



Genesee/Silver Lake Outlet Watershed (0413000210)

Water Index Number	Waterbody Segment	Category
Ont 117 (portion 4)	Genesee River, Middle, Main Stem (0403-0037)	Threatened
Ont 117 (portion 5)/P110a	Mount Morris Reservoir (0403-0040)	Unassessed
Ont 117 (portion 6)	Genesee River, Upper, Main Stem (0403-0006)	Threatened
Ont 117- 69 thru 91, Lower (sel)	Minor Tribs, Lower, to Genesee River (0403-0078)	Unassessed
Ont 117- 69 thru 91, Upper (sel)	Minor Tribs, Upper, to Genesee River (0403-0042)	Unassessed
Ont 117- 70	Silver Lake Outlet and tribs (0403-0034)	Minor Impacts
Ont 117- 70-P115	Silver Lake (0403-0002)	Impaired
Ont 117- 70-P115-	Silver Lake Inlet/Tribs to Silver Lake (0403-0044)	Unassessed
Ont 117- 87	Wolf Creek and tribs (0403-0003)	Unassessed
Ont 117- 93 thru 103	Minor Tribs to Genesee River (0403-0043)	Unassessed

Genesee River, Middle, Main Stem (0403-0037)

Threatened

Waterbody Location Information

Revised: 10/9/2015

Water Index No:	Ont 117 (portion 4)	Water Class:	A
Hydro Unit Code:	Outlet Silver Lake-Genesee River (0413000210)	Drainage Basin:	Genesee River
Water Type/Size:	River/Stream 1.7 Miles	Reg/County:	8/Livingston (26)
Description:	from Genesee/Mt Morris to Mt Morris Dam		

Water Quality Problem/Issue Information

Uses Evaluated	Severity	Confidence
Water Supply	Threatened	Suspected
Public Bathing	Fully Supported	Unconfirmed
Recreation	Fully Supported	Unconfirmed
Aquatic Life	Fully Supported	Unconfirmed
Fish Consumption	Fully Supported	Unconfirmed
Conditions Evaluated		
Habitat/Hydrology	Unknown	
Aesthetics	Unknown	

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

Known: - - -
Suspected: Silt/Sediment
Unconfirmed: Nutrients

Source(s) of Pollutant(s)

Known: Agriculture, Municipal (Mount Morris) Streambank Erosion - - -
Suspected: - - -
Unconfirmed: - - -

Management Information

Management Status: Strategy Implementation Scheduled or Underway
Lead Agency/Office: ext/WQCC
IR/305(b) Code: Water Attaining All Standards (IR Category 1)

Further Details

Overview

This portion of the Genesee River is assessed as threatened due to water supply use that is considered to be threatened by sediment loads and turbidity. Although uses are currently fully supported, these pollutants raise concerns and conditions should continue to be monitored.

Use Assessment

This waterbody segment is a Class A waterbody, suitable for water supply use, public bathing and general recreation use and support of aquatic life.

Although there are currently no public drinking water supply withdrawals from this reach, elevated natural sediment loads and turbidity are considered to threaten this use.

Aquatic life was previously found to experience no significant impacts based on sampling in a reach of the Genesee River downstream of this segment, however the age of this data (more than 10 years old) and the location of the sampling outside the segment suggest that additional sampling is needed to verify current conditions in the reach. (DEC/DOW, BWAM/SBU, December 2014)

This portion of the river is managed as a warmwater fishery and supports recreational (fishing) uses, although more specific sampling is necessary to more fully evaluate other recreational and swimming use. (DEC/DOW, BWAM/SBU, December 2014)

There are no health advisories in place limiting the consumption of fish from this waterbody (beyond the general advice for all waters). Fish consumption is considered to be fully supported based on the absence of any waterbody-specific advisory, but is noted as unconfirmed since routine monitoring of contaminants in fish is limited. (NYS DOH Health Advisories and DEC/DOW, BWAM, January 2014)

Water Quality Information

A biological (macroinvertebrate) assessment of the Genesee in Cuylerville (at Route 20A) was conducted as part of the RIBS sampling effort in 1999. Sampling results revealed non-impacted conditions, based on field assessment and lab sorting to family level. Sampling at a site upstream of the Mount Morris Dam and above this segment has also been assessed as threatened. (DEC/DOW, BWAM/SBU, July 2016)

Source Assessment

Both point sources (primarily municipal wastewater discharges) as well as agricultural and other nonpoint sources of pollutants have been identified in the watershed. Significant streambank erosion resulting in high sediment loads and turbidity are also typical in much of the Genesee River. The Mount Morris STP has been identified as one of several wastewater treatment phosphorus reduction priorities in the Genesee Basin Watershed Plan (see Management Actions below), though impacts to this specific reach are limited. The watershed includes large concentrations of agricultural lands and rural areas served by onsite wastewater (septic) systems, both of which pose some threat to water supply and other uses. The nonpoint source impacts are exacerbated by natural geology as the Genesee River cuts through an alluvial plain with highly erodible soils.

