



Upper Honeoye Creek Watershed

0413000302

Upper Honeoye Creek Watershed (0413000302)

| Water Index Number | Waterbody Segment | Category |
|------------------------|---|--------------------|
| Ont 117- 27 | Honeoye Creek, Upper, and minor tribs (0402-0061) | Unassessed |
| Ont 117- 27-23-P39,P40 | Round, Long Ponds (0402-0073) | Minor Impacts |
| Ont 117- 27-28 | Beebe Creek and tribs (0402-0067) | Unassessed |
| Ont 117- 27-28-6-P40d | Shackleton Pond (0402-0074) | Unassessed |
| Ont 117- 27-34 | Hemlock Lake Outlet and minor tribs (0402-0013) | Needs Verification |
| Ont 117- 27-34- 7 | Kinney Creek and tribs (0402-0068) | Needs Verification |
| Ont 117- 27-34-11 | Canadice Lake Outlet and tribs (0402-0042) | Needs Verification |
| Ont 117- 27-34-11-P43 | Canadice Lake (0402-0002) | Impaired |
| Ont 117- 27-34-11-P43- | Tribs to Canadice Lake (0402-0069) | Unassessed |
| Ont 117- 27-34-P44 | Hemlock Lake (0402-0011) | No Known Impacts |
| Ont 117- 27-34-P44- | Minor Tribs to Hemlock Lake (0402-0043) | Unassessed |
| Ont 117- 27-34-P44-7 | Springwater Creek and minor tribs (0402-0070) | No Known Impacts |
| Ont 117- 27-34-P44-7-4 | Limekiln Creek and tribs (0402-0007) | Threatened |
| Ont 117- 27-47 | Mill Creek and tribs (0402-0071) | Threatened |
| Ont 117- 27-P57 | Honeoye Lake (0402-0032) | Impaired |
| Ont 117- 27-P57- | Minor Tribs to Honeoye Lake (0402-0045) | Unassessed |
| Ont 117- 27-P57-10 | Honeoye Inlet and tribs (0402-0044) | Threatened |

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 Honeoye Creek in Honeoye (at Route 20A) was conducted in 2014. Sampling results reflect moderate impacts corresponding to poor water quality, with the macroinvertebrate community altered from what is expected under natural conditions. However conditions at the site are influenced by stream habitat (upstream impoundment) and as a result this evaluation of aquatic life is considered to be inconclusive. A previous assessment of the creek as having no known impacts was based on sampling conducted downstream of the segment in Honeoye Falls in 1999 which indicated non-impacted water quality conditions, with mayflies, stoneflies and caddisflies all well-represented. More recent sampling below the segment reflects minor impacts. Though the most recent assessment of the segment suggested no known impact, the lack of conclusive sampling data suggests the segment should be treated as being unassessed. (DEC/DOW, BWAR/SBU, August 2016)

Source Assessment

Based on the biologic community composition, surrounding land use and other knowledge of the waterbody, the most likely source of impacts to the waterbody are municipal point sources and agricultural and other nonpoint sources. The Honeoye Lake County Sewer District STP has been identified in the Genesee Basin Watershed Plan (see Management Actions below) as one of several wastewater treatment facilities contributing significant phosphorus loading. 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. Additional sampling to verify conditions in this waterbody segment is needed.

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

Upper Honeoye Creek 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 portion of the stream and selected/smaller tribs from/including Dark Hollow Brook (-21) in Idaho to Honeoye Lake. The waters of this portion of the stream are Class C. Tribs to this reach, including Dark Hollow Brook (-21) and Whetstone Brook (-39), are Class C. Beebe Creek (-28), Hemlock Outlet (-34), Mill Creek (-47) as well as larger lakes in the watershed are listed separately.

Round, Long Ponds (0402-0073)

Minor Impacts

Waterbody Location Information

Revised: 10/28/2015

Water Index No: Ont 117- 27-23-P39,P40
Hydro Unit Code: Headwaters Honeoye Creek (0413000302)
Water Type/Size: Lake/Reservoir 20.2 Acres
Description: total area of both lakes

Water Class: C
Drainage Basin: Genesee River
Reg/County: 8/Livingston (26)

Water Quality Problem/Issue Information

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

Conditions Evaluated

| | |
|-------------------|------|
| Habitat/Hydrology | Fair |
| Aesthetics | Fair |

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

Known: Nutrients (phosphorus), Algal/Plant Growth, Aquatic Invasive Species
Suspected: - - -
Unconfirmed: - - -

Source(s) of Pollutant(s)

Known: - - -
Suspected: Agriculture, Habitat Alteration, Other Source (in-lake recycling)
Unconfirmed: - - -

Management Information

Management Status: Restoration/Protection Strategy Needed
Lead Agency/Office: ext/WQCC
IR/305(b) Code: Water Attaining All Standards (IR Category 1)

Further Details

Overview

Long Pond is assessed as having minor impacts due to recreational uses that are thought to be stressed by somewhat elevated nutrient levels and invasive aquatic vegetation. No specific nutrient sources have been identified, but agricultural sources as well as in-lake nutrient recycling are thought to be contributing to the nutrient load. The assessment of this waterbody is based on sampling conducted of Long Pond only. Sampling of Round Pond is necessary to provide a complete assessment.

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.

Recreational uses are considered to be (supported but) stressed due to elevated nutrients (phosphorus) resulting algal growth. Non-contact recreation (boating, fishing) is also affected by excessive aquatic vegetation and the presence of invasive plant growth (Eurasian watermilfoil). Aesthetic conditions of the lake are considered to be fair due to excessive aquatic vegetation and invasive plants. Additional bacteriological sampling is needed to more fully evaluate the impact of pathogen levels on (swimming) use. (DEC/DOW, BWAM/LMAS, July 2013)

Aquatic life is currently evaluated as threatened due to low episodic (summer) dissolved oxygen levels in deep waters of the Lake.

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 Long Pond has been conducted through the NYSDEC Lake Classification and Inventory (LCI) in 2009 and 2010. Results of this sampling indicate the lake is best characterized as mesoeutrophic, or moderately to highly productive. Chlorophyll/algal levels are within the criteria range corresponding to impacted/stressed recreational uses, while phosphorus concentrations are elevated. Lake clarity measurements indicate water transparency typically 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. (DEC/DOW, BWAM/LMAS, May 2015)

Source Assessment

Specific sources of pollutants to the waterbody have not been identified. However agricultural sources are present in the watershed. In-lake nutrient recycling is likely also contributing to the nutrient load.

Management Actions

No specific management actions have been identified for the waterbody. Given the generally low level of impact, local stakeholders (SWCD/WQCC) – with input from Regional DOW staff – would be appropriate to oversee management activities. A range of general best management practices and other recommendations to restore and protect water quality in all lakes is outlined in the NYSDEC manual Diet for a Small Lake (NYSDEC/FOLA, 2009).

