wastewater treatment facilities. Some of the streams flow through intensively cultivated row croplands. Nutrient (fertilizer) and pesticides applied to these fields in the absence of approved nutrient/pesticide management plans may have an impact on water quality. (Montgomery County SWCD/WQCC, April 2002)

Municipal discharges from the City of Amsterdam have previously been cited as cause of impacts in the Mohawk. However these impacts have been addressed with an upgrade of the sludge processing facility.

Water Quality Management

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Segment Description

This segment includes the portion of the river/canal from the Schenectady-Montgomery County line near Pattersonville to McQueen Creek (-76) near Fort Johnson (just above Amsterdam). This portion of the river is designated Class C.

Mohawk River/NYS Barge Canal, Main Stem (1201-0088) MinorImpacts

Waterbody Location Information

Revised: 03/21/2003

Water Index No:	H-240 (portion 7)	Drain Basin:	Mohawk River
Hydro Unit Code:	02020004/300	Str Class:	B Mohawk River
Waterbody Type:	River (High Flow)	Reg/County:	4/Montgomery Co. (29)
Waterbody Size:	4.7 Miles	Quad Map:	TRIBES HILL (J-23-2)
Seg Description:	from Fort Johnson to Auriesville		

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

Known: ---
Suspected: AGRICULTURE, STREAMBANK EROSION
Possible: ---

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))

Verification Status: 3 (Cause Identified, Source Unknown)

Lead Agency/Office: DOW/BWAR

TMDL/303d Status: n/a

Resolution Potential: Medium

Further Details

Overview

Aquatic life support and recreational uses (fishing, boating) in this reach are thought to experience minor impacts from agricultural runoff, streambank erosion and other nonpoint sources. Silt and sediment loads from the Schoharie Creek are significant; a visual contrast is apparent at the confluence at Fort Hunter.

Water Quality Sampling

A biological (macroinvertebrate) assessment of the Mohawk River in Fonda (at Route 30A) was conducted as part of the RIBS biological screening effort in 2005. Though these sites are just above and just below the actual reach, they are considered to be representative of water quality conditions in this segment. Sampling results indicated slightly impacted conditions. In such samples some replacement of sensitive ubiquitous species by more tolerant species occurs, although the sample also includes a balanced distribution of all expected species. Aquatic life is considered to be fully supported in the stream, however the community composition suggest conditions that cause some stress to aquatic life. The results from the site at Fonda show some variation from results collected in previous years. Samples collected at this site in 1990 and 1995 were moderately impacted. Then in 2000, results reflected non-impacted water quality; an improvement that was attributed to improved water quality in Cayadutta Creek. Additional sampling is necessary to determine if the 2000 or 2005 sampling is most reflective of long-term conditions. (DEC/DOW, BWAM/SBU, January 2010)

Source Assessment

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

Water Quality Management

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

Segment Description

This segment includes the portion of the river/canal from McQueen Creek (-76) near Fort Johnson (just above Amsterdam) to Auries Creek (-84) near Auriesville.

Shaker Creek and trib (1201-0079)

MinorImpacts

Waterbody Location Information

Revised: 02/10/2010

Water Index No:	H-240- 11	Str Class:	C	Drain Basin:	Mohawk River
Hydro Unit Code:	02020004/400				Mohawk River
Waterbody Type:	River (Low Flow)			Reg/County:	4/Albany Co. (1)
Waterbody Size:	15.7 Miles			Quad Map:	NISKAYUNA (J-25-3)
Seg Description:	entire stream and trib				

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

Known: NUTRIENTS (phosphorus)

Suspected: SILT/SEDIMENT

Possible: - - -

Source(s) of Pollutant(s)

Known: - - -

Suspected: URBAN/STORM RUNOFF

Possible: Chemical Leak/Spill (Albany Internat'l Airport), Industrial

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))

Verification Status: 4 (Source Identified, Strategy Needed)

Lead Agency/Office: ext/WQCC

TMDL/303d Status: n/a

Resolution Potential: Medium

Further Details

Overview

Aquatic life support in Shaker Creek is known to experience impacts due to nutrients, silt/sediment loads and other pollutants from various urban nonpoint sources, including airport runoff. The stream flows through the Albany International Airport. Previously cited concerns regarding impacts from deicing runoff have been largely addressed, but other impacts persist.

Water Quality Sampling

A biological (macroinvertebrate) assessment of Shaker Creek in Latham (at Mill Road) was conducted as part of the RIBS biological screening effort in 2005. Sampling results indicated slightly to moderately impacted conditions. In such samples sensitive species are notably reduced and the distribution of major groups is significantly unbalanced relative to what would be expected. Samples are exhibit more tolerant species. The nutrient biotic index indicates elevated enrichment. These results indicate clearly impacted water quality. Further investigation and/or other indicators are required to determine whether water quality impacts reach the level of impairment of uses. (DEC/DOW, BWAM/SBU, January 2010)

A biological assessment of Shaker Creek was also conducted at this site in 2000. Sampling results indicated slightly impacted water quality conditions. Impact Source Determination pointed to municipal/industrial sources, with a likely toxic element. (DEC/DOW, BWAR/SBU, July 2002)

A 1996 biological survey of Shaker Creek found moderately impacted water quality along the entire reach and suggested airport runoff as the probable source of impact. (Shaker Creek Biological Assessment Report, Bode et al., DEC/DOW, BWAR/SBU, December 1997)

Water Quality Management

Recent airport construction included efforts to address the runoff of deicing fluids (propylene glycol) into the creek. Despite of a few isolated spill incidents, deicing control appears to be adequate and there has been an improvement in water quality in the creek. (DEC/DOW, Region 4, June 2002)

Segment Description

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

Ann Lee (Shakers) Pond, Stump Pond (1201-0096)

Impaired Seg

Waterbody Location Information

Revised: 01/29/2010

Water Index No:	H-240- 11-P496/P498	Drain Basin:	Mohawk River
Hydro Unit Code:	02020004/400	Str Class:	C Mohawk River
Waterbody Type:	Lake (Unknown Trophic)	Reg/County:	4/Albany Co. (1)
Waterbody Size:	17.1 Acres	Quad Map:	ALBANY (K-25-2)
Seg Description:	total area of both lakes		

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
RECREATION	Impaired	Known
Aesthetics	Stressed	Known

Type of Pollutant(s)

Known: ALGAL/WEED GROWTH, NUTRIENTS (phosphorus)
Suspected: - - -
Possible: - - -

Source(s) of Pollutant(s)

Known: - - -
Suspected: UNKNOWN SOURCE, URBAN/STORM RUNOFF
Possible: - - -

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))

Verification Status: 3 (Cause Identified, Source Unknown)

Lead Agency/Office: DOW/Reg4

TMDL/303d Status: 1,4c (Individual Waterbody Impairment Requiring a TMDL, more)

Resolution Potential: Medium

Further Details

Overview

Recreational (fishing, boating) uses and aesthetics in Ann Lee Pond, Stump Pond are known to be impaired by nutrients that result in excessive weed growth and algal blooms in the lake.