Management Actions

NYSDEC developed an extensive watershed management plan for the Genesee River Basin. The Genesee River Basin Nine Key Element Watershed Plan for Phosphorus and Sediment (September 2015) focuses on management and reduction of phosphorus and sediment loads to Genesee River and Lake Ontario. The Plan builds on past and ongoing nonpoint source management practices throughout the basin, as well as implementation of a strategy to reduce phosphorus from wastewater treatment plants. Over half (56%) of the proposed point source reduction of phosphorus is from the five larger WWTPs (> 1.0 MGD) in the lower basin (i.e., below Mount Morris Dam). Reductions for these plants are already reflected in their permits. About one-third (31%) of the reduction is from smaller plants in the lower basin. Reduction at these plants may require upgrades; the target for meeting reductions at these plants is 2019. The remaining reductions (13%) is from facilities in the upper basin. Reduction at these plants may also require upgrades; the target for meeting reductions at these plants is also 2019. (DEC/DOW, BWRM, September 2016)

Section 303(d) Listing

This portion of the Genesee River is not included on the current (2016) NYS Section 303(d) List of Impaired/TMDL Waters. There appear to be no impacts that would justify the listing of this waterbody. (DEC/DOW, BWAM/WQAS, January 2016)

Segment Description

This segment includes the Genesee River from Canaseraga Creek (-66) near Geneseo/Mount Morris to the Mount Morris Reservoir (P110a). The River is Class C from Canaseraga Creek to Route 36, and Class A for the remainder of the reach.

Mount Morris Reservoir (0403-0040)

Unassessed

Waterbody Location Information

Revised: 10/9/2015

Water Index No:	Ont 117 (portion 5)/P110a	Water Class:	B
Hydro Unit Code:	Outlet Silver Lake-Genesee River (0413000210)	Drainage Basin:	Genesee River
Water Type/Size:	Lake/Reservoir 2080.5 Acres	Reg/County:	8/Livingston (26)
Description:	entire reservoir		

Water Quality Problem/Issue Information

Uses Evaluated	Severity	Confidence
Water Supply	N/A	-
Public Bathing	Unassessed	-
Recreation	Unassessed	-
Aquatic Life	Unassessed	-
Fish Consumption	Unassessed	-
Conditions Evaluated		
Habitat/Hydrology	Unknown	
Aesthetics	Unknown	

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

Known: ---
Suspected: ---
Unconfirmed: ---

Source(s) of Pollutant(s)

Known: ---
Suspected: ---
Unconfirmed: ---

Management Information

Management Status: Unassessed
Lead Agency/Office: DOW/BWAM
IR/305(b) Code: Water with Insufficient Data (IR Category 3)

Further Details

Overview

Currently there is inadequate data/information to evaluate uses and determine a water quality assessment for this waterbody.

Use Assessment

This waterbody segment is a Class B waterbody, suitable for public bathing and general recreation use and support of aquatic life, but not as a water supply.

Water Quality Information

There is currently no water quality information available upon which to base an assessment.

Source Assessment

Specific sources of pollutants to the waterbody have not been identified.

Management Actions

No specific management actions have been identified for the waterbody. Baseline sampling to evaluate conditions in

this waterbody segment is needed. The Mount Morris Dam was built between 1958 and 1952 and is operated as a flood control dam.

Section 303(d) Listing

This waterbody is not included on the current (2016) NYS Section 303(d) List of Impaired/TMDL Waters. There is insufficient information to make a listing decision. (DEC/DOW, BWAM/WQAS, January 2016)

Segment Description

This segment includes the total area of the Reservoir.

Genesee River, Upper, Main Stem (0403-0006)

Threatened

Waterbody Location Information

Revised: 09/01/2016

Water Index No:	Ont 117 (portion 6)	Water Class:	B
Hydro Unit Code:	Outlet Silver Lake-Genesee River (0413000210)	Drainage Basin:	Genesee River
Water Type/Size:	River/Stream 17.5 Miles	Reg/County:	8/Livingston (26)
Description:	from Mount Morris Reservoir to Rossburg		

Water Quality Problem/Issue Information

Uses Evaluated	Severity	Confidence
Water Supply	N/A	-
Public Bathing	Fully Supported	Unconfirmed
Recreation	Fully Supported	Suspected
Aquatic Life	Threatened	Known
Fish Consumption	Fully Supported	Unconfirmed
Conditions Evaluated		
Habitat/Hydrology	Unknown	
Aesthetics	Unknown	

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

Known: - - -

Suspected: - - -

Unconfirmed: Silt/Sediment

Source(s) of Pollutant(s)

Known: - - -

Suspected: - - -

Unconfirmed: Streambank Erosion

Management Information

Management Status: Strategy Implementation Scheduled or Underway

Lead Agency/Office: ext/WQCC

IR/305(b) Code: Water Attaining All Standards (IR Category 1)

Further Details

Overview

This portion of the Genesee River is assessed as being threatened due to aquatic life that is thought to be threatened by unspecified pollutants. Biological sampling results show slightly impacted conditions that approach the nonimpacted range and with minimal anthropogenic impacts and with a community that is most similar to natural conditions.