Section 303(d) Listing

The Round Pond, Long Pond segment is not included on the current (2016) NYS Section 303(d) List of Impaired/TMDL Waters. There are no impacts/impairments that would justify the listing of this waterbody. (DEC/DOW, BWAM/WQAS, January 2016)

Segment Description

This segment includes the total area of both ponds. These waters are Class C.

Beebe Creek and tribs (0402-0067)

Unassessed

Waterbody Location Information

Revised: 7/30/2015

Water Index No: Ont 117- 27-28
Hydro Unit Code: Headwaters Honeoye Creek (0413000302)
Water Type/Size: River/Stream 46.2 Miles
Description: entire stream and tribs

Water Class: C
Drainage Basin: Genesee River
Reg/County: 8/Ontario (35)

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 | Unassessed | |
| Aesthetics | Unassessed | |

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

Beebe 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.

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

Beebe Creek 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 entire stream and all tribs. Tribs to this segment are also Class C.

Shackleton Pond (0402-0074)

Unassessed

Waterbody Location Information

Revised: 7/30/2015

| | | | |
|-------------------------|---------------------------------------|------------------------|----------------|
| Water Index No: | Ont 117- 27-28-6-P40d | Water Class: | C |
| Hydro Unit Code: | Headwaters Honeoye Creek (0413000302) | Drainage Basin: | Genesee River |
| Water Type/Size: | Lake/Reservoir 12.3 Acres | Reg/County: | 8/Ontario (35) |
| Description: | entire lake | | |

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

Shackleton Pond 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. One of the two property owners along the lake operates a sand and gravel mine.

Management Actions

No specific management actions have been identified for the waterbody. Baseline sampling to evaluate conditions in this waterbody segment is needed, however the pond is private with no public access.

Section 303(d) Listing

Shackleton Pond 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 entire pond. The waters of the pond are Class C.

Hemlock Lake Outlet and minor tribs (0402-0013)

Needs Verification

Waterbody Location Information

Revised: 9/3/2015

Water Index No: Ont 117- 27-34
Hydro Unit Code: Headwaters Honeoye Creek (0413000302)
Water Type/Size: River/Stream 29.2 Miles
Description: stream and selected/smaller tribs

Water Class: C
Drainage Basin: Genesee River
Reg/County: 8/Ontario (35)

Water Quality Problem/Issue Information

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

Conditions Evaluated

| | |
|-------------------|---------|
| Habitat/Hydrology | Fair |
| Aesthetics | Unknown |

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

Known: Water Level/Flow
Suspected: NUTRIENTS (PHOSPHORUS), PATHOGENS, Silt/Sediment
Unconfirmed: Pesticides

Source(s) of Pollutant(s)

Known: Hydro Alteration
Suspected: Onsite/Septic Systems, Agriculture, Streambank Erosion
Unconfirmed: Roadbank Erosion

Management Information

Management Status: Verification of Problem Severity Needed
Lead Agency/Office: DOW/BWAM
IR/305(b) Code: Water with Insufficient Data (IR Category 3)

Further Details

Overview

Hemlock Lake Outlet is assessed as needing verification of minor impacts and possible impairment due to aquatic life that may be impaired, but this evaluation is based on older, limited and somewhat inconclusive data and needs to be more fully assessed. Nutrient impacts are indicated with agricultural nonpoint sources being the most likely contributor. Previously cited pathogen impacts to recreational uses also need to be confirmed. Failing and/or inadequate residential onsite septic systems that were noted as possibly impacting water quality in the stream have been addressed through a sewerage project in 2005.

Use Assessment

Hemlock 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 was previously found to experience significant impacts and may be impaired, however due to the inconclusive results, limited data and the age of the data (more than 10 years old) additional sampling is needed to verify current impacts and conditions. This sampling can also be used to infer that there may be 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 other recreational uses. (DEC/DOW, BWAM/SBU, December 2014)

Hydrologic fluctuations may also limit or otherwise influence aquatic life. Previous assessments indicated that the fishery in the outlet is limited by the retention of water in Hemlock Lake and the resulting low water levels in the creek. However, the issue in this case is one of competing uses: the retention of water to support that water supply use supercedes water releases to maintain the downstream fishery. Additionally, even with appropriate releases the creek could support only a minnow population at best; it would not support a sport fishery. (DEC/FWMR, Region 8, 2000)

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 Hemlock Lake Outlet in Frost Hollow (at Route 15) was conducted as part of the RIBS biological screening effort in 1999. Sampling results reflect moderately impacted (poor) water quality, although at the high end of this category bordering on slight impact. Sensitive taxa was reduced, and the distribution of major taxonomic groups significantly different from what is naturally expected. Aquatic life is considered to be impaired, however this evaluation is noted as unconfirmed because it is based on a single, older sample; additional sampling to confirm this result is needed. (DEC/DOW, BWAM/SBU, January 2015)

Source Assessment

Based on the biologic community composition, surrounding land use and other knowledge of the waterbody, the most likely sources of nutrients to the waterbody is/are agricultural and other nonpoint sources. Failing and/or inadequate on-site septic systems (due to native clay soils) in the Village of Hemlock had been documented by the Livingston County Health Department in 2001, but have since been addressed through a sewerage project in the Hamlet of Hemlock in 2005. (Livingston County DOH, July 2015)

Management Actions

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

Section 303(d) Listing

Hemlock Lake Outlet is included on the current (2016) NYS Section 303(d) List of Impaired/TMDL Waters. The waterbody is included on Part 3a of the List as an impaired waterbody for which TMDL development may be deferred pending verification of impairment. The waterbody is listed for both phosphorus and pathogens. However onsite septic systems that were cited as the source of possible pathogen impairment in the stream and the basis of the pathogen listing have been addressed; the listing for pathogens should be removed during the next update of the List. Additionally, based on recently revised assessment and listing methodology there is insufficient information to justify a phosphorus listing and the waterbody should be considered for delisting for this pollutant. This waterbody was first listed on the 2004 List. (DEC/DOW, BWAM, January 2016)

Segment Description

This segment includes the entire stream and selected/smaller tribs. The waters of the stream and tribs included in the segment are Class C. Kinney Creek (-7) and Canadice Outlet (-11) are listed separately.