Water Quality Sampling

Ann Lee Pond was included in the 1996 Lake Classification and Inventory monitoring effort. Results of this study indicate that phosphorus criteria associated with "impaired" conditions have been exceeded during each of the sampling sessions at the lake. The lake is also covered extensively with canopy-forming submergent, floating, and emergent aquatic plants, as well as epiphytic filamentous algae. Information about specific use impairments are limited but indicate that conditions impact recreational and aesthetic uses of the lake. (DEC/DOW, BWM/Lake Services, February 2002)

Section 303(d) Listing

The Ann Lee Pond, Stump Pond segment is included on the NYS 2008 Section 303(d) List of Impaired Waters due to phosphorus levels in Ann Lee Pond. The lakes are included on Part 1 of the List as a Water Requiring Development of a TMDL to meet water quality standards and restore uses. (DEC/DOW, BWAM/WQAS, January 2010)

Lisha Kill and trib (1201-0074)

MinorImpacts

Waterbody Location Information

Revised: 02/05/2010

Water Index No:	H-240- 13	Drain Basin:	Mohawk River
Hydro Unit Code:	02020004/400	Str Class:	B(T) Mohawk River
Waterbody Type:	River (Low Flow)	Reg/County:	4/Albany Co. (1)
Waterbody Size:	28.5 Miles	Quad Map:	NISKAYUNA (J-25-3)
Seg Description:	entire stream and tribs		

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

Known: ---
Suspected: NUTRIENTS, SILT/SEDIMENT
Possible: Thermal Changes

Source(s) of Pollutant(s)

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

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))

Verification Status: 2 (Problem Verified, Cause Unknown)

Lead Agency/Office: DOW/Reg4

TMDL/303d Status: n/a

Resolution Potential: Medium

Further Details

Overview

Aquatic life and natural resources (trout fishery) habitat in Lisha Kill are thought to experience impacts from elevated stream temperatures, nutrients, silt/sediment and other nonpoint inputs. Urban stormwater runoff and streambank modifications, including the removal of riparian buffers and stream cover, are the reason for this concern.

Water Quality Sampling

A biological (macroinvertebrate) assessment of Lisha Kill in Niskayuna (at Route 7) 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 siltation and enrichment are sufficient to cause some stress to aquatic life. Impact source determination found the fauna to be most similar to communities influenced by nonpoint sources. These results are consistent with sampling at the site in 2000 and 2001. (DEC/DOW, BWAM/SBU, January 2010)

NYSDEC Rotating Intensive Basin Studies (RIBS) Intensive Network monitoring of the Lisha Kill in Niskayuna was conducted in 2001. Sampling of the water column, sediments, and invertebrate tissues was conducted, as well as macroinvertebrate

community analysis. Biological (macroinvertebrate) sampling revealed slightly impacted conditions. Because of limited resources, water column samples were taken only 4 times, so water quality impacts should be verified, but total dissolved solids and fecal coliform were identified as parameters of concern. No contaminants above levels of concern were found in sediments or invertebrate tissues, and no toxicity was present in the water column on the date of sampling. (DEC/DOW, BWAR/RIBS, April 2003)

These results are also consistent with conditions reported in a 1996 biological survey of the Lisha Kill. This survey also found slightly impacted water quality along the entire reach. These impacts were also attributed to urban nonpoint sources, including the Colonie Golf Course through which the stream runs. (Lisha Kill Biological Assessment Report, Bode et al., DEC/DOW, BWAR/SBU, December 1996)

Fishery Assessment

DEC Regional Fisheries office stocks the stream with trout. Much of the stream has adequate riparian vegetation, and it does not appear to suffer from urban runoff problems that limit some other streams in the area. (DEC/DOW, Region 4, June 2002.)

Segment Description

This segment includes the entire stream and all tributaries. The waters of the stream are Class B(T). Tributaries to this reach/segment are Class B and C.

Stony Creek, Lower, and trib (1201-0097)

NoKnownImpct

Waterbody Location Information

Revised: 08/12/2002

Water Index No:	H-240- 14	Drain Basin:	Mohawk River
Hydro Unit Code:	02020004/380	Str Class:	C(T) Mohawk River
Waterbody Type:	River (Low Flow)	Reg/County:	5/Saratoga Co. (46)
Waterbody Size:	1.9 Miles	Quad Map:	NISKAYUNA (J-25-3)
Seg Description:	stream and tribs, from mouth to Stony Creek Reservoir		

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
NO USE IMPAIRMNT		

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

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

Resolution/Management Information

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

Resolution Potential: n/a

Further Details

Water Quality Sampling

A biological (macroinvertebrate) assessment of Stony Creek in Vischers Ferry (at Riverview Road) 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 suggest conditions are sufficient to cause some stress to aquatic life. Nutrient enrichment in the stream appeared to be low. Impact source determination found a community that is most similar to water experiencing 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 2009)

A biological (macroinvertebrate) assessment of Stony Creek in Vischer Ferry was conducted in 1990. Sampling results indicated slightly impacted water quality conditions. Nonpoint nutrient enrichment was indicated during this sampling. (DEC/DOW, BWAR/SBU, July 2002)

Segment Description

This segment includes the portion of the stream and all trib from the mouth to the Stony Creek (Colonie) Reservoir. The waters

of this portion of the stream are Class C(T). The reservoir (P503a) and upper creek are listed separately.

Stony Creek, Upper, and trib (1201-0051)

Need Verific

Waterbody Location Information

Revised: 08/12/2002

Water Index No: H-240- 14 **Drain Basin:** Mohawk River
Hydro Unit Code: 02020004/380 **Str Class:** A(T) **Reg/County:** Mohawk River
Waterbody Type: River (Low Flow) **Quad Map:** 5/Saratoga Co. (46)
Waterbody Size: 15.4 Miles **Seg Description:** stream and trib, above Stony Creek Reservoir
NISKAYUNA (J-25-3)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Habitat/Hydrology	Stressed	Possible

Type of Pollutant(s)

Known: ---
Suspected: ALGAL/WEED GROWTH, SILT/SEDIMENT, Nutrients
Possible: Pesticides

Source(s) of Pollutant(s)

Known: ---
Suspected: URBAN/STORM RUNOFF
Possible: Construction

Resolution/Management Information

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

Further Details

Overview

Natural resources (fishery) habitat in Upper Stony Creek may experience impacts due to sediment loads and habitat modification in the streams related to residential development in the surrounding suburban area. Algal growth in the waters are also a concern.

Source Assessment

The watershed encompasses significant housing developments. Many reaches of the stream have been channelized, thought to result in diminished fish habitat. Several ponds within the watershed are reported as being eutrophic and silted. Lawn/golf course runoff (pesticides, herbicides, fertilizers) are also a concern. (Town Of Clifton Park, April 2002)

Source (Drinking) Water Assessment

The waters of this segment comprise the watershed of the Stony Creek Reservoir. A source water assessment of the Stony Creek Reservoir found only a moderate level of susceptibility to contaminants. Silt/sediment loads, nutrient inputs and other pollutants from various urban and residential nonpoint runoff are potential sources. This level of susceptibility is typical of many water supplies that experience no impacts to water supply use and reflects the need to protect the resource. This assessment was conducted through the NYSDOH Source Waters Assessment Program (SWAP) which compiles, organizes, and evaluates information regarding possible and actual threats to the quality of public water supply (PWS) sources. The information

contained in SWAP assessment reports assists in the oversight and protection of public water systems. It is important to note that SWAP reports estimate the potential for untreated drinking water sources to be impacted by contamination and do not address the quality of treated finished potable tap water. This water supply source provides water to the Town of Clifton Park. (NYSDOH, Source Water Assessment Program, 2005)

Segment Description

This segment includes the portion of the stream and all tributaries above the Stony Creek (Colonie) Reservoir. The waters of this portion of the stream are Class A(T). Tributaries to this reach/segment are also Class A,A(T). The Stony Creek (Colonie) Reservoir (P503a) is listed separately.