Use Assessment

This portion of the Genesee River is a Class B waterbody, suitable for public bathing and general recreation use and support of aquatic life, but not as a water supply.

Aquatic life is considered to be supported with minimal impacts. Biological sampling of the stream show conditions to be in the slightly impacted range, but approaching non-impacted with a community that is most similar to natural conditions. This assessment is consistent with sampling in other reaches of the Genesee River. This sampling can also be used to infer that there are no significant impacts to recreational (fishing) uses, although more specific sampling is necessary to confirm this is the case. Additional bacteriological sampling is needed to more fully evaluate public bathing uses. This portion of the river is managed as a warmwater fishery and supports recreational (fishing) uses. (DEC/DOW, BWAM/SBU, July 2016)

There are no health advisories in place limiting the consumption of fish from this waterbody (beyond the general advice for all waters). Fish consumption is considered to be fully supported based on the absence of any waterbody-specific advisory, but is noted as unconfirmed since routine monitoring of contaminants in fish is limited. (NYS DOH Health Advisories and DEC/DOW, BWAM, January 2014)

Water Quality Information

A biological (macroinvertebrate) assessment of the Genesee River in Castile (at Lee's Landing trail)_was conducted in 2014. Sampling results reflect good water quality. Conditions were in the slightly impacted range but approaching non-impacted and communities were most similar to natural conditions. The macroinvertebrate community shows some beginning signs of alteration, some expected sensitive species are not present and overall macroinvertebrate species richness is somewhat lower than expected, but overall there is still balanced distribution of all expected taxa. Aquatic life is fully supported and there are no other apparent water quality impacts. (DEC/DOW, BWAM/SBU, July 2016)

Source Assessment

Specific sources of pollutants to the waterbody have not been identified. Both point sources (primarily municipal wastewater discharges) as well as agricultural and other nonpoint sources of pollutants have been identified in the watershed. Significant streambank erosion resulting in high sediment loads and turbidity are also typical in much of the Genesee River. The Castile STP has been identified as one of several wastewater treatment phosphorus reduction priorities in the Genesee Basin Watershed Plan (see Management Actions below), though impacts to this specific reach are limited. The watershed includes large concentrations of agricultural lands and rural areas served by onsite wastewater (septic) systems, both of which pose some threat to water supply and other uses. The nonpoint source impacts are exacerbated by natural geology as the Genesee River cuts through an alluvial plain with highly erodible soils.

Management Actions

No specific management actions have been identified for the waterbody. More general agricultural and other nonpoint source reduction efforts are underway throughout the watershed.

NYSDEC developed an extensive watershed management plan for the Genesee River Basin. The Genesee River Basin Nine Key Element Watershed Plan for Phosphorus and Sediment (September 2015) focuses on management and reduction of phosphorus and sediment loads to Genesee River and Lake Ontario. The Plan builds on past and ongoing nonpoint source management practices throughout the basin, as well as implementation of a strategy to reduce phosphorus from wastewater treatment plants. Over half (56%) of the proposed point source reduction of phosphorus is from the five larger WWTPs (> 1.0 MGD) in the lower basin (i.e., below Mount Morris Dam). Reductions for these plants are already reflected in their permits. About one-third (31%) of the reduction is from smaller plants in the lower basin. Reduction at these plants may require upgrades; the target for meeting reductions at these plants is 2019. The remaining reductions (13%) is from facilities in the upper basin. Reduction at these plants may also require upgrades; the target for meeting reductions at these plants is also 2019. (DEC/DOW, BWRM, September 2016)

Section 303(d) Listing

This portion of the Genesee River is not included on the current (2016) NYS Section 303(d) List of Impaired/TMDL Waters. There is insufficient data and information to make a listing determination for this waterbody. (DEC/DOW, BWAM/WQAS, January 2016)

Segment Description

This segment includes the Genesee River from the Mount Morris Reservoir (P110a) to Route Wiscoy Creek (-104) near Rossburg. The River is Class B from the reservoir to Route 245 in Portageville, and Class C for the remainder of the reach.