Kinney Creek and tribs (0402-0068)

Needs Verification

Waterbody Location Information

Revised: 09/30/2016

Water Index No: Ont 117- 27-34- 7
Hydro Unit Code: Headwaters Honeoye Creek (0413000302)
Water Type/Size: River/Stream 17.9 Miles
Description: entire stream and tribs

Water Class: C
Drainage Basin: Genesee River
Reg/County: 8/Livingston (26)

Water Quality Problem/Issue Information

| Uses Evaluated | Severity | Confidence |
|------------------|------------|-------------|
| Water Supply | N/A | - |
| Public Bathing | N/A | - |
| Recreation | Stressed | Suspected |
| Aquatic Life | Impaired | Unconfirmed |
| 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: Unknown Pollutants (biological impacts)
Unconfirmed: - - -

Source(s) of Pollutant(s)

Known: - - -
Suspected: Unknown Source
Unconfirmed: Agriculture

Management Information

Management Status: Verification of Problem Severity Needed
Lead Agency/Office: DOW/BWAM
IR/305(b) Code: Water with Insufficient Data (IR Category 3)

Further Details

Overview

Kinney Creek is currently assessed as needing verification of minor impacts/possible impairment due to aquatic life that may be impaired, but this evaluation is based on a single sample and need to be more fully assessed. Specific pollutants have not been identified but nonpoint nutrient sources are suspected. Additional sampling to verify conditions is recommended.

Use Assessment

Kinney 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.

Aquatic life may experience significant impacts (and may be impaired), however due to the limited data additional sampling is needed to verify current impacts/impairment/conditions. This sampling can also be used to infer that there may be impacts to recreational (fishing) uses, although more specific sampling is necessary to confirm this is the case. (DEC/DOW, BWAM/SBU, August 2016)

Fish Consumption use is considered to be unassessed. There are no health advisories limiting the consumption of fish

from this waterbody (beyond the general advice for all waters). However due to the presence of impacts/contaminants in the stream and the uncertainty as to whether the lack of a waterbody-specific health advisory is based on actual sampling, fish consumption use is noted as unassessed, rather than fully supported but unconfirmed. (NYS DOH Health Advisories and DEC/DOW, BWAM, December 2014)

Water Quality Information

A biological (macroinvertebrate) assessment of Kinney Creek in Livonia Center (at Route 20A) was conducted as part of the RIBS biological screening effort in 2014. Sampling results reflect moderately impacted (poor) water quality, with sensitive taxa reduced, and the distribution of major taxonomic groups significantly different from what is naturally expected. Aquatic life is considered to be impaired, however this evaluation is noted as suspected because it is based on a single sample. (DEC/DOW, BWAM/SBU, January 2016)

Source Assessment

Based on the biologic community composition, surrounding land use and other knowledge of the waterbody, agricultural nonpoint sources are a likely contributing source of impacts to the waterbody.

Management Actions

No specific management actions have been identified for the waterbody. Additional sampling to verify the level of impact in this waterbody segment is needed.

Section 303(d) Listing

Kinney Creek 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 at this time. However this updated assessment suggests it may be appropriate to consider including this waterbody on the next List, pending additional sampling to verify an impairment. (DEC/DOW, BWAM/WQAS, January 2016)

Segment Description

This segment includes the entire stream and all tribs. Tribs to this segment are also Class C.

Canadice Lake Outlet and tribs (0402-0042)

Needs Verification

Waterbody Location Information

Revised: 9/3/2015

Water Index No: Ont 117- 27-34-11
Hydro Unit Code: Headwaters Honeoye Creek (0413000302)
Water Type/Size: River/Stream 17.1 Miles
Description: entire stream and tribs

Water Class: AA(T)
Drainage Basin: Genesee River
Reg/County: 8/Livingston (26)

Water Quality Problem/Issue Information

| Uses Evaluated | Severity | Confidence |
|------------------|-----------------|-------------|
| Water Supply | Fully Supported | Known |
| Public Bathing | Stressed | Unconfirmed |
| Recreation | Stressed | Unconfirmed |
| Aquatic Life | Impaired | Unconfirmed |
| 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: Unknown Pollutants (biological impacts)
Unconfirmed: - - -

Source(s) of Pollutant(s)

Known: - - -
Suspected: Unknown Source
Unconfirmed: - - -

Management Information

Management Status: Verification of Problem Severity Needed
Lead Agency/Office: DOW/BWAM
IR/305(b) Code: Water with Insufficient Data (IR Category 3)

Further Details

Overview

Canadice Lake Outlet is currently assessed as needing verification of minor impacts/possible impairment due to aquatic life that may be impaired, but this evaluation is based on a single sample that reflects influences from habitat (impoundment) conditions and need to be more fully assessed. Specific pollutants have not been identified. Previous sampling at a site farther downstream also noted impoundment effects as the primary causes of impacts.

Use Assessment

Canadice Lake Outlet is a Class AA(T) waterbody, suitable for water supply, public bathing and general recreation use as well as support of aquatic life. The waterbody is also designated as a cold water (trout) fishery.

Public water supply use of Canadice Lake Outlet is considered fully supported, based on an assessment of water quality in Canadice Lake. The outlet itself is not currently used as a public supply. However Canadice Lake (and Hemlock Lake) serves as a water supply source for the City of Rochester. The most recent annual water quality report indicates no contaminants in finished (treated) water exceed regulatory limits. A Source Water Assessment by the NYSDOH conducted in the early 2000s found some potential susceptibility to contamination in the watershed but none of particular note. 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 level of susceptibility is also typical of many water supplies that experience no impacts to water supply use and reflects the need to protect the resource. (NYSDOH, Source Water Assessment Program, 2005)

Aquatic life may experience significant impacts and may be impaired, however due to limited data and conflicting and/or inconclusive results, additional sampling is needed to verify current impacts and conditions. This sampling can also be used to infer that there may be 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 and other recreational uses. (DEC/DOW, BWAM/SBU, December 2014)

Fish Consumption use is considered to be unassessed. There are no health advisories limiting the consumption of fish from this waterbody (beyond the general advice for all waters). However due to the advisory currently in place for Canadice Lake for PCBs and the uncertainty as to whether the lack of a waterbody-specific health advisory is based on actual sampling, fish consumption use is noted as unassessed, rather than fully supported but unconfirmed. (NYS DOH Health Advisories and DEC/DOW, BWAM, December 2014)

Water Quality Information

A biological (macroinvertebrate) assessment of Canadice Lake Outlet in Canadice was conducted as part of the RIBS biological screening effort in 2009. Sampling results reflect moderate impacts corresponding to poor water quality, with the macroinvertebrate community altered from what is expected under natural conditions. However conditions at the site are influenced by stream habitat (upstream impoundment) and as a result of this influence and the basis of the assessment on a single sample, the evaluation of aquatic life is considered to be unconfirmed. A previous sampling on the Outlet farther downstream in Hemlock was evaluated as slightly impacted, with impoundment effects noted as the primary cause of impacts. Additional sampling to confirm this result is needed. (DEC/DOW, BWAM/SBU, December 2014)

Source Assessment

Specific sources of pollutants to the waterbody have not been definitively identified. Based on the biologic community composition, both impoundment effects and nutrient enrichment have been suggested as sources of impact.

Management Actions

No specific management actions have been identified for the waterbody. Additional sampling to verify the level of impact in this waterbody segment is needed.