Stony Creek (Colonie) Reservoir (1201-0098)

Need Verific

Waterbody Location Information

Revised: 08/12/2002

Water Index No: H-240- 14-P503a **Drain Basin:** Mohawk River
Hydro Unit Code: 02020004/380 **Str Class:** A **Reg/County:** Mohawk River
Waterbody Type: Lake(R) (Unknown Trophic) **Quad Map:** 5/Saratoga Co. (46)
Waterbody Size: 366.3 Acres **Seg Description:** entire reservoir **NISKAYUNA (J-25-3)**

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Water Supply	Threatened	Suspected

Type of Pollutant(s)

Known: - - -
Suspected: ALGAL/WEED GROWTH, NUTRIENTS (phosphorus), SILT/SEDIMENT
Possible: Pesticides

Source(s) of Pollutant(s)

Known: - - -
Suspected: URBAN/STORM RUNOFF
Possible: - - -

Resolution/Management Information

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

Further Details

Source (Drinking) Water Assessment

A source water assessment of Stony Creek Reservoir found only a moderate level of susceptibility to contaminants. Silt/sediment loads, nutrient inputs and other pollutants from various urban and residential nonpoint runoff are potential sources. This level of susceptibility is typical of many water supplies that experience no impacts to water supply use and reflects the need to protect the resource. This assessment was conducted through the NYSDOH Source Waters Assessment Program (SWAP) which compiles, organizes, and evaluates information regarding possible and actual threats to the quality of public water supply (PWS) sources. The information contained in SWAP assessment reports assists in the oversight and protection of public water systems. It is important to note that SWAP reports estimate the potential for untreated drinking water sources to be impacted by contamination and do not address the quality of treated finished potable tap water. This water supply source provides water to the Town of Clifton Park. (NYSDOH, Source Water Assessment Program, 2005)

Alplaus Kill and minor trib (1201-0099)

MinorImpacts

Waterbody Location Information

Revised: 02/01/2010

Water Index No:	H-240- 20	Drain Basin:	Mohawk River
Hydro Unit Code:	02020004/360	Str Class:	B Mohawk River
Waterbody Type:	River (Low Flow)	Reg/County:	4/Schenectady Co. (47)
Waterbody Size:	101.7 Miles	Quad Map:	BURNT HILLS (J-25-1)
Seg Description:	entire stream and selected/smaller trib		

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

Known: ---
Suspected: AGRICULTURE, URBAN/STORM RUNOFF
Possible: ---

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))

Verification Status: 4 (Source Identified, Strategy Needed)

Lead Agency/Office: ext/WQCC

TMDL/303d Status: n/a

Resolution Potential: Medium

Further Details

Overview

Aquatic life and recreational uses in Alplaus Kill are known to experience minor impacts/threats due to nutrient enrichment from agricultural and other nonpoint sources.

Water Quality Sampling

A biological (macroinvertebrate) survey of Alplaus Kill at multiple sites between Galway and Alplaus was conducted in 2005. Sampling results indicated slightly impacted water quality conditions at all sites. In such samples some replacement of sensitive ubiquitous species by more tolerant species occurs, although the sample also includes a balanced distribution of all expected species. Aquatic life is considered to be fully supported in the stream, however the community composition and nutrient biotic evaluation suggest conditions and levels of enrichment are sufficient to cause some stress to aquatic life. Nutrient enrichment was the primary factor influencing the fauna in the stream and nutrient biotic indices indicated some level of eutrophic condition at most sites. These results indicate somewhat greater impacts than were noted during previous sampling at the downstream site in Glenville in 2000 and 2001. (Alplaus Kill Biological Assessment Report, 2006, Bode, et al, DEC/DOW, BWAM/SBU, February 2006)

NYSDEC Rotating Intensive Basin Studies (RIBS) Intensive Network monitoring of Alplaus Kill in Glenville was conducted in

2001. Sampling of the water column, sediments, and invertebrate tissues was conducted, as well as macroinvertebrate community analysis. Because of limited resources, water column samples were taken only 4 times, so water quality impacts should be verified, but fecal coliform was identified as a parameter of concern. Sediments were found to contain arsenic and nickel in levels elevated above background. However, no contaminants above guidance values were found in invertebrate tissues, and no toxicity was present in the water column on the date of sampling. (DEC/DOW, BWAR/SBU, April 2003)

Segment Description

This segment includes the entire stream and selected/smaller tributaries. The waters of the stream are Class B,B(T). Tributaries to this reach/segment, including Laures Creek (-8) and Crabb Kill (-P513-4), are Class C,C(T). Indian Kill (-2) is listed separately.

Indian Kill and trib (1201-0100)

MinorImpacts

Waterbody Location Information

Revised: 04/06/2010

Water Index No: H-240- 20- 2 **Drain Basin:** Mohawk River
Hydro Unit Code: 02020004/360 **Str Class:** A **Reg/County:** Mohawk River
Waterbody Type: River (Low Flow) **Quad Map:** 4/Schenectady Co. (47)
Waterbody Size: 17.5 Miles **Seg Description:** entire stream and trib
Seg Description: BURNT HILLS (J-25-1)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Public Bathing	Stressed	Possible
Aquatic Life	Stressed	Suspected
Recreation	Stressed	Possible
Habitat/Hydrology	Stressed	Suspected

Type of Pollutant(s)

Known: ---
Suspected: SILT/SEDIMENT, THERMAL CHANGES, Nutrients, Pathogens
Possible: ---

Source(s) of Pollutant(s)

Known: URBAN/STORM RUNOFF
Suspected: HYDRO MODIFICATION, On-Site/Septic Syst, Private/Comm/Inst (Mayfair Plaza), 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/Reg4

Resolution Potential: Medium

TMDL/303d Status: n/a

Further Details

Overview

Aquatic life in the Indian Kill is thought to experience minor impacts due to silt/sediment loads, nutrient inputs and other impacts from urban nonpoint and stormwater runoff sources. Public bathing and recreational uses may be affected by elevated coliform from urban/stormwater runoff. Natural resources (fishery) habitat may also be affected by habitat modification.

Water Quality Sampling

A biological (macroinvertebrate) survey of the stream was conducted by NYS DEC in 2000. The purpose of this study was to evaluate water quality and follow-up on earlier work done by the Environmental Study Team (EST), a volunteer environmental group comprised of area high school students. The NYS DEC study found water quality to be generally slightly impacted, with sites in the South Branch and in the vicinity of the Mayfair Plaza to have moderate impacts. The entire stream was found to be influenced by nonpoint source nutrient enrichment, reflected in high numbers of filter-feeding caddisflies. Due to a higher level of taxonomic resolution the DEC study determined most sites to be slightly impacted, where the EST study assessed most sites as moderately impacted. (DEC/DOW, BWAR/SBU, Indian Kill Biological Assessment Report, March 2001)

The EST study also documented several features that potentially affect water quality in the Indian Kill. These include stormwater catchment pond, a farm dump, areas of streambank erosion, discharge from the Mayfair Plaza, and drainage from a swim club. Coliform sampling also suggest possible on-site septic system impacts. (Environmental Study Team, The Indian Kill Study, 2000)

The Indian Kill is designated as a trout water and is stocked annually in support of a youth fishing derby. Local Trout Unlimited chapter is conducting a temperature study to determine ability to the stream to support trout. (DEC/DOW, Region 4, April 2002)

Water Quality Management

Since the initial assessment sewer extension work and connection of areas along Route 50 near the stream to the Schenectady WWTP has been undertaken. Follow-up monitoring to verify current conditions in the stream is recommended. (DEC/DOW, Region 4, April 2010)

Segment Description

This segment includes the entire stream and all tributaries. The waters of the stream are Class C(T) from the mouth to unnamed pond (P509) and Class A,A(T) for the remainder of the reach. Tributaries to this reach/segment, including Hatchery Brook (-1), are also Class A,A(T).