Minor Tribs, Lower, to Genesee River (0403-0078)

Unassessed

Waterbody Location Information

Revised: 10/9/2015

Water Index No: Ont 117- 69 thru 91, Lower (select) **Water Class:** B
Hydro Unit Code: Outlet Silver Lake-Genesee River (0413000210) **Drainage Basin:** Genesee River
Water Type/Size: River/Stream 36.3 Miles **Reg/County:** 9/Wyoming (61)
Description: total legth of portions of selected tribs to Genesee R

Water Quality Problem/Issue Information

Uses Evaluated	Severity	Confidence
Water Supply	N/A	-
Public Bathing	Unassessed	-
Recreation	Unassessed	-
Aquatic Life	Unassessed	-
Fish Consumption	Unassessed	-
Conditions Evaluated		
Habitat/Hydrology	Unknown	
Aesthetics	Unknown	

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

Known: - - -
Suspected: - - -
Unconfirmed: - - -

Source(s) of Pollutant(s)

Known: - - -
Suspected: - - -
Unconfirmed: - - -

Management Information

Management Status: Unassessed
Lead Agency/Office: DOW/BWAM
IR/305(b) Code: Water with Insufficient Data (IR Category 3)

Further Details

Overview

Currently there is inadequate data/information to evaluate uses and determine a water quality assessment for this waterbody.

Use Assessment

This waterbody segment is a Class B waterbody, suitable for public bathing and general recreation use and support of aquatic life, but not as a water supply.

Water Quality Information

There is currently no water quality information available upon which to base an assessment.

Source Assessment

Specific sources of pollutants to the waterbody have not been identified.

Management Actions

No specific management actions have been identified for the waterbody. Baseline sampling to evaluate conditions in

this waterbody segment is needed.

Section 303(d) Listing

This waterbody is not included on the current (2016) NYS Section 303(d) List of Impaired/TMDL Waters. There is insufficient information to make a listing decision. (DEC/DOW, BWAM/WQAS, January 2016)

Segment Description

This segment includes the total length of the lower portions (within Letchworth State Park) of selected/smaller tribs to the Genesee River/Mount Morris Reservoir from the Mount Morris Dam to Portageville. Tribs within this segment, including Eastover Brook (-76), are Class B. Silver Lake Outlet (-70) and Wolf Creek (-87) are listed as separate segments.

Minor Tribs, Upper, to Genesee River (0403-0042)

Unassessed

Waterbody Location Information

Revised: 10/9/2015

Water Index No: Ont 117- 69 thru 91, Upper (select) **Water Class:** C
Hydro Unit Code: Outlet Silver Lake-Genesee River (0413000210) **Drainage Basin:** Genesee River
Water Type/Size: River/Stream 56.6 Miles **Reg/County:** 9/Wyoming (61)
Description: total length of portions of selected tribs to Genesee R

Water Quality Problem/Issue Information

Uses Evaluated	Severity	Confidence
Water Supply	N/A	-
Public Bathing	N/A	-
Recreation	Unassessed	-
Aquatic Life	Unassessed	-
Fish Consumption	Unassessed	-
Conditions Evaluated		
Habitat/Hydrology	Unknown	
Aesthetics	Unknown	

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

Known: - - -
Suspected: - - -
Unconfirmed: - - -

Source(s) of Pollutant(s)

Known: - - -
Suspected: - - -
Unconfirmed: - - -

Management Information

Management Status: Unassessed
Lead Agency/Office: DOW/BWAM
IR/305(b) Code: Water with Insufficient Data (IR Category 3)

Further Details

Overview

Currently there is inadequate data/information to evaluate uses and determine a water quality assessment for this waterbody.

Use Assessment

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

Water Quality Information

There is currently no water quality information available upon which to base an assessment.

Source Assessment

Specific sources of pollutants to the waterbody have not been identified.

Management Actions

No specific management actions have been identified for the waterbody. Baseline sampling to evaluate conditions in

this waterbody segment is needed.

Section 303(d) Listing

This waterbody is not included on the current (2016) NYS Section 303(d) List of Impaired/TMDL Waters. There is insufficient information to make a listing decision. (DEC/DOW, BWAM/WQAS, January 2016)

Segment Description

This segment includes the total length of the upper portions (outside Letchworth State Park) of selected/smaller tribs to the Genesee River/Mount Morris Reservoir from the Mount Morris Dam to Portageville. Tribs within this segment, including Eastover Brook (-76), are Class B. Silver Lake Outlet (-70) and Wolf Creek (-87) are listed as separate segments.