Section 303(d) Listing

Canadice Lake Outlet is not included on the current (2016) NYS Section 303(d) List of Impaired/TMDL Waters. Given the limited data and uncertain results currently available there is insufficient evidence to justify a listing of this waterbody. Additional sampling is recommended. (DEC/DOW, BWAM/WQAS, January 2016)

Segment Description

This segment includes the entire stream and all tribs. The waters of the stream are Class C from the mouth to the Rochester water supply diversion, Class AA from the diversion to trib -1, and Class AA(T) for the remainder of the reach. Tribs to this reach are Class C.

Canadice Lake (0402-0002)

Impaired

Waterbody Location Information

Revised: 09/30/2016

| | | | |
|-------------------------|---------------------------------------|------------------------|----------------|
| Water Index No: | Ont 117- 27-34-11-P43 | Water Class: | AA(TS) |
| Hydro Unit Code: | Headwaters Honeoye Creek (0413000302) | Drainage Basin: | Genesee River |
| Water Type/Size: | Lake/Reservoir 668.7 Acres | Reg/County: | 8/Ontario (35) |
| Description: | entire lake | | |

Water Quality Problem/Issue Information

| Uses Evaluated | Severity | Confidence |
|-----------------------------|-----------------|------------|
| Water Supply | Fully Supported | Known |
| Public Bathing | Fully Supported | Suspected |
| Recreation | Fully Supported | Known |
| Aquatic Life | Fully Supported | Known |
| Fish Consumption | Impaired | Known |
| Conditions Evaluated | | |
| Habitat/Hydrology | Unassessed | |
| Aesthetics | Unassessed | |

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

| | |
|--------------|--------------------------|
| Known: | PRIORITY ORGANICS (PCBs) |
| Suspected: | --- |
| Unconfirmed: | --- |

Source(s) of Pollutant(s)

| | |
|--------------|-------------------------|
| Known: | LANDFILL/LAND DISPOSAL. |
| Suspected: | --- |
| Unconfirmed: | --- |

Management Information

| | |
|----------------------------|---|
| Management Status: | Strategy Implementation Scheduled or Underway |
| Lead Agency/Office: | DEC/FWMR |
| IR/305(b) Code: | Impaired Water Requiring a TMDL (IR Category 5) |

Further Details

Overview

Canadice Lake is assessed as an impaired waterbody due to fish consumption that is known to be impaired by PCBs from a hazardous waste site. All other uses in the lake are considered to be fully supported.

Use Assessment

Canadice Lake is a Class AA waterbody, suitable for water supply, public bathing, general recreation use and support of aquatic life. The waterbody is also designated as a cold water (trout) fishery.

Public water supply use of Canadice Lake is fully supported. The waterbody is used as a portion of the public supply for the City of Rochester which serves a population of 210,000. The most recent annual water quality report indicates no contaminants in finished (treated) water exceed regulatory limits. A Source Water Assessment by the NYSDOH conducted in the early 2000s found some elevated susceptibility to contamination due to agricultural and other activities in the watershed, however none were particularly noteworthy. It is also 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 level of susceptibility is also typical of many water supplies that experience no impacts to water supply use and reflects the need to protect the resource. (NYSDOH, Source Water

Assessment Program, 2005)

Aquatic life is considered to be fully supported based on DFWMR assessments that indicate a healthy cold water fishery. Fishery surveys reveal a good lake trout population. Stocking of lake trout, brown trout and rainbow trout continues today. The lake is best suited for trout and smallmouth bass, it also provides significant fishing opportunities for largemouth bass and chain pickerel in its limited, shallow water habitat. Similarly, panfish such as rock bass, yellow perch, bluegills, pumpkinseeds and bullhead, are also important contributors to the fishery. (DEC/DFWMR, Region 8, January 2015)

There is no evidence of recreation use impacts in Canadice Lake, consistent with relatively low lake productivity, high water clarity, and the lack of invasive species and/or excessive aquatic vegetation. Depressed deep water oxygen levels have been noted, although no impacts have been measured or reported. (DEC/DOW, BWAM/LMAS, March 2014)

Fish consumption in Canadice Lake is impaired due to a NYS DOH health advisory that recommends eating no larger lake trout (greater than 23 inches) and no more than one meal per month of smaller lake trout or brown trout of any size because of elevated PCBs. The source of this contamination is considered to be the result of past industrial hazardous waste site activity. The advisory for this waterbody was first issued prior to 1998-99. (NYS DOH Health Advisories and DEC/FWMR, Habitat, January 2014)

Water Quality Information

Water quality sampling of Canadice Lake was conducted through a 1990 NYSDEC Finger Lakes water quality study. Results of this sampling published in 2001 indicate the lake is best characterized as oligomesotrophic, or moderately unproductive. Chlorophyll/algal levels are well below criteria corresponding to impacted recreational uses, while phosphorus concentrations are typically low. Lake clarity measurements indicate water transparency measurements consistently exceed the recommended minimum criteria for swimming beaches. Readings of pH fall within the range established in state water quality standards for protection of aquatic life. (DEC/DOW, BWAM/LMAS, May 2006)

Source Assessment

The source of PCBs in the lake appear to be an electrical component dump, was identified in 1985 and was remediated under the State Superfund program. There are no other apparent sources of pollutants to the waterbody.

Management Actions

Due to the water supply use of the lake, a fairly stringent watershed protection program and lake use restrictions are in place for the Lake. Local stakeholders (municipal water supplier) – with input from Regional DOW staff – should continue to promote watershed efforts to protect the water supply use.

Section 303(d) Listing

Canadice Lake is included on the current (2016) NYS Section 303(d) List of Impaired/TMDL Waters. The waterbody is included on Part 2b of the List as an impaired waterbody due to fish consumption restrictions requiring TMDL development for PCBs. This waterbody was first listed on the 1998 List. (DEC/DOW, BWAM, January 2016)

Segment Description

This segment includes the total area of the entire Lake. The waters of the Lake are Class AA(TS).

Tribs to Canadice Lake (0402-0069)

Unassessed

Waterbody Location Information

Revised: 7/30/2015

| | | | |
|-------------------------|---|------------------------|----------------|
| Water Index No: | Ont 117- 27-34-11-P43- | Water Class: | C |
| Hydro Unit Code: | Headwaters Honeoye Creek (0413000302) | Drainage Basin: | Genesee River |
| Water Type/Size: | River/Stream 27.3 Miles | Reg/County: | 8/Ontario (35) |
| Description: | entire length of all tribs to Canadice Lake | | |

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

These Canadice Lake Tribes segment 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 Canadice Lake. Tribs within this segment are Class C.