Minor Tribs to Mohawk River (1201-0040)

Impaired Seg

Waterbody Location Information

Revised: 11/04/2009

Water Index No: H-240- 21 thru 28 **Drain Basin:** Mohawk River
Hydro Unit Code: 02020004/350 **Str Class:** C **Reg/County:** Mohawk River
Waterbody Type: River (Low Flow) **Quad Map:** 4/Schenectady Co. (47)
Waterbody Size: 27.2 Miles **Seg Description:** total length of selected tributaries, in Schenectady

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	Known
RECREATION	Impaired	Known
HABITAT/HYDROLGY	Impaired	Known

Type of Pollutant(s)

Known: UNKNOWN TOXICITY, Aesthetics, Restricted Passage
Suspected: D.O./Oxygen Demand, Nutrients (phosphorus), Priority Organics, Pathogens, Salts
Possible: - - -

Source(s) of Pollutant(s)

Known: HABITAT MODIFICATION, URBAN/STORM RUNOFF
Suspected: INDUSTRIAL, Landfill/Land Disp., Tox/Contam. Sediment,
Possible: - - -

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))

Verification Status: 2 (Problem Verified, Cause Unknown)

Lead Agency/Office: DOW/Reg4

Resolution Potential: Medium

TMDL/303d Status: n/a->3b

Further Details

Overview

Aquatic life, recreational use and natural resources (fishery) habitat in these urban tributaries to the Mohawk River are impaired. The impairment is the result of various pollutants from industrial activities, previously contaminated sediments and urban/storm runoff as well as extensive stream habitat modification.

Water Quality Sampling

Biological (macroinvertebrate) surveys of selected tributaries to the Mohawk in the Schenectady area were conducted in 2006 and in 2007. Sampling results indicated clearly impaired water quality in College Creek (-23), Cowhorn Creek (24), Schemerhorn Creek (-25), Brandywine Creek (-25-1) and other tributaries to Schemerhorn Creek, with assessments ranging from moderately to severely impacted in these urban tributaries. In such samples sensitive species are significantly reduced or missing entirely 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 elevated enrichment. Water quality is considered to be poor and aquatic life is not fully supported in the stream. (Biological Assessments of Stream of Schenectady Area, DEC/DOW, BWAM/SBU, March 2007 and January 2009)

Habitat Assessment

Many reaches of these tributaries have been incorporated into the City of Schenectady storm drainage system. Some have been channelized while other sections have been piped underground. In both instances, these modifications have seriously disrupted the aquatic and fishery habitat of the tributaries. Proposed phase II stormwater regulations may benefit water quality in these waters. (DEC/DOW, Region 4, April 2002)

Source Assessment

A number of previously identified sources of impact to these tributaries have been resolved. A sewer overflow that discharged into and was the source of significant water quality problems in College Creek (-23) has been resolved. The Nott Street Industrial Park, the source of other problems, has been closed; including the General Electric operation. Previously reported problems in Schemerhorn Creek (-24) related to the Cheltingham Avenue Landfill have been largely resolved through a consent order. However, other sources continue to affect the streams. These include past legacy pollutants from industrial operations, runoff and seeps from current commercial and industrial activity, urban/storm runoff from the largely impervious watershed. The channelization and piping of these stream segments also impacts water quality and natural resource value. (DEC/DOW, Region 4 and BWAM/SBU, January 2009)

Section 303(d) Listing

These tributaries are not currently included on the NYS 2008 Section 303(d) List of Impaired Waters. However this updated assessment suggests it is appropriate to include this waterbody segment on the 2010 List. It is recommended that the segment be listed for unknown toxicity and be added to Part 3b, as a waterbody for which TMDL development is deferred pending the identification of specific pollutants. (DEC/DOW, BWAM/WQAS, November 2009)

Segment Description

This segment includes the total length of selected/smaller tributaries to the Mohawk River between the Aphaus Kill near Rexford to the Plotter Kill near Wyatts. Tributaries within this segment, including College Creek (-23), Schemerhorn Creek (-24), Cowhorn Creek/Oil Mill Creek (-25) and Longgate Kill (-25-2), are Class C. Poentic Kill (-26) is listed separately.

Collins Lake (1201-0077)

Impaired Seg

Waterbody Location Information

Revised: 07/02/2010

Water Index No:	H-240- 22-P519	Str Class:	B	Drain Basin:	Mohawk River
Hydro Unit Code:	02020004/350				Mohawk River
Waterbody Type:	Lake (Eutrophic)			Reg/County:	4/Schenectady Co. (47)
Waterbody Size:	55.9 Acres			Quad Map:	SCHENECTADY (J-25-4)
Seg Description:	entire lake				

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
PUBLIC BATHING	Impaired	Known
RECREATION	Impaired	Known
Aesthetics	Stressed	Known

Type of Pollutant(s)

Known: ALGAL/WEED GROWTH, NUTRIENTS (phosphorus)
Suspected: Silt/Sediment
Possible: Pathogens, Salts

Source(s) of Pollutant(s)

Known: - - -
Suspected: OTHER SOURCE (waterfowl), URBAN/STORM RUNOFF, Hydro Modification
Possible: Deicing (stor/appl), Streambank Erosion

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))

Verification Status: 4 (Source Identified, Strategy Needed)

Lead Agency/Office: DOW/BWM

Resolution Potential: Medium

TMDL/303d Status: 1,4c (Individual Waterbody Impairment Requiring a TMDL, more)

Further Details

Overview

Public Bathing, recreational (fishing, boating) uses and aesthetics in Collins Lake are restricted by excessive weed growth and algal blooms. Elevated nutrient levels from nonpoint urban runoff sources contribute to the weed/algal growth. Resident geese throughout the summer and impacts from salt storage are also concerns.

Water Quality Sampling

Collins Lake was sampled as part of the NYSDEC Lake Classification and Inventory (LCI) sampling effort, a component of the Rotating Intensive Basin Studies (RIBS) Program, in 2006. Nutrient, chlorophyl and clarity measurements taken at that time reveal the lake was best characterized as eutrophic, although water quality conditions in the lake were noticeably improved from previous conditions. Algae levels are sufficiently high to render the lake susceptible to harmful algal blooms, although it is not known if algal toxins or taste and odor compounds are produced by the algae in the lake. The Lake appears to have benefitted from multiple management actions. Nuisance aquatic plant growth was reduced by the application of fluridone, an aquatic herbicide, although at least three exotic plant species (Eurasian watermilfoil, curly leafed pondweed, and water chestnut) are still found in the lake. Bacteriological testing conducted as part of the LCI and by the Village of Scotia indicated a substantial reduction in fecal coliform counts in the lake, allowing for the beach to maintain summer operation. Despite the improvements

in the lake, water quality conditions are still typical of impaired lakes. (DEC/DOW, BWAM/RIBS, June 2010)

Previous sampling conducted in 2001 found consistently high phosphorus levels and poor water clarity that indicated impaired recreational uses waters during the entirety of the summer season. Recent (at that time) infestations of *Myriophyllum spicatum* (Eurasian milfoil) led to more active led control measures. Town-initiated strategies appear to have contributed to improving water quality in the lake. (DEC/Lake Services Section, June 2010)

Water Quality Management

Collin Lake was the focus of a Phase II Clean Lakes project (1985-1992). The project included hydraulic dredging to increase water depth by one meter to reduce growth of the exotic plant, Curlyleaf pondweed. However, dredging has also been noted as a pollution source. The lake has also undergone some work under the Aid to Localities Program. (DEC/DOW, Lake Services Section, June 2002)

Segment Description

This segment includes the total area of the entire lake.