Silver Lake Outlet, and tribs (0403-0034)

Minor Impacts

Waterbody Location Information

Revised: 09/01/2016

Water Index No:	Ont 117- 70	Water Class:	C
Hydro Unit Code:	Outlet Silver Lake-Genesee River (0413000210)	Drainage Basin:	Genesee River
Water Type/Size:	River/Stream 24.3 Miles	Reg/County:	9/Wyoming (61)
Description:	stream and tribs fr Letchworth S.P. border to Silver Lk		

Water Quality Problem/Issue Information

Uses Evaluated	Severity	Confidence
Water Supply	N/A	-
Public Bathing	N/A	-
Recreation	Fully Supported	Suspected
Aquatic Life	Stressed	Known
Fish Consumption	Fully Supported	Unconfirmed

Conditions Evaluated

Habitat/Hydrology	Good
Aesthetics	Unknown

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

Known:	---
Suspected:	Unknown Pollutants (biological impacts), Pathogens
Unconfirmed:	---

Source(s) of Pollutant(s)

Known:	---
Suspected:	Unknown Source, Municipal (Perry STP)
Unconfirmed:	---

Management Information

Management Status:	Verification of Pollutants/Causes Needed
Lead Agency/Office:	DOW/Reg9
IR/305(b) Code:	Impaired Water Requiring a TMDL (IR Category 5)

Further Details

Overview

Silver Lake Outlet is assessed as having minor impacts due to aquatic life that is known to be stressed. No specific pollutant or sources have been identified.

Use Assessment

Silver Lake Outlet is a Class C waterbody, suitable for general recreation use and support of aquatic life, but not as a water supply or for public bathing.

Aquatic life is evaluated as supported but stressed based on biological sampling that shows slight impacts. This sampling can also be used to infer that there are no significant impacts to recreational (fishing) uses, although more specific sampling is necessary to confirm this is the case. (DEC, DOW, BWAM, July 2014)

There are no health advisories in place limiting the consumption of fish from this waterbody (beyond the general advice for all waters). Fish consumption is considered to be fully supported based on the absence of any waterbody-specific advisory, but is noted as unconfirmed since routine monitoring of contaminants in fish is limited. (NYS DOH Health Advisories and DEC/DOW, BWAM, January 2014)

Water Quality Information

A biological (macroinvertebrate) assessment of Silver Lake Outlet in Perry (at Twin Bridges Road) was conducted as part of the RIBS screening effort in 2014 and a more intensive RIBS monitoring effort in 2009 and 2010. Sampling results revealed slight impacts reflecting fair water quality, with the macroinvertebrate community altered from what is expected under natural conditions. Some expected sensitive species are not present and overall macroinvertebrate species richness is lower than expected. Some changes in community composition have occurred due to replacement of sensitive ubiquitous taxa by more tolerant taxa, but overall there is still balanced distribution of all expected taxa. In spite of these minor impacts, aquatic life is considered to be supported. These results reflect improved water quality over results from previous sampling conducted in 1999 at this site. (DEC/DOW, BWAM/SBU, January 2015)

Source Assessment

Specific sources of pollutants to the waterbody have not been identified. The previous sampling suggested impacts were the result of municipal wastewater discharges (Perry WWTP). The Perry STP has been identified as one of several wastewater treatment phosphorus reduction priorities in the Genesee Basin Watershed Plan (see Management Actions below), though impacts to this specific reach are limited. The plant is not currently required to disinfect its discharge, resulting in pathogen contributions that are also thought to impact recreational uses. Habitat (impoundment) effects were also discounted as contributing sources in the most recent sampling. (DEC/DOW, BWAM/SBU, June 2015)

Management Actions

Additional sampling to verify pollutants and sources of the minor impacts is recommended. However given the generally low level of impact, local stakeholders (SWCD/WQCC) – with input from Regional DOW staff – would be appropriate to oversee management activity. (DEC/DOW, BWAM, June 2015)

NYSDEC developed an extensive watershed management plan for the Genesee River Basin. The Genesee River Basin Nine Key Element Watershed Plan for Phosphorus and Sediment (September 2015) focuses on management and reduction of phosphorus and sediment loads to Genesee River and Lake Ontario. The Plan builds on past and ongoing nonpoint source management practices throughout the basin, as well as implementation of a strategy to reduce phosphorus from wastewater treatment plants. Over half (56%) of the proposed point source reduction of phosphorus is from the five larger WWTPs (> 1.0 MGD) in the lower basin (i.e., below Mount Morris Dam). Reductions for these plants are already reflected in their permits. About one-third (31%) of the reduction is from smaller plants in the lower basin. Reduction at these plants may require upgrades; the target for meeting reductions at these plants is 2019. The remaining reductions (13%) is from facilities in the upper basin. Reduction at these plants may also require upgrades; the target for meeting reductions at these plants is also 2019. (DEC/DOW, BWRM, September 2016)

Section 303(d) Listing

Silver Lake Outlet is included on the current (2016) NYS Section 303(d) List of Impaired/TMDL Waters. The waterbody is included on Part 3b of the List as an impaired waterbody requiring verification of cause/pollutant/source (the List indicates the source of impairment is “unknown”). However this updated assessment suggests that the suspected impacts to water quality and uses are not sufficient to warrant continued listing. This waterbody should be delisting during the next update of the List. (DEC/DOW, BWAM/WQAS, June 2015)

Segment Description

This segment includes the entire stream and tribs above the Letchworth State Park boundary. This reach of the stream is Class C. Tribs to this segment are also Class C.