Hemlock Lake (0402-0011)

No Known Impacts

Waterbody Location Information

Revised: 10/9/2015

Water Index No: Ont 117- 27-34-P44
Hydro Unit Code: Headwaters Honeoye Creek (0413000302)
Water Type/Size: Lake/Reservoir 2074 Acres
Description: entire lake

Water Class: AA(T)
Drainage Basin: Genesee River
Reg/County: 8/Livingston (26)

Water Quality Problem/Issue Information

| Uses Evaluated | Severity | Confidence |
|------------------|-----------------|-------------|
| Water Supply | Fully Supported | Known |
| Public Bathing | Fully Supported | Known |
| Recreation | Fully Supported | Known |
| Aquatic Life | Fully Supported | Known |
| Fish Consumption | Fully Supported | Unconfirmed |

Conditions Evaluated

| | |
|-------------------|------|
| Habitat/Hydrology | Good |
| Aesthetics | Good |

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: No Action Needed
Lead Agency/Office: ext/WQCC
IR/305(b) Code: Water Attaining All Standards (IR Category 1)

Further Details

Overview

Hemlock Lake is assessed as having no known impacts; all evaluated uses are considered to be fully supported.

Use Assessment

Hemlock Lake is a Class AA waterbody, suitable for water supply, public bathing, general recreation use and support of aquatic life. The waterbody is also designated as a cold water (trout) fishery.

Public water supply use of Hemlock Lake is fully supported. The waterbody is used as a portion of the public supply for the City of Rochester which serves a population of 210,000. The most recent annual water quality report indicates no contaminants in finished (treated) water exceed regulatory limits. A Source Water Assessment by the NYSDOH conducted in the early 2000s found some elevated susceptibility to contamination due to agricultural and other activities in the watershed, however none were particularly noteworthy. It is also 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 level of susceptibility is also typical of many water supplies that experience no impacts to water supply use and reflects the need to protect the resource. (NYSDOH, Source Water Assessment Program, 2005)

Aquatic life is considered to be fully supported based on DFWMR assessments that indicate a healthy cold water fishery. Currently, Hemlock's salmonid fishery consists of lake trout, brown trout, rainbow trout and landlocked salmon. Good populations of smelt and alewives provide excellent trout and salmon growth. Annual stocking by DEC sustains the lake trout, brown trout, and landlocked salmon populations. The rainbow trout fishery is supported by natural reproduction from Springwater Creek. The Lake's warmwater sportfishery includes smallmouth bass, largemouth bass and chain pickerel, as well as various panfish. (DEC/DFWMR, Region 8, January 2015)

There is no evidence of recreation use impacts in Hemlock Lake, consistent with relatively low lake productivity, high water clarity, and the lack of invasive species and/or excessive aquatic vegetation. Depressed deep water oxygen levels have been noted, although no impacts have been measured or reported. (DEC/DOW, BWAM/LMAS, March 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 Hemlock Lake was conducted through a 1990 NYSDEC Finger Lakes water quality study. Results of this sampling published in 2001 indicate the lake is best characterized as oligomesotrophic, or moderately unproductive. Chlorophyll/algal levels are well below criteria corresponding to impacted recreational uses, while phosphorus concentrations are typically low. Lake clarity measurements indicate water transparency measurements consistently exceed the recommended minimum criteria for swimming beaches. Readings of pH fall within the range established in state water quality standards for protection of aquatic life. (DEC/DOW, BWAM/LMAS, May 2006)

Source Assessment

There are no apparent sources of pollutants to the waterbody.

Management Actions

Due to the water supply use of the lake, a fairly stringent watershed protection program and lake use restrictions are in place for the Lake. Local stakeholders (municipal water supplier) – with input from Regional DOW staff – should continue to promote watershed efforts to protect the water supply use.

Section 303(d) Listing

Hemlock Lake is not included on the current (2016) NYS Section 303(d) List of Impaired/TMDL Waters. There are no impacts/impairments that would justify the listing of this waterbody. (DEC/DOW, BWAM/WQAS, January 2016)

Segment Description

This segment includes the total area of the entire Lake. The waters of the Lake are Class AA(T).

Minor Tribs to Hemlock Lake (0402-0043)

Unassessed

Waterbody Location Information

Revised: 9/3/2015

Water Index No: Ont 117- 27-34-P44-
Hydro Unit Code: Headwaters Honeoye Creek (0413000302)
Water Type/Size: River/Stream 26.5 Miles
Description: entire length of selected/smaller tribs to Hemlock Lake

Water Class: C
Drainage Basin: Genesee River
Reg/County: 8/Livingston (26)

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

The Hemlock Lake Tribs segment 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, January 2016)

Segment Description

This segment includes the total length of selected/smaller tribs to Hemlock Lake. Tribs within this segment are Class C. Springwater Creek (-7) is listed separately.

Springwater Creek and minor tribs (0402-0070)

No Known Impacts

Waterbody Location Information

Revised: 09/30/2016

| | | | |
|-------------------------|---------------------------------------|------------------------|-------------------|
| Water Index No: | Ont 117- 27-34-P44-7 | Water Class: | C |
| Hydro Unit Code: | Headwaters Honeoye Creek (0413000302) | Drainage Basin: | Genesee River |
| Water Type/Size: | River/Stream 49.5 Miles | Reg/County: | 8/Livingston (26) |
| Description: | stream and selected/smaller tribs | | |

Water Quality Problem/Issue Information

| Uses Evaluated | Severity | Confidence |
|------------------|-----------------|-------------|
| Water Supply | N/A | - |
| Public Bathing | N/A | - |
| Recreation | Fully Supported | Suspected |
| Aquatic Life | Fully Supported | Suspected |
| 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: | --- |

Source(s) of Pollutant(s)

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

Management Information

| | |
|----------------------------|---|
| Management Status: | Verification of Problem Severity Needed |
| Lead Agency/Office: | DOW/BWAM |
| IR/305(b) Code: | Water Attaining All Standards (IR Category 1) |

Further Details

Overview

Springwater Creek is assessed as having no known impacts; all evaluated uses are considered to be fully supported. However, this assessment is based on older data and sampling to verify conditions is recommended.

Use Assessment

Springwater 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. The waterbody is also designated as a cold water (trout) fishery.

Aquatic life was previously found to experience no known impacts, however due to the age of the data (more than 10 years old) additional sampling is needed to verify current impacts/impairment/conditions. 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 other recreational uses. (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 Springwater Creek in Springwater was conducted in 1999. Sampling results indicated slightly impacted water quality conditions. Mayflies, stoneflies and caddisflies were all well-represented. Worms were present in significant numbers, however they were not pollution-tolerant species indicative of water quality problems. The impact was assessed as very minor, and aquatic life is considered to be fully supported in the stream. (DEC/DOW, BWAR/SBU, January 2001)

Source Assessment

There are no apparent continuing sources of significant impacts to the waterbody. Subsequent to the previous assessment construction of a sanitary sewer system to serve the Hamlet of Springwater and address raw discharges from failing and/or inadequate residential onsite septic systems was completed. The Springwater WWTP began operation in 2008.