Poentic Kill and trib (1201-0005)

MinorImpacts

Waterbody Location Information

Revised: 02/10/2010

Water Index No:	H-240- 26	Str Class:	B	Drain Basin:	Mohawk River
Hydro Unit Code:	02020004/350				Mohawk River
Waterbody Type:	River (Low Flow)			Reg/County:	4/Schenectady Co. (47)
Waterbody Size:	14.4 Miles			Quad Map:	ROTTERDAM JUNCTION (J-24-3)
Seg Description:	entire stream and trib				

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

Known: ---
Suspected: NUTRIENTS, SILT/SEDIMENT
Possible: Priority Organics (18)

Source(s) of Pollutant(s)

Known: ---
Suspected: URBAN/STORM RUNOFF
Possible: Industrial, Landfill/Land Disp. (Burdick Street Landfill)

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))

Verification Status: 4 (Source Identified, Strategy Needed)

Lead Agency/Office: ext/WQCC

TMDL/303d Status: n/a

Resolution Potential: Medium

Further Details

Overview

Aquatic life support in the Poentic Kill is known to experience minor impacts due to nutrient enrichment, sediment loads and other pollutants from urban nonpoint runoff. There are some remaining concerns about possible impacts from landfills.

Water Quality Sampling

A biological (macroinvertebrate) survey of Poentic Kill at four sites in Rotterdam was conducted in 2002. Sampling results indicated mostly slightly impacted water quality conditions, with one site indicating moderate impacts. Mayflies, stoneflies, and caddisflies were present, but species richness was low. In spite of the low metrics, no major water quality problems were indicated and aquatic life support is considered to be fully supported. (Poentic Kill Biological Assessment Report, Bennett, Novak, et al., DEC/DOW, BWAR/SBU, April 2003)

These results are consistent with conditions reported in 1988 and 1989 biological surveys of Poentic Kill. These surveys were conducted to evaluate the impact of the relocation of a portion of the stream to accommodate the construction of a shopping mall (Rotterdam Mall). Sampling found the relocated reaches to be recolonized and similar to upstream sites. The 1989 survey found slightly impacted water quality along the stream and no significant water quality problems were indicated. A 1988 biological survey of the Poentic Kill was significantly affected by a sewage spill to the creek that occurred a few days prior to

sampling. The stream was found to have recovered from the impacts from this spill during the 1989 survey. (Poentic Kill Biological Stream Assessment Reports, Bode et al., DEC/DOW, BWAR/SBU, April 1988 and January 1989)

Historically, there has been documentation of abnormalities in fish. These have appeared in various reports including one by the Bureau of Environmental Protection. The Burdick Street Landfill (since closed) was the suspected source of the problems. DEC/DFWMR Bureau of Habitat PISCES sampling of the creek in 1995 detected low levels of PCBs from the General Electric property that warrant continued monitoring. (DEC/DOW, Region 4, April 2002)

Segment Description

This segment includes the entire stream and all tributaries. The waters of the stream are Class B. Tributaries to this reach/segment are Class C.

Plotter Kill and trib (1201-0102)

MinorImpacts

Waterbody Location Information

Revised: 02/05/2010

Water Index No:	H-240- 29	Drain Basin:	Mohawk River
Hydro Unit Code:	02020004/350	Str Class:	C Mohawk River
Waterbody Type:	River (Low Flow)	Reg/County:	4/Schenectady Co. (47)
Waterbody Size:	11.4 Miles	Quad Map:	ROTTERDAM JUNCTION (J-24-3)
Seg Description:	entire stream and tribs		

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

Known: - - -
Suspected: URBAN/STORM RUNOFF
Possible: - - -

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))

Verification Status: 2 (Problem Verified, Cause Unknown)

Lead Agency/Office: DOW/Reg4

Resolution Potential: Medium

TMDL/303d Status: n/a

Further Details

Overview

Aquatic life in Plotter Kill is thought to experience impacts from elevated stream elevated nutrients and silt/sediment rom urban stormwater runoff and other nonpoint sources.

Water Quality Sampling

A biological (macroinvertebrate) assessment of Plotter Kill in Rotterdam Junction (at Route 5S) 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 siltation and enrichment are sufficient to cause some stress to aquatic life. Impact source determination found the fauna to be most similar to communities influenced by nonpoint sources. (DEC/DOW, BWAM/SBU, January 2010)

Segment Description

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

Sandsea Kill and trib (1201-0103)

No Known Impct

Waterbody Location Information

Revised: 02/04/2010

Water Index No:	H-240- 45	Drain Basin:	Mohawk River
Hydro Unit Code:	02020004/350	Str Class:	C Mohawk River
Waterbody Type:	River (Low Flow)	Reg/County:	4/Schenectady Co. (47)
Waterbody Size:	20.2 Miles	Quad Map:	ROTTERDAM JUNCTION (J-24-3)
Seg Description:	entire stream and tribs		

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
NO USE IMPAIRMNT		

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

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

Resolution/Management Information

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

Resolution Potential: n/a

Further Details

Water Quality Sampling

A biological (macroinvertebrate) survey/assessment of Sandsea Kill in Pattersonville (at Route 5S) was conducted as part of the RIBS biological screening effort in 2005. Sampling results indicated non-impacted conditions. Such samples are dominated by clean-water species and are most similar to a natural community with minimal human impacts. Some additional species, including sensitive non-native species, and additional biomass may be present; the samples reveal no, or only incidental, anomalies. Aquatic life community is fully supported. (DEC/DOW, BWAM/SBU, January 2009)

Segment Description

This segment includes the entire stream and all tributaries. The waters of the stream are Class C. Tributaries to this reach/segment are Class C.

Minor Tribs to Mohawk River (1201-0104)

Need Verific

Waterbody Location Information

Revised: 01/14/2010

Water Index No: H-240- 51 thru 68 **Drain Basin:** Mohawk River
Hydro Unit Code: 02020004/ **Str Class:** C **Reg/County:** Mohawk River
Waterbody Type: River (Low Flow) **Quad Map:** 4/Schenectady Co. (47)
Waterbody Size: 42.2 Miles **AMSTERDAM (J-24-1)**
Seg Description: total length of sel. trib., Pattersonville to Amsterdam

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, Silt/Sediment

Source(s) of Pollutant(s)

Known: - - -
Suspected: AGRICULTURE, URBAN/STORM RUNOFF
Possible: Streambank Erosion

Resolution/Management Information

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

Resolution Potential: Medium

Further Details

Overview

Aquatic life in these tributaries to the Mohawk River may experience minor impacts. Various sources, including agricultural activity and urban runoff are possible contributors of pollutants. However water quality monitoring to date has been limited and inconclusive. Impacts on water uses need to be verified.

Water Quality Sampling

A biological (macroinvertebrate) assessment of Terwilliger Creek in South Amsterdam (at RR Bridge off Route 5S) 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 enrichment. However sampling was conducted during exceptionally low flow using alternative sample collection protocols (Robertson Kick). Such 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)

Previous Assessment

Management practices at several dairy and other farms near the streams contribute to livestock waste loadings to streams. Some

barnyard boundaries permit unrestricted access to the river, resulting in nutrient and pathogen loads and also contributing to streambank destabilization. Improper manure application on these fields is also a concern. Most of area farms have no silage leachate, manure or milkhouse wastewater treatment facilities. Some of the streams flow through intensively cultivated row croplands. Nutrient (fertilizer) and pesticides applied to these field in the absence of approved nutrient/pesticide management plans may have an impact on water quality. Morphys Creek (-65) has been specifically identified by the county. (Montgomery County SWCD/WQCC, April 2002)

Segment Description

This segment includes the total length of selected/smaller tributaries to the Mohawk River between the Schenectady-Montgomery County line near Pattersonville and North, South Chuctanunda Creeks (-69, -70) in Amsterdam. Tributaries within this segment, including Lewis Creek (-59), Terwilliger Creek (-63), Degraf Creek (-64) and Morphys Creek (-65), are Class C,C(T). Cranes Hollow Creek (-61) and North, South Chuctanunda Creeks (-69, -70) are listed separately.