Silver Lake (0403-0002)

Impaired

Waterbody Location Information

Revised: 10/9/2015

Water Index No:	Ont 117- 70-P115	Water Class:	A
Hydro Unit Code:	Outlet Silver Lake-Genesee River (0413000210)	Drainage Basin:	Genesee River
Water Type/Size:	Lake/Reservoir 832.1 Acres	Reg/County:	9/Wyoming (61)
Description:	entire lake		

Water Quality Problem/Issue Information

Uses Evaluated	Severity	Confidence
Water Supply	Impaired	Suspected
Public Bathing	Stressed	Known
Recreation	Impaired	Known
Aquatic Life	Fully Supported	Suspected
Fish Consumption	Fully Supported	Unconfirmed

Conditions Evaluated

Habitat/Hydrology	Fair
Aesthetics	Poor

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

Known: ALGAL/PLANT GROWTH (native), HARMFUL ALGAL BLOOMS, NUTRIENTS (phosphorus)

Suspected: - - -

Unconfirmed: - - -

Source(s) of Pollutant(s)

Known: AGRICULTURE, On-Site/Septic Systems, Urban/Storm Runoff

Suspected: Streambank Erosion

Unconfirmed: - - -

Management Information

Management Status: Strategy Implementation Scheduled or Underway

Lead Agency/Office: DOW/Reg9

IR/305(b) Code: Impaired Water, TMDL Completed (IR Category 4a)

Further Details

Overview

Silver Lake is assessed as an impaired waterbody due to recreational uses that are known to be impaired by elevated nutrients, resulting in excessive aquatic vegetation growth and periodic harmful algal blooms. Water supply use may also be impaired by the elevated nutrients that result in periodic occurrences of disinfection by-products in finished water. Agricultural activity has been identified as the largest source of nutrients to the Lake. A TMDL to address nutrients (phosphorus) in the Lake was completed in 2010.

Use Assessment

Silver Lake is a Class A waterbody, suitable for water supply use, public bathing and general recreation use and support of aquatic life.

Regarding water supply use, note that the evaluation of this use focuses on the source water prior to treatment, and does not necessarily reflect the quality of water distributed for use after treatment. Monitoring of water quality at the tap is conducted by local water suppliers and public health agencies. That being said, water supply use is considered to be stressed due to elevated nutrients and the occurrence of HABs that could cause taste/odor concerns in treated water

and/or elevated treatment costs. The local health department reports no current restrictions on potable water use of water from this supply, however the maximum contaminant level for disinfection by-products (THMs) were found in some samples. The lake is used as a public water supply by the Village of Perry. (DEC/DOW, BWAM/LMAS and Village of Perry, June 2015)

Recreation use and public bathing are considered to be impaired due to elevated nutrients (phosphorus), excessive algae, poor water clarity, and shoreline harmful algal blooms. Additional bacteriological sampling is needed to more fully evaluate the impact of pathogen levels on public bathing (swimming) use. Non-contact recreation (boating, fishing) is also affected by excessive aquatic vegetation and invasive plant growth (Eurasian watermilfoil). Aesthetic conditions of the lake are considered to be poor due to excessive algae, shoreline algal blooms and excessive aquatic vegetation. (DEC/DOW, BWAM/LMAS, July 2013)

Aquatic life is fully supported in the lake. The Lake provides a balanced and productive fishery providing angling for largemouth bass, walleye, northern pike and several species of panfish. Though dense beds of aquatic vegetation, particularly at the north and south ends, can negatively impact some recreational uses, they provide excellent habitat for bass and other predator and prey fish species. (DEC/DOW, DFWMR/Region 9, 2014)

There are no health advisories in place limiting the consumption of fish from this waterbody (beyond the general advice for all waters). Fish consumption is considered to be fully supported based on the absence of any waterbody-specific advisory, but is noted as unconfirmed since routine monitoring of contaminants in fish is limited. (NYS DOH Health Advisories and DEC/DOW, BWAM, January 2014)

Water Quality Information

Water quality sampling of Silver Lake has been conducted through the Citizens Statewide Lake Assessment Program (CSLAP) from 1986-91, 1995-97 and 2006 through the present. Results of this sampling indicate the lake is best characterized as mesoeutrophic, or moderately to highly productive. Chlorophyll/algae levels are typically above criteria corresponding to impaired recreational uses, while phosphorus concentrations are typically moderately high. Lake clarity measurements indicate water transparency occasionally fail to meet the recommended minimum criteria for swimming beaches. Readings of pH typically fall within the range established in state water quality standards for protection of aquatic life. A single sample was also collected through the NYSDEC LCI Program in 2008; results of this sampling were consistent with the more extensive CSLAP sampling results. (DEC/DOW, BWAM/LMAS, June 2014)