Management Actions

Clean Water/Clean Air Bond Act and EPF grants were awarded to the Town of Springwater in 2003 to construct a sanitary sewer collection system to serve the Hamlet of Springwater, eliminating the direct discharge of raw or inadequately treated wastewater from failing septic systems to roadside ditches, the Lime Kiln Creek, Springwater Creek, and into Hemlock Lake. Although completion of the plant addressed the residential onsite wastewater issues, the plant discharges to a dry creek that flows to Springwater Creek at the confluence with Limekiln Creek. The plant has difficulty consistently meeting its discharge permit limits. Hemlock Lake is a major water supply source for the City of Rochester. (DEC/DOW, Region 8, August 2016)

Section 303(d) Listing

Springwater Creek 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 entire stream and selected/smaller tribs. The waters of the stream are Class C from the mouth to Limekiln Creek (-4), and Class C(TS) for the remainder of the reach. Tribs to this reach, including Reynolds Gully (-1) and Pokamoonshine Gulf (-11), are primarily Class C, C(TS). Limekiln Creek (-4) is listed separately.

Limekiln Creek and tribs (0402-0007)

Threatened

Waterbody Location Information

Revised: 09/30/2016

| | | | |
|-------------------------|---------------------------------------|------------------------|-------------------|
| Water Index No: | Ont 117- 27-34-P44-7-4 | Water Class: | C |
| Hydro Unit Code: | Headwaters Honeoye Creek (0413000302) | Drainage Basin: | Genesee River |
| Water Type/Size: | River/Stream 22.9 Miles | Reg/County: | 8/Livingston (26) |
| Description: | entire stream and tribs | | |

Water Quality Problem/Issue Information

| Uses Evaluated | Severity | Confidence |
|-----------------------------|-----------------|-------------|
| Water Supply | N/A | - |
| Public Bathing | N/A | - |
| 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: Unknown Pollutants (biological impacts)
 Unconfirmed: - - -

Source(s) of Pollutant(s)

Known: - - -
 Suspected: Unknown Source
 Unconfirmed: Municipal (Springwater WWTP)

Management Information

Management Status: No Action Needed
Lead Agency/Office: ext/WQCC
IR/305(b) Code: Water Attaining All Standards (IR Category 1)

Further Details

Overview

Limekiln Creek 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 a community that is most similar to natural conditions. A previous assessment cited failing and inadequate onsite septic systems as the source of pollutants, but the area has since been sewered and water quality results indicate good water quality.

Use Assessment

Limekiln Creek is considered 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 small portion of one trib is designated as Class AA, but this segment is not currently used 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 and/or with a community that is most similar to natural conditions. 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. Recreation was evaluated as stressed in

the previous assessment, but that assessment cited the source of the impacts as onsite septic systems that have since been addressed. Additional (bacteriological) sampling is needed to more fully evaluate other recreational uses. (DEC/DOW, BWAM/SBU, August 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 Limekiln Creek in Springwater (at Marvin Hill Road) was conducted as part of the RIBS biological screening effort 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. These results are consistent with sampling at the same site in 1999. Results from sampling at an alternate site conducted in 1995 reflected non-impacted conditions. (DEC/DOW, BWAM/SBU, January 2016)

Source Assessment

There are no apparent continuing sources of significant impact to the waterbody. Subsequent to the previous assessment, construction of a sanitary sewer system to serve the Hamlet of Springwater and address raw discharges from failing and/or inadequate residential onsite septic systems was completed. The Springwater WWTP began operation in 2008.

Management Actions

Clean Water/Clean Air Bond Act and EPF grants were awarded to the Town of Springwater in 2003 to construct the sanitary sewer collection system to serve the Hamlet of Springwater, eliminating the direct discharge of raw or inadequately treated wastewater from failing septic systems to roadside ditches, the Limekiln Creek, Springwater Creek, and into Hemlock Lake. Although completion of the plant addressed the residential onsite wastewater issues, the plant discharges to a dry creek that flows to Springwater Creek at the confluence with Limekiln Creek. The plant has difficulty consistently meeting its discharge permit limits. Hemlock Lake is a major water supply source for the City of Rochester. (DEC/DOW, Region 8, August 2016)

Section 303(d) Listing

Limekiln Creek 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 entire stream and all tribs. The waters of the stream are Class C(TS). Tribs to this reach are primarily Class C, with portion of one trib designated Class AA. The stream is also known as Green Gulf Brook.

Mill Creek and tribs (0402-0071)

Threatened

Waterbody Location Information

Revised: 9/3/2015

| | | | |
|-------------------------|---------------------------------------|------------------------|----------------|
| Water Index No: | Ont 117- 27-47 | Water Class: | C |
| Hydro Unit Code: | Headwaters Honeoye Creek (0413000302) | Drainage Basin: | Genesee River |
| Water Type/Size: | River/Stream 27.2 Miles | Reg/County: | 8/Ontario (35) |
| Description: | entire stream and tribs | | |

Water Quality Problem/Issue Information

| Uses Evaluated | Severity | Confidence |
|-----------------------------|-----------------|-------------|
| Water Supply | N/A | - |
| Public Bathing | N/A | - |
| 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: - - -

Source(s) of Pollutant(s)

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

Management Information

Management Status: No Action Needed
Lead Agency/Office: DOW/BWAM
IR/305(b) Code: Water Attaining All Standards (IR Category 1)

Further Details

Overview

Mill Creek 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, with minimal anthropogenic impacts and with a community that is most similar to natural conditions.

Use Assessment

Mill 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 portion of the waterbody is also designated as a cold water (trout) fishery.

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 and with a community that is most similar to natural conditions. 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/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 Mill Creek in Bristol (at Egypt Road) was conducted as part of the RIBS biological screening effort in 2009. 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/threatened and there are no other apparent water quality impacts. This evaluation is consistent with results from previous sampling at a nearby site conducted in 1999. (DEC/DOW, BWAM/SBU, January 2015)

Source Assessment

There are no apparent sources of pollutants to the waterbody. Biological results suggest natural conditions with minimal human disturbance.

Management Actions

No specific management actions have been identified or are deemed necessary for the waterbody.

Section 303(d) Listing

Mill Creek is not included on the current (2016) NYS Section 303(d) List of Impaired/TMDL Waters. There are no impacts/impairments that would justify the listing of this waterbody. (DEC/DOW, BWAM/WQAS, January 2016)

Segment Description

This segment includes the entire stream and all tribs. The waters of the stream are Class C from the mouth to Lake Road, Class C(TS) from Lake Road to unnamed trib (-15b) and Class C for the remainder of the reach. Tribs to this reach are Class C.