Cranes Hollow Creek and trib(s) (1201-0105)

NoKnownImpct

Waterbody Location Information

Revised: 02/01/2010

Water Index No:	H-240- 61	Str Class:	C	Drain Basin:	Mohawk River
Hydro Unit Code:	02020004/				Mohawk River
Waterbody Type:	River (Low Flow)			Reg/County:	4/Montgomery Co. (29)
Waterbody Size:	21.3 Miles			Quad Map:	AMSTERDAM (J-24-1)
Seg Description:	entire stream and tribs				

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
NO USE IMPAIRMNT		

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

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

Resolution/Management Information

Issue Resolvability: 8 (No Known Use Impairment)

Verification Status: (Not Applicable for Selected RESOLVABILITY)

Lead Agency/Office: n/a

Resolution Potential: n/a

TMDL/303d Status: n/a

Further Details

Water Quality Sampling

A biological (macroinvertebrate) assessment of Cranes Hollow Creek in Cranesville (at Route 5) was conducted as part of the RIBS biological screening effort in 2005. Sampling results indicated non-impacted conditions. Such samples are dominated by clean-water species and conditions that reflect a natural community with minimal, if any, human impacts. Aquatic life community is clearly fully supported. (DEC/DOW, BWAM/SBU, January 2009)

Segment Description

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

North Chuctanunda Cr, Lower, and trib (1201-0031)

MinorImpacts

Waterbody Location Information

Revised: 04/02/2010

Water Index No:	H-240- 69	Drain Basin:	Mohawk River
Hydro Unit Code:	02020004/320	Str Class:	C Mohawk River
Waterbody Type:	River (Low Flow)	Reg/County:	4/Montgomery Co. (29)
Waterbody Size:	9.7 Miles	Quad Map:	AMSTERDAM (J-24-1)
Seg Description:	stream and minor trib, from mouth to Hagaman		

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

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

Known: - - -
Suspected: AGRICULTURE, URBAN/STORM RUNOFF
Possible:

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))

Verification Status: 4 (Source Identified, Strategy Needed)

Lead Agency/Office: ext/WQCC

TMDL/303d Status: n/a

Resolution Potential: Medium

Further Details

Overview

Aquatic life and recreational uses in this portion of North Chuctanunda Creek are known to experience minor impacts due to elevated nutrient loads and levels of pathogens. The sources of these pollutants are thought to be a combination of urban runoff at the site in Amsterdam and agricultural nonpoint sources from throughout the larger watershed.

Water Quality Sampling

NYSDEC Rotating Integrated Basin Studies (RIBS) Intensive Network monitoring of North Chuctanunda Creek in Amsterdam, Montgomery County, (at Willow 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 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 overall water quality is considered to be good. However the nutrient biotic index and impact source determination indicate some enrichment in the stream and fauna that is most similar to communities influenced by nonpoint nutrients and agricultural sources. Water column chemistry indicates elevated levels of pathogens (coliform) that constitute 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, although elevated levels of metals, PAHs and pesticides were noted. Based on the consensus of these established assessment indicators, overall water quality at this site shows that in spite of some concerns that 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)

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

Fishery Assessment

A conservation release from Galway Lake may benefit water quality in the stream. The stream supports a warm water fishery. Though the stream may not be suitable for trout the stream is not designated a trout stream and is considered to fully support an appropriate fishery resource. Some sections may have been stocked with trout by sportsmen in the past. (DEC/DFWMR, Region 4, June 2002)

Segment Description

This segment includes the portion of the stream and selected/smaller tributaries from the mouth to Harrrower Pond (P556) in Hagaman. The waters of this portion of the stream are Class C. Tributaries to this reach/segment, including Lower Bunns Creek (-1), are also Class C. Upper Bunns Creek is listed separately.

North Chuctanunda Cr, Middle, and trib (1201-0106)

MinorImpacts

Waterbody Location Information

Revised: 04/02/2010

Water Index No:	H-240- 69	Drain Basin:	Mohawk River
Hydro Unit Code:	02020004/320	Str Class:	C Mohawk River
Waterbody Type:	River (Low Flow)	Reg/County:	5/Fulton Co. (18)
Waterbody Size:	39.7 Miles	Quad Map:	AMSTERDAM (J-24-1)
Seg Description:	stream and tribs, from Hagaman to Galway Lake		

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

Known: NUTRIENTS (phosphorus)
Suspected: - - -
Possible: Pathogens

Source(s) of Pollutant(s)

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

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))

Verification Status: 4 (Source Identified, Strategy Needed)

Lead Agency/Office: ext/WQCC

TMDL/303d Status: n/a

Resolution Potential: Medium

Further Details

Overview

Aquatic life and recreational uses in this portion of North Chuctanunda Creek may experience minor impacts due to nutrient loads attributed to agricultural nonpoint sources. This assessment is based on monitoring downstream on this reach that is believed to be reflective of conditions in this segment, but that need to be verified.

Water Quality Sampling

NYSDEC Rotating Integrated Basin Studies (RIBS) Intensive Network monitoring of North Chuctanunda Creek a few miles below this reach in Amsterdam (at Willow 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 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 overall water quality is considered to be good. However the nutrient biotic index and impact source determination indicate some enrichment in the stream and fauna that is most similar to communities influenced by nonpoint nutrients and agricultural sources. Water column chemistry indicates elevated levels of pathogens (coliform) that constitute 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, although elevated levels of metals, PAHs and pesticides were noted. Based on the consensus of these established assessment indicators, overall water quality at this site was noted as having minor impacts to uses. (DEC/DOW, BWAM/RIBS, January 2010)

A biological (macroinvertebrate) assessment of North Chuctanunda Creek at the mouth in Amsterdam was conducted in 2000. Field sampling results indicated non-impacted water quality conditions. The sample satisfied field screening criteria and was returned to the stream. Though this sampling location is just below the described segment, it is considered indicative of conditions in this reach. (DEC/DOW, BWAR/SBU, July 2002)

Fishery Assessment

A conservation release from Galway Lake may benefit water quality in the stream. The stream supports a warm water fishery. Though the stream may not be suitable for trout the stream is not designated a trout stream and is considered to fully support an appropriate fishery resource. Some sections may have been stocked with trout by sportsmen in the past. (DEC/DFWMR, Region 4, June 2002)

Other Issues

Possible nonpoint agricultural impacts are a concern raised by the Fulton County SWCD/WQCC. Runoff from a tree nursery causes excessive turbidity in a (Caneys Brook (-9) during major rain events. (DEC/DOW, Region 5, May 2002)

Segment Description

This segment includes the portion of the stream and all tributaries from Harrower Pond (P556) in Hagaman to Galway Lake (P563). The waters of this portion of the stream are Class C. Tributaries to this reach/segment, including Healy Kill (-8) and Caneys Brook (-9), are primarily Class C,C(T); with one tributary designated Class D.

North Chuctanunda Cr, Upper, and trib (1201-0107)

Need Verific

Waterbody Location Information

Revised: 04/02/2010

Water Index No: H-240- 69 **Drain Basin:** Mohawk River
Hydro Unit Code: 02020004/320 **Str Class:** C **Reg/County:** Mohawk River
Waterbody Type: River (Low Flow) **Quad Map:** 5/Fulton Co. (18)
Waterbody Size: 11.6 Miles **Seg Description:** stream and trib, above Galway Lake **GALWAY (I-24-3)**

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: - - -

Source(s) of Pollutant(s)

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

Resolution/Management Information

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

Resolution Potential: Medium

Further Details

Overview

Aquatic life in this portion of North Chuctanunda Creek may experience minor impacts due to elevated nutrient loadings attributed to agricultural nonpoint sources.