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 impaired." The lake itself is most often described as "not quite crystal clear," an assessment that is consistent with measured water quality characteristics]. Assessments have noted that aquatic plants grow to the lake surface. Aquatic plants are dominated by a mix of native and non-native species and have been cited as impacting recreational uses. (DEC/DOW, BWAM/CSLAP, June 2014)

Source Assessment

Agricultural sources – cropland and pastureland – have been identified as the primary source of nutrients (phosphorus) to the Lake, accounting for an estimated 84% of the total phosphorus load. Runoff from developed lands (7%) and onsite wastewater (septic) systems (2%) were identified as lesser contributors. (Total Maximum Daily Load (TMDL) for Phosphorus in Silver Lake, DEC/DOW, BWRM, September 2010)

Management Actions

The Silver Lake TMDL for Phosphorus outlines management strategies for agricultural and other sources of nutrients to the Lake. Continued monitoring to evaluate changes in water quality through CSLAP or other lake assessment programs is recommended. (DEC/DOW, BWRM, September 2010)

Section 303(d) Listing

Silver Lake is not included on the current (2016) NYS Section 303(d) List of Impaired/TMDL Waters. Although it is assessed as an impaired water, it is categorized as an IR Category 4a water that is not listed due to the completion of a TMDL for phosphorus in 2010. (DEC/DOW, BWAM/WQAS, January 2016)

Segment Description

This segment includes the total area of the entire lake.

Silver Lake Inlet/Tribs to Silver Lake (0403-0044)

Unassessed

Waterbody Location Information

Revised: 10/9/2015

Water Index No: Ont 117- 70-P115-
Hydro Unit Code: Outlet Silver Lake-Genesee River (0413000210)
Water Type/Size: River/Stream 34.3 Miles
Description: entire length of all tribs to Silver Lake

Water Class: C
Drainage Basin: Genesee River
Reg/County: 9/Wyoming (61)

Water Quality Problem/Issue Information

Uses Evaluated	Severity	Confidence
Water Supply	N/A	-
Public Bathing	N/A	-
Recreation	Unassessed	-
Aquatic Life	Unassessed	-
Fish Consumption	Unassessed	-
Conditions Evaluated		
Habitat/Hydrology	Unknown	
Aesthetics	Unknown	

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

Known: ---
Suspected: ---
Unconfirmed: ---

Source(s) of Pollutant(s)

Known: ---
Suspected: ---
Unconfirmed: ---

Management Information

Management Status: Unassessed
Lead Agency/Office: DOW/BWAM
IR/305(b) Code: Water with Insufficient Data (IR Category 3)

Further Details

Overview

Currently there is inadequate data/information to evaluate uses and determine a water quality assessment for this waterbody.

Use Assessment

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

Water Quality Information

There is currently no water quality information available upon which to base an assessment.

Source Assessment

Specific sources of pollutants to the waterbody have not been identified.

Management Actions

No specific management actions have been identified for the waterbody. Baseline sampling to evaluate conditions in

this waterbody segment is needed.

Section 303(d) Listing

This waterbody is not included on the current (2016) NYS Section 303(d) List of Impaired/TMDL Waters. There is insufficient information to make a listing decision. (DEC/DOW, BWAM/WQAS, January 2016)

Segment Description

This segment includes the total length of all tribs to Silver Lake. Tribs within this segment, including Silver Lake Inlet (-1), are primarily Class C with some small portions designated as Class B.

Wolf Creek, Upper, and tribs (0403-0003)

Unassessed

Waterbody Location Information

Revised: 10/9/2015

Water Index No:	Ont 117- 87	Water Class:	C
Hydro Unit Code:	Outlet Silver Lake-Genesee River (0413000210)	Drainage Basin:	Genesee River
Water Type/Size:	River/Stream 34.7 Miles	Reg/County:	9/Wyoming (61)
Description:	stream and tribs above Letchworth State Park		

Water Quality Problem/Issue Information

Uses Evaluated	Severity	Confidence
Water Supply	N/A	-
Public Bathing	N/A	-
Recreation	Stressed	Unconfirmed
Aquatic Life	Stressed	Unconfirmed
Fish Consumption	Fully Supported	Unconfirmed

Conditions Evaluated	Severity
Habitat/Hydrology	Unknown
Aesthetics	Unknown

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

Known: - - -
Suspected: Silt/Sediment
Unconfirmed: Nutrients, Pathogens

Source(s) of Pollutant(s)

Known: - - -
Suspected: Agriculture
Unconfirmed: Onsite/Septic Systems

Management Information

Management Status: Assessment/Reassessment Scheduled
Lead Agency/Office: DOW/BWAM
IR/305(b) Code: Water with Insufficient Data (IR Category 3)

Further Details

Overview

Currently there is inadequate data/information to evaluate uses and determine a water quality assessment for this waterbody. A previous assessment of minor impacts is based on limited and older data and sampling to verify conditions is recommended.