Honeoye Lake (0402-0032)

Impaired

Waterbody Location Information

Revised: 05/01/2018

Water Index No: Ont 117- 27-P57
Hydro Unit Code: Headwaters Honeoye Creek (0413000302)
Water Type/Size: Lake/Reservoir 1796.6 Acres
Description: entire lake

Water Class: AA
Drainage Basin: Genesee River
Reg/County: 8/Ontario (35)

Water Quality Problem/Issue Information

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

Conditions Evaluated

| | |
|-------------------|------|
| Habitat/Hydrology | Poor |
| Aesthetics | Poor |

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

Known: LOW D.O./OXYGEN DEMAND (OXYGEN DEMAND), NUTRIENTS (PHOSPHORUS), Algal/Plant Growth

Suspected: ---

Unconfirmed: ---

Source(s) of Pollutant(s)

Known: AGRICULTURE, Internal Loading, Urban/Storm Runoff

Suspected: On-site Septic Systems,

Unconfirmed: ---

Management Information

Management Status: Restoration/Protection Strategy Needed

Lead Agency/Office: DOW/BWRM

IR/305(b) Code: Impaired Water Requiring a TMDL (IR Category 5)

Further Details

Overview

Honeoye Lake is assessed as an impaired waterbody due to primary and secondary contact recreation uses that are known to be impaired by nutrients (phosphorus) and resulting low dissolved oxygen, and excessive algae. Nutrient loads may also impact water supply use and may contribute to lower dissolved oxygen levels in the lake, which may impact the support of aquatic life. Internal sources of nutrients are considered to be the source of impact. Internal loading, agricultural nonpoint sources and failing and/or inadequate on-site septic systems are considered to be likely sources of nutrients.

Use Assessment

Honeoye Lake is a Class AA waterbody, required to support and protect the best uses of a water supply source for drinking, culinary or food processing purposes, primary and secondary contact recreation, and fishing

Regarding water supply use, monitoring of water quality at the tap is conducted by local water suppliers and public health agencies. Water supply use in the waterbody may be impaired by elevated nutrient and algae levels in the lake that may result in the formation of disinfection by-products (DBPs) in finished potable water and make treatment to

meet drinking water standards more difficult. DBPs are formed when disinfectants such as chlorine used in water treatment plants react with organic matter (e.g. natural organic acids, single-celled organisms, decaying vegetation) present in the source water. Prolonged exposure to DBPs may increase the risk of certain health effects. (DEC/DOW, BWAM and NYSDOH, Public Water Supply, December 2014).

Primary and secondary contact recreation uses are impaired by elevated nutrients (phosphorus), excessive algae, and poor water clarity. These uses are also impaired by the frequent closure of Sandy Bottom beach by the county health department due to harmful algal blooms. These blooms have been well documented through an extensive shoreline surveillance program established by the Honeoye Lake Watershed Task Force and DEC. Secondary-contact recreation use (boating, fishing) is also affected by excessive aquatic vegetation and the presence of invasive plant growth (Eurasian watermilfoil, curly leafed pondweed). Dense rooted aquatic vegetation severely impacts recreational uses of the lake. Mechanical harvesting of vegetation, intended to allow access to the open waters for boating and bathing, has been conducted by Ontario County for several years. (DEC/DOW, BWAM, July 2015, April 2018)

There are no known restrictions to fishing use. Concerns have been noted regarding hypolimnetic oxygen depletion impacts on aquatic life support, although impacts to the fisheries have not been documented. Honeoye is a highly regarded fishing lake, with walleye, largemouth bass, smallmouth bass and chain pickerel as the dominant sportfish species. Walleye is currently stocked (8.7 million fry annually) into the lake by the DEC. In addition to its excellent sportfish opportunities, the lake also supports an outstanding panfish fishery for bluegill, pumpkinseed, yellow perch and black crappie. While it is likely that zebra mussels affect phytoplankton (algae and cyanobacteria) dynamics in the lake, the effect of these invasive mussels on other aquatic life is not known. (DEC/DFWMR, Region 8, July 2015, DEC/DOW, BWAM, April 2018)

Fish Consumption use is considered to be unassessed. There are no health advisories limiting the consumption of fish from this waterbody (beyond the general advice for all waters). However due to the uncertainty as to whether the lack of a waterbody-specific health advisory is based on actual sampling, fish consumption use is noted as unassessed. (NYS DOH Health Advisories and DEC/DOW, BWAM, April 2018)

Water Quality Information

Honeoye Lake was monitored through NYSDEC CSLAP in 2017. Major trophic indicators were monitored and show that Honeoye Lake is characterized as eutrophic. Chlorophyll-a levels often exceeded the DEC criteria indicating impaired conditions for potable water supplies, due to a high likelihood of producing potential carcinogens (based on chlorophyll a levels greatly exceeding 4 ug/l) during chlorination of raw water (Finger Lakes Study, 1990). Total phosphorus and clarity results correspond to impacted recreational uses.

In 2018, the hypolimnion of the lake showed low oxygen concentrations during winter (DEC FL Water Hub Winter Sampling 2018), and became hypoxic during the growing season. The cause(s) of this dissolved oxygen depletion are uncertain, although excessive growth of algae and cyanobacteria contribute to this oxygen depletion. The results from this study are summarized in the Water Quality Study of the Finger Lakes on the DEC website (<http://www.dec.ny.gov/lands/25576>). (DEC/DOW, BWAM, July 2015)

Since at least 2003, Honeoye Lake has been sampled by a partnership including the Honeoye Lake Watershed Task Force, Ontario County Soil and Water Conservation District, and the Community College of the Finger Lakes. Water quality monitoring included total and soluble phosphorus at multiple depths, chlorophyll a, and water clarity. The monitoring plan was expanded to include extensive harmful algae bloom (HABs) surveillance and monitoring at multiple locations on a weekly basis from early June through late October since 2013, in collaboration with NYSDEC and SUNY ESF. (DEC/DOW, BWAM/LMAS, July 2015).

Each of the Finger Lakes were added to the New York Citizens Statewide Lake Assessment Program (CSLAP) starting in 2017. Two sites in Honeoye Lake were sampled biweekly from June through September, and water quality results from this study showed significantly higher lake productivity (lower water clarity in response to higher phosphorus and chlorophyll *a* levels) that reported in the 1990s DEC study. These data also suggest slightly lower lake productivity in the northern sections of the lake. Continuing data collection will help to evaluate if these differences represent a long-term trend, and if water quality gradients are present in the lake. Summary reports from this sampling will be posted on the websites from DEC (<http://www.dec.ny.gov/lands/77853.html>) and the New York State Federation of Lake Associations (<http://www.nysfola.org/cslap/>).

The NYSDEC HABs Notification program confirmed the presence of HABs in Honeoye Lake during the recreational seasons of 2012 through 2017. In 2017, Honeoye Lake was on the HABs Notification list for 14 weeks. The blooms observed in 2017 ranged from small localized to widespread/lakewide blooms. More information about this program can be found at <http://www.dec.ny.gov/chemical/77118.html> (DEC/DOW, BWAM, April 2018).