Water Quality Sampling

A biological (macroinvertebrate) survey/assessment of North Chuctanunda Creek in North Galway (at Green Corners Road) was conducted as part of the RIBS biological screening effort in 2005. Sampling results indicated the lower range of 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 natural communities. (DEC/DOW, BWAM/SBU, January 2010)

Segment Description

This segment includes the portion of the stream and all trib above the outlet of Galway Lake (P563). The waters of this portion of the stream are Class C. Tribs to this reach/segment are primarily Class C,C(T),C(TS); with one trib designated Class D.

Bunn Creek, Upper, and trib (1201-0108)

MinorImpacts

Waterbody Location Information

Revised: 02/05/2010

Water Index No: H-240- 69- 1 **Drain Basin:** Mohawk River
Hydro Unit Code: 02020004/320 **Str Class:** A **Reg/County:** Mohawk River
Waterbody Type: River (Low Flow) **Quad Map:** 4/Montgomery Co. (29)
Waterbody Size: 9.3 Miles **AMSTERDAM (J-24-1)**
Seg Description: stream and tribs, above Amsterdam

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

Known: - - -
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/Reg4

Resolution Potential: Medium

TMDL/303d Status: n/a

Further Details

Overview

Aquatic life in Bunn Creek is known to experience impacts from elevated nutrient and silt/sediment loads from urban stormwater runoff and other nonpoint sources.

Water Quality Sampling

A biological (macroinvertebrate) assessment of Bunn Creek in Amsterdam (at Route 15) 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 siltation and enrichment are sufficient to cause some stress to aquatic life. Impact source determination found the fauna to be most similar to communities influenced by nonpoint sources. (DEC/DOW, BWAM/SBU, January 2010)

Segment Description

This segment includes the portion of the stream and all trib above the unnamed pond (P546). The waters of this portion of the stream are Class A,A(T). Tribs to this reach/segment are also/primarily Class C,C(T).

Galway Lake (Amsterdam Reservoir) (1201-0110)

NoKnownImpct

Waterbody Location Information

Revised: 10/30/2002

Water Index No:	H-240- 69-P563	Drain Basin:	Mohawk River
Hydro Unit Code:	02020004/320	Str Class:	B Mohawk River
Waterbody Type:	Lake(R) (Mesotrophic)	Reg/County:	5/Saratoga Co. (46)
Waterbody Size:	523.0 Acres	Quad Map:	GALWAY (I-24-3)
Seg Description:	entire lake		

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
NO USE IMPAIRMNT		

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

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

Resolution/Management Information

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

Resolution Potential: n/a

Further Details

Water Quality Sampling

Galway Lake has been sampled as part of the NYSDEC Citizen Statewide Lake Assessment Program (CSLAP), most recently in 2001. An Interpretive Summary report of the findings of this sampling was published in 2002. These data indicate that the lake continues to be best characterized as mesotrophic, or moderate productive. Phosphorus levels in the lake rarely exceed the state guidance values indicating impacted/stressed recreational uses. Corresponding transparency measurements typically meet the recommended minimum for swimming beaches. Measurements of pH typically fall within the state water quality range of 6.5 to 8.5. The lake water is moderately colored, but color does not limit water transparency. (DEC/DOW, BWAM/CSLAP, August 2002)

Recreational Assessment

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

Previous Assessment

Although water quality in the lake currently supports uses, local/county agencies have raised concerns regarding extensive development of the lake front, limited lots sizes and the potential impact of on-site septic systems. Invasive species (purple loosestrife and Eurasian milfoil) are also noted. The Galway Lake Association completed a study of the lake in 2001. (Saratoga County WQCC, April 2002)

South Chuctanunda Cr, Lower, and trib (1201-0082) NoKnownImpct

Waterbody Location Information

Revised: 04/02/2010

Water Index No: H-240- 70 **Drain Basin:** Mohawk River
Hydro Unit Code: 02020004/310 **Str Class:** C **Reg/County:** Mohawk River
Waterbody Type: River (Low Flow) **Quad Map:** 4/Montgomery Co. (29)
Waterbody Size: 22.7 Miles **Seg Description:** stream and trib, from mouth to Scotch Bush
AMSTERDAM (J-24-1)

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
TMDL/303d Status: n/a

Resolution Potential: n/a

Further Details

Water Quality Sampling

NYSDEC Rotating Integrated Basin Studies (RIBS) Intensive Network monitoring of South Chuctanunda Creek in South Amsterdam, Montgomery County, (at Florida Street and Snooks Corners Road) was conducted in 2005 and 2006. Intensive Network sampling typically includes macroinvertebrate community analysis, water column chemistry, toxicity testing, sediment assessment and macroinvertebrate tissue analysis. Biological (macroinvertebrate) sampling indicated 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 overall 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. Water column chemistry indicates fecal coliform at levels that constitute 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 no 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 in spite of some concerns that should continue to be monitored, aquatic life and recreational uses are considered to be fully supported in the stream, and there are no other apparent water quality impacts to recreational uses. (DEC/DOW, BWAM/RIBS, January 2010)

Previous Sampling

A biological (macroinvertebrate) assessment of South Chuctanunda Creek in South Amsterdam was conducted in 2000. Sampling results indicated non-impacted water quality conditions. The fauna was dominated by clean-water mayflies and caddisflies. (DEC/DOW, BWAR/SBU, July 2002)

Other Issues

Hydrologic and habitat conditions are affected by the removal of riparian vegetation and heavy stream bank erosion. In one area the eroding bank threatens a home. Considerable agricultural activity (including one CAFO) in the upper watershed are also of concern to DEC Regional staff. (DEC/DOW, Region 4, June 2002)

Segment Description

This segment includes the portion of the stream and all trib from the mouth to trib (-12) near Scotch Bush. The waters of this portion of the stream are Class C. Tribs to this reach/segment are also Class C.

South Chuctanunda Cr, Upper, and trib (1201-0112)

Need Verific

Waterbody Location Information

Revised: 02/11/2010

Water Index No: H-240- 70 **Drain Basin:** Mohawk River
Hydro Unit Code: 02020004/310 **Str Class:** C **Reg/County:** Mohawk River
Waterbody Type: River (Low Flow) **Quad Map:** 4/Montgomery Co. (29)
Waterbody Size: 25.3 Miles **AMSTERDAM (J-24-1)**
Seg Description: stream and tribs, above Scotch Bush

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Habitat/Hydrology	Stressed	Possible

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

Known: - - -
Suspected: HABITAT MODIFICATION, STREAMBANK EROSION, 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

Hydrologic and habitat conditions in this portion of South Chuctanunda Creek may experience impacts due to the removal of riparian vegetation and heavy stream bank erosion. Considerable agricultural activity (including one CAFO) in the upper watershed are also of concern to DEC Regional staff. (DEC/DOW, Region 4, June 2002)

Segment Description

This segment includes the portion of the stream and all trib from the mouth to trib (-12) near Scotch Bush. The waters of this portion of the stream are Class C,C(T). Tribs to this reach/segment are also Class C,C(T).

