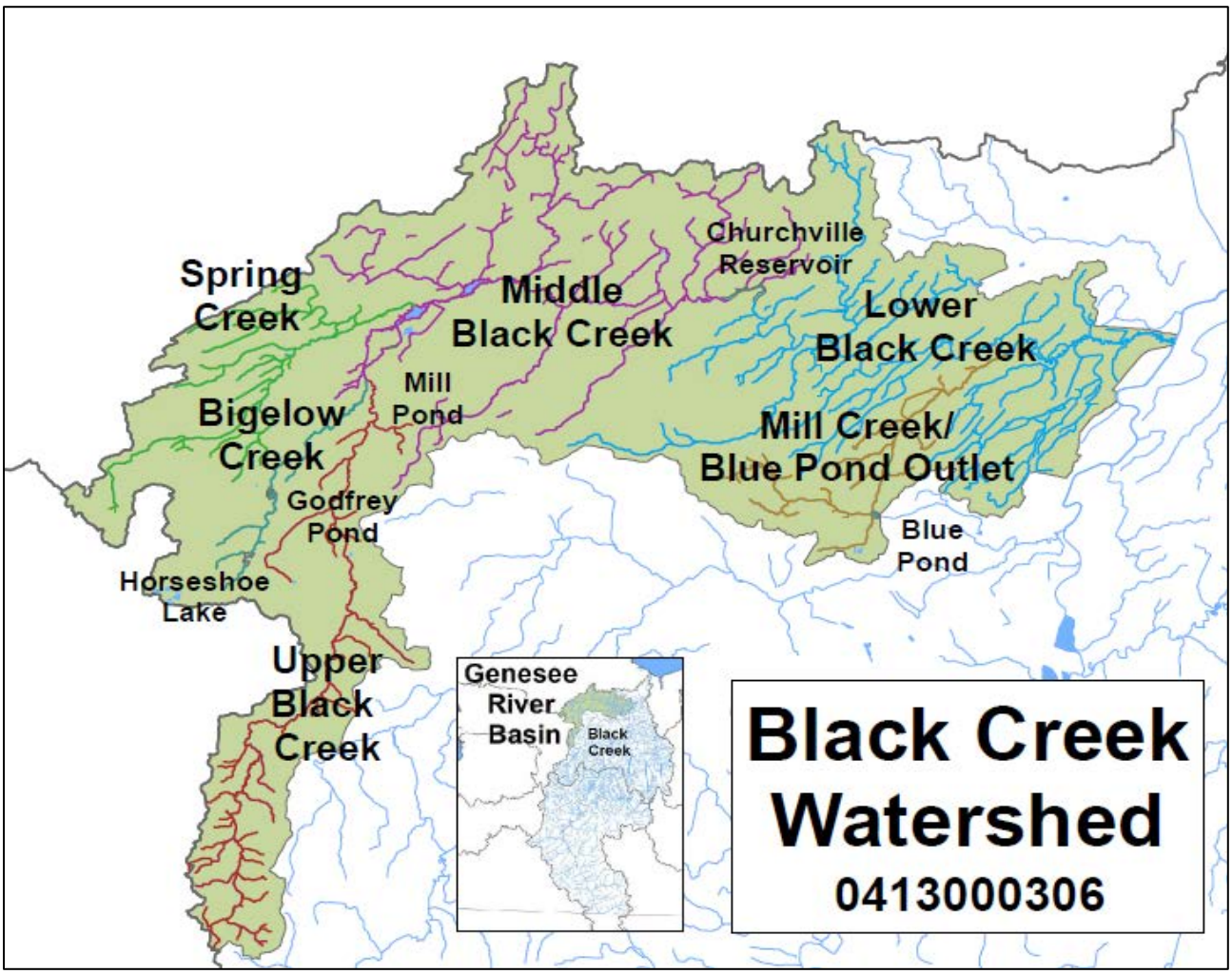

Black Creek Watershed
(0413000306)