Source Assessment

Based on the surrounding land use and other knowledge of the waterbody, internal loading, agriculture, onsite septic systems, and urban stormwater runoff are likely sources of nutrient pollution resulting in Low Dissolved Oxygen in the waterbody and increase in the growth of algae/plants. The lake is surrounded by development; in some areas a 2nd and 3rd tier of development has occurred. A perimeter sewer goes around 2/3 of lake. Most lakeside homes are connected but ones further back are not. Steep slopes and poor soils cause problems with on-site systems. (DEC/DOW, Region 8, 1996).

A (draft) TMDL for the lake in 2018 indicated that 92% of the phosphorus load from the lake comes from sediment release from internal (aerobic and anaerobic) sources. The bulk of this (> 85%) comes from aerobic release of nutrients from decay of organic sediments (DEC/DOW, BWAM, April 2018).

Management Actions

This waterbody is considered a highly valued water resource due to its drinking water supply classification and as a multi-use waterbody. On December 21, 2017, New York State Governor Andrew Cuomo announced a \$65 million initiative to combat harmful algal blooms in Upstate New York. Honeoye Lake was identified for inclusion in this initiative as it is vulnerable to HABs and is a critical drinking water source.

Section 303(d) Listing

Honeoye Lake is included on the current (2016) NYS Section 303(d) List of Impaired/TMDL Waters. The waterbody is included on Part 1 of the List as an impaired waterbody requiring TMDL development for phosphorus and corresponding low dissolved oxygen. (DEC/DOW, BWAM/WQAS, May 2017)

Segment Description

This segment includes the entire lake. The waters of the Lake are Class AA.

Minor Tribs to Honeoye Lake (0402-0045)

Unassessed

Waterbody Location Information

Revised: 09/30/2016

Water Index No: Ont 117- 27-P57-
Hydro Unit Code: Headwaters Honeoye Creek (0413000302)
Water Type/Size: River/Stream 39.1 Miles
Description: entire length of selected/smaller tribs to Honeoye Lake

Water Class: C
Drainage Basin: Genesee River
Reg/County: 8/Ontario (35)

Water Quality Problem/Issue Information

| Uses Evaluated | Severity | Confidence |
|----------------------|------------------|-------------|
| Water Supply | N/A | - |
| Public Bathing | N/A | - |
| Recreation | Fully Supporting | Unconfirmed |
| Aquatic Life | Fully Supporting | Unconfirmed |
| Fish Consumption | Fully Supporting | 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: ---

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. Sampling of one of these tribs found good water quality, while sampling at another was inconclusive. Based on the large number of tribs in this segment and the impairment in the lake, this waterbody should be considered to be unassessed.

Use Assessment

This tribs waterbody 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 considered to be fully supported based on biological sampling that shows non-impacted conditions, however due to the limited data (only one of the multiple tribs) additional sampling is needed to verify current conditions. 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/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

Biological (macroinvertebrate) assessments of an unnamed trib (-9a) in Richmond (at East Lake Road) was conducted as part of the RIBS biological screening effort in 2014 and 2009. Sampling results reflect good water quality. The most recent sampling revealed water quality to be in the slightly impacted range, but very near the non-impacted threshold; the 2009 results indicated clearly non-impacted conditions and very good water quality. Such samples are dominated by clean-water species and are most similar to a natural community with minimal human impacts. Aquatic life community is fully supported in this trib. Sampling at another unnamed trib (-12) reflected slight to moderate impacts, but low stream flow influenced this sample and it may not be representative of conditions. (DEC/DOW, BWAM/SBU, January 2015)

Source Assessment

There are no apparent sources of pollutants to the tribs in the waterbody that were sampled.

Management Action

No specific management actions have been identified for the waterbody. Based on the limited amount of sampling data (conclusive data for only one of the tribs to this multiple trib segment), additional sampling to verify conditions in other tribs of this waterbody segment is recommended.

Section 303(d) Listing

This multiple trib segment 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, however additional monitoring on additional trib segments is recommended. (DEC/DOW, BWAM/WQAS, January 2016)

Segment Description

This segment includes the total length of selected/smaller tribs to Honeoye Lake. Tribs within this segment are Class C. Honeoye Inlet Creek (-10) is listed separately.

Honeoye Inlet and tribs (0402-0044)

Threatened

Waterbody Location Information

Revised: 09/30/2016

| | | | |
|-------------------------|---------------------------------------|------------------------|----------------|
| Water Index No: | Ont 117- 27-P57-10 | Water Class: | C |
| Hydro Unit Code: | Headwaters Honeoye Creek (0413000302) | Drainage Basin: | Genesee River |
| Water Type/Size: | River/Stream 34.5 Miles | Reg/County: | 8/Ontario (35) |
| Description: | entire stream and tribs | | |

Water Quality Problem/Issue Information

| Uses Evaluated | Severity | Confidence |
|-----------------------------|-----------------|-------------|
| Water Supply | N/A | - |
| Public Bathing | N/A | - |
| Recreation | Fully Supported | Suspected |
| Aquatic Life | Threatened | Suspected |
| 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: Unknown Pollutants (biological impacts)
Unconfirmed: - - -

Source(s) of Pollutant(s)

Known: - - -
Suspected: - - -
Unconfirmed: Unknown Source

Management Information

Management Status: Verification of Problem Severity Needed
Lead Agency/Office: DOW/BWAM
IR/305(b) Code: Water Attaining All Standards (IR Category 1)

Further Details

Overview

Honeoye Inlet is assessed as being threatened due to aquatic life that is thought to be threatened by unspecified pollutants. The most recent biological sampling results show slightly impacted conditions that approach the nonimpacted range, with minimal anthropogenic impacts and with a community that is most similar to natural conditions. However that assessment is based on older and limited data and sampling to verify conditions is recommended.

Use Assessment

Honeoye Inlet 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 portion of the waterbody is also designated as a cold water (trout) fishery.

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 and with a community that is most similar to natural conditions. 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/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 Honeoye Inlet in Hunt Hollow (at Route 36) was conducted as part of the RIBS biological screening effort 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/threatened and there are no other apparent water quality impacts. This evaluation is consistent with results from previous sampling at a nearby site conducted in 1999 and 1995. (DEC/DOW, BWAR/SBU, January 2001)

Source Assessment

There are no apparent sources of pollutants to the waterbody. Biological results suggest natural conditions with minimal human disturbance.

Management Actions

No specific management actions have been identified or are deemed necessary for the waterbody. Additional sampling to verify current conditions in this waterbody segment is needed.

Section 303(d) Listing

Honeoye Inlet is not included on the current (2016) NYS Section 303(d) List of Impaired/TMDL Waters. There are no impacts/impairments that would justify the listing of this waterbody. (DEC/DOW, BWAM/WQAS, January 2016)

Segment Description

This segment includes the entire stream and all tribs. The waters of the stream are Class C from the mouth to unnamed trib (-12) and Class C(T) for the remainder of the reach. Tribs to this reach are Class C.