Use Assessment

Wolf Creek is a Class C waterbody, suitable for general recreation use and support of aquatic life, but not as a water supply or for public bathing. A few tribs to the stream are designated as a cold water (trout) fishery.

Aquatic life was previously found to experience minor impacts, however due to the limited and age of the data (more than 10 years old) additional sampling is needed to verify current conditions. (DEC/DOW, BWAM/SBU, December 2014)

There are no health advisories in place limiting the consumption of fish from this waterbody (beyond the general advice for all waters). Fish consumption is considered to be fully supported based on the absence of any waterbody-specific advisory, but is noted as unconfirmed since routine monitoring of contaminants in fish is limited. (NYS DOH

Health Advisories and DEC/DOW, BWAM, January 2014)

Wolf Creek is a Class C waterbody, suitable for general recreation use and support of aquatic life, but not as a water supply or for public bathing. A few tribs to the stream are designated as a cold water (trout) fishery.

Aquatic life was previously found to experience minor impacts, however due to the limited and age of the data (more than 10 years old) additional sampling is needed to verify current conditions. (DEC/DOW, BWAM/SBU, December 2014)

There are no health advisories in place limiting the consumption of fish from this waterbody (beyond the general advice for all waters). Fish consumption is considered to be fully supported based on the absence of any waterbody-specific advisory, but is noted as unconfirmed since routine monitoring of contaminants in fish is limited. (NYS DOH Health Advisories and DEC/DOW, BWAM, January 2014)

Water Quality Information

A biological (macroinvertebrate) assessment of the Genesee River near Fillmore was conducted in 1999. Sampling results indicated slightly impacted water quality conditions, with the macroinvertebrate community altered from what is expected under natural conditions and indications of onsite septic inputs. Some expected sensitive species are not present and overall macroinvertebrate species richness is lower than expected. (DEC/DOW, BWAM/SBU, January 2001)

Source Assessment

A previous assessment of the stream identified failing and/or inadequate onsite septic systems serving the village of Castile as the primary source of impacts. A strategy to address the issue had been identified but was awaiting funding. Onsite septic systems in the hamlet of Silver Springs were also raised as a potential concern, as were agricultural activities in the watershed. (DEC/DOW, BWAM, April 2001)

Management Actions

No specific management actions have been identified for the waterbody. Additional sampling to verify conditions in this waterbody segment is recommended.

Section 303(d) Listing

Wolf Creek is not included on the current (2016) NYS Section 303(d) List of Impaired/TMDL Waters. There is insufficient data and information to make a listing determination for this waterbody. (DEC/DOW, BWAM/WQAS, January 2016)

Segment Description

This segment includes the portion of the stream and all tribs above the western boundary of Letchworth State Park. The waters of this portion of the stream are Class C. Tribs to this reach are primarily Class C with some waters designated Class C(T).

Minor Tribs to Genesee River (0403-0043)

Unassessed

Waterbody Location Information

Revised: 10/9/2015

Water Index No: Ont 117- 93 thru 103
Hydro Unit Code: Outlet Silver Lake-Genesee River (0413000210)
Water Type/Size: River/Stream 39.3 Miles
Description: total length of selected/smaller tribs to Genesee River

Water Class: C
Drainage Basin: Genesee River
Reg/County: 9/Wyoming (61)

Water Quality Problem/Issue Information

Uses Evaluated	Severity	Confidence
Water Supply	N/A	-
Public Bathing	N/A	-
Recreation	Unassessed	-
Aquatic Life	Unassessed	-
Fish Consumption	Unassessed	-
Conditions Evaluated		
Habitat/Hydrology	Unknown	
Aesthetics	Unknown	

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

Known: - - -
Suspected: - - -
Unconfirmed: - - -

Source(s) of Pollutant(s)

Known: - - -
Suspected: - - -
Unconfirmed: - - -

Management Information

Management Status: Unassessed
Lead Agency/Office: DOW/BWAM
IR/305(b) Code: Water with Insufficient Data (IR Category 3)

Further Details

Overview

Currently there is inadequate data/information to evaluate uses and determine a water quality assessment for this waterbody.

Use Assessment

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

Water Quality Information

There is currently no water quality information available upon which to base an assessment.

Source Assessment

Specific sources of pollutants to the waterbody have not been identified.

Management Actions

No specific management actions have been identified for the waterbody. Baseline sampling to evaluate conditions in

this waterbody segment is needed.

Section 303(d) Listing

This waterbody is not included on the current (2016) NYS Section 303(d) List of Impaired/TMDL Waters. There is insufficient information to make a listing decision. (DEC/DOW, BWAM/WQAS, January 2016)

Segment Description

This segment includes the total length of selected/smaller tribs to the Genesee River from Portageville to Wiscoy Creek (-104).