Mariaville Lake (1201-0113)

Impaired Seg

Waterbody Location Information

Revised: 04/06/2010

Water Index No:	H-240- 70-P570	Drain Basin:	Mohawk River
Hydro Unit Code:	02020004/310	Str Class:	B Mohawk River
Waterbody Type:	Lake (Eutrophic)	Reg/County:	4/Schenectady Co. (47)
Waterbody Size:	193.1 Acres	Quad Map:	AMSTERDAM (J-24-1)
Seg Description:	entire lake		

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
RECREATION	Impaired	Known
Aesthetics	Stressed	Known

Type of Pollutant(s)

Known: ALGAL/WEED GROWTH, NUTRIENTS (phosphorus)
Suspected: - - -
Possible: Pathogens

Source(s) of Pollutant(s)

Known: - - -
Suspected: AGRICULTURE, URBAN/STORM RUNOFF
Possible: On-Site/Septic Syst

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))

Verification Status: 3 (Cause Identified, Source Unknown)

Lead Agency/Office: DOW/Reg4

TMDL/303d Status: n/a->4b?

Resolution Potential: Medium

Further Details

Overview

Public bathing and other recreational uses (swimming, fishing, boating) in Mariaville Lake are impaired due to high nutrient loads, excessive aquatic weed growth, occasional algal blooms and reduced water clarity. Inadequate on-site septic systems are considered the source of greatest concern.

Water Quality Sampling

Mariaville Lake has been sampled as part of the NYSDEC Citizen Statewide Lake Assessment Program (CSLAP) beginning in 2002 continuing through the present. An Interpretive Summary report of the findings of this sampling was published in 2009. These data indicate that the lake continues to be best characterized as eutrophic, or highly productive. Phosphorus levels in the lake typically exceed the state guidance values indicating impacted/stressed recreational uses. Corresponding transparency measurements have begun to occasionally fail to meet the recommended minimum for swimming beaches. Measurements of pH are occasionally high but typically fall within the state water quality range of 6.5 to 8.5. The lake water is weakly to moderately colored, but color does not influence water transparency. (DEC/DOW, BWAM/CSLAP, January 2009)

Recreational Assessment

Public perception of the lake and its uses is also evaluated as part of the CSLAP program. This assessment indicates

recreational suitability of the lake to be mostly unfavorable. The recreational suitability of the lake is described most frequently as "slightly" or "substantially" impacted. The lake itself is most often described as "having a definite algal greenness," an assessment that is consistent measured water quality characteristics. Assessments have noted that aquatic plants regularly grow to the lake surface, often densely and are routinely cited as impacting recreational uses. (DEC/DOW, BWAM/CSLAP, January 2009)

Lake Uses

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

Previous Assessment

The lake is relatively shallow (11 feet) and subject to summer algal blooms and dense aquatic weed growth. Conversion of summer cottages to year-round residences with inadequate and/or failing on-site septic systems all along the lake shore was previously noted as a major contributing source of pollution to the lake. However the lake shore area was sewered in 2006 with the creation of the Mariaville Lake SD#2 and onsite impacts are no longer considered a significant source. Other nonpoint sources as well as previous nutrient loadings remaining in the lake are the most likely current sources. (DEC/DOW, Region 4, April 2010)

Section 303(d) Listing

Mariaville Lake is not currently included on the NYS 2008 Section 303(d) List of Impaired Waters. However this updated assessment suggests it is appropriate to consider this waterbody for future listing due to elevated phosphorus. Alternatively, a listing as a Category 4b water for which other required control measures (i.e., the WWTP) are adequate to address the impairment may be more appropriate. (DEC/DOW, BWAM/WQAS, January 2010)

Minor Tribs to Mohawk River (1201-0030)

Need Verific

Waterbody Location Information

Revised: 08/13/2002

Water Index No: H-240- 71 thru 88 (selected)
Hydro Unit Code: 02020004/300 **Str Class:** C
Waterbody Type: River (Low Flow)
Waterbody Size: 49.5 Miles
Seg Description: total length of sel trib, fr Amsterdam to Fonda/Fville

Drain Basin: Mohawk River
Reg/County: 4/Montgomery Co. (29)
Quad Map: TRIBES HILL (J-23-2)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

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

Resolution/Management Information

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

Resolution Potential: n/a

Further Details

Overview

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

Water Quality Sampling

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

Source Assessment

Management practices at several dairy and other farms near the streams contribute to livestock waste loadings to the river. Some barnyard boundaries permit unrestricted access to the river, resulting in nutrient and pathogen loads and also contributing to streambank destabilization. Improper manure application on these fields is also a concern. Most of area farms have no silage leachate, manure or milkhouse wastewater treatment facilities. Some of the streams flow through intensively cultivated row croplands. Nutrient (fertilizer) and pesticides applied to these fields in the absence of approved nutrient/pesticide management plans may have an impact on water quality. Danascara Creek (-85) (see below) and tributaries -74 and -78 have been specifically

singled out by the county. Regional staff have been to Danascara Creek on several occasions to investigate water quality problems over the past 3 to 5 years. (Montgomery County SWCD/WQCC and DEC/DOW, Region 4, April 2002)

Segment Description

This segment includes the total length of selected/smaller tributaries to the Mohawk River between North, South Chuctanunda Creeks (-69, -70) in Amsterdam and Cayadutta Creek in Fonda/Fultonville. Tributaries within this segment, including Dove Creek (-73) and Danascara Creek (-85), are Class C. Kayaderosseras/McQueen Creek (-76), Schoharie Creek (-82) and Auries Creek (-84) are listed separately.

Kayaderosseras/McQueen Creeks and trib (1201-0115) NoKnownImpct

Waterbody Location Information

Revised: 02/04/2010

Water Index No:	H-240- 76	Drain Basin:	Mohawk River
Hydro Unit Code:	02020004/300	Str Class:	C(T) Mohawk River
Waterbody Type:	River (Low Flow)	Reg/County:	4/Montgomery Co. (29)
Waterbody Size:	30.9 Miles	Quad Map:	AMSTERDAM (J-24-1)
Seg Description:	entire stream and trib		

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
NO USE IMPAIRMNT		

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

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

Resolution/Management Information

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

Resolution Potential: n/a

Further Details

Water Quality Sampling

A biological (macroinvertebrate) assessment of McQueen Creek in Fort Johnson (at Route 67) 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 the overall abundance of macroinvertebrates is lower. However, the effects on the fauna are relatively insignificant and water quality is considered to be good. The nutrient biotic index and impact source determination indicate some elevated enrichment in the stream and fauna that is most similar to communities influenced by impoundment effects. Aquatic life support is considered to be fully supported in the stream, and there are no other apparent water quality impacts to designated uses). (DEC/DOW, BWAM/SBU, January 2009)

Previous Assessment

Concerns were raised by local agencies and stakeholders during previous assessment efforts regarding impacts from various agricultural activity in the watershed that might be affecting water quality. Management practices at several dairy and other farms near the streams may contribute livestock waste loadings to McQueen Creek; DEC/DOW Regional staff indicate there is little agricultural activity in the Kayaderosseras Creek watershed. Some barnyard boundaries permit unrestricted access to the river, resulting in nutrient and pathogen loads and also contributing to streambank destabilization. Improper manure application on these fields is also a concern. Most of area farms have no silage, manure or milkhouse wastewater treatment

facilities. Some of the streams flow through intensively cultivated row croplands. Nutrient (fertilizer) and pesticides applied to these fields in the absence of approved nutrient/pesticide management plans may have an impact on water quality. The most recent sampling reveals no significant impacts to the stream, so these activities are considered to be potential threats that nonetheless require some attention. (Montgomery County SWCD/WQCC, April 2002)

Recreational cold water fishing is supported and enhanced by annual Regional stocking of trout. (DEC/DFWMR, Region 4, October 2002)

Segment Description

This segment includes the entire stream and all tributaries. The waters of the stream are Class C(T); McQueen Creek (-1) is Class C(TS). Tributaries to this reach/segment, including Fort Johnson Brook (-2), are also Class C,C(T),C(TS).