Water Index Number	Waterbody Segment	Category
Ont 117- 19 (portion 1)	Black Creek, Lower, and minor tribs (0402-0033)	Impaired
Ont 117- 19 (portion 2)/P13	Churchville Reservoir (0402-0053)	Minor Impacts
Ont 117- 19 (portion 3)	Black Creek, Middle, and minor tribs (0402-0028)	Impaired
Ont 117- 19 (portion 4)	Black Creek, Upper, and minor tribs (0402-0048)	Impaired
Ont 117- 19- 4	Mill Creek/Blue Pond Outlet and tribs (0402-0049)	Impaired
Ont 117- 19- 4-P11	Blue Pond (0402-0079)	No Known Impacts
Ont 117- 19-28	Spring Creek and tribs (0402-0036)	Needs Verification
Ont 117- 19-28a-P 16	Mill Pond (0402-0050)	Impaired
Ont 117- 19-30	Bigelow Creek and tribs (0402-0016)	Impaired
Ont 117- 19-30-P 17	Godfrey Pond (0402-0051)	Unassessed
Ont 117- 19-30-P 18	Horseshoe Lake (0402-0052)	No Known Impacts

Black Creek, Lower, and minor tribs (0402-0033) Impaired

Waterbody Location Information

Revised: 11/01/2016

Water Index No:	Ont 117- 19 (portion 1)	**Water Class:**	C
Hydro Unit Code:	Black Creek (0413000306)	**Drainage Basin:**	Genesee River
Water Type/Size:	River/Stream 137.9 Miles	**Reg/County:**	8/Monroe (28)
Description:	stream and select/smaller tribs fr mouth to Churchville		

Water Quality Problem/Issue Information

Uses Evaluated	Severity	Confidence
Water Supply	N/A	-
Public Bathing	N/A	-
Recreation	Stressed	Known
Aquatic Life	Impaired	Known
Fish Consumption	Fully Supported	Unconfirmed
Conditions Evaluated		
Habitat/Hydrology	Unassessed	
Aesthetics	Fair	

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

Known:	NUTRIENTS (phosphorus), Aesthetics (debris), Silt/Sediment
Suspected:	- - -
Unconfirmed:	- - -

Source(s) of Pollutant(s)

Known:	AGRICULTURE, MUNICIPAL DISCHARGES (Churchville WWTP), Streambank Erosion
Suspected:	Industrial Discharges
Unconfirmed:	Urban/Storm Runoff

Management Information

Management Status:	Restoration/Protection Strategy Needed
Lead Agency/Office:	DOW/BWAM
IR/305(b) Code:	Impaired Water Requiring a TMDL (IR Category 5)

Further Details

Overview

This portion of Black Creek is assessed as an impaired waterbody due to aquatic life that is known to be impaired by nutrient loads from agricultural sources and municipal discharges. Silt/sediment loads from agricultural and other nonpoint sources may also be contributing to impacts.

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.

Aquatic life is evaluated as impaired based on biological sampling that shows significant impacts. This sampling can also be used to infer that there may be minor impacts to recreational (fishing) uses, although more specific sampling is necessary to confirm this is the case. Debris in the stream was also previously cited as contributing to flooding and recreational impacts. (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 Black Creek below Churchville (at Burnt Mill Road) was conducted as part of the RIBS monitoring effort in 2014 and 2004, and in North Chili and 2009. 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. The north Chili sample was assessed using alternate "sandy stream" criteria due to less than ideal sampling habitat and impoundment effects are thought to have contributed to the impacts at both sites (the reach and sampling locations are below the Churchville Reservoir), but municipal sources were also clearly indicated. Sampling of a Black Creek trib in North Chili (off Route 259) in 2009 found similarly impacted condition, but the sites was swampy and less than ideal habitat. (DEC/DOW, BWAM/SBU, January 2015)

This evaluation is consistent with results from previous sampling at the site conducted in 1999 and 1996. The 1996 sampling was part of RIBS Intensive Network sampling that found water quality exhibited high dissolved solids and elevated pH. Sediment sampling at the site found elevated levels of some metals and toxicity testing yielded positive results. (DEC/DOW, BWAM/SBU, January 2003)

Source Assessment

Based on the biologic community composition, surrounding land use and other knowledge of the waterbody, agricultural nonpoint sources are the most likely source(s) of nutrient and silt/sediment loadings to the waterbody. Municipal and possibly industrial discharges are also suspected sources. (DEC/DOW, BWAM, January 2015)

Management Actions

This portion of Black Creek is included on the Section 303(d) List for eventual development of a TMDL or other restoration strategy (see below). A draft TMDL for the Upper Black Creek Watershed has been developed. A Black Creek Watershed Characterization Report was recently released (Genesee/Finger Lakes Regional Planning Council 2012) and work on a companion Management Plan is ongoing. The plan will serve to build consensus among watershed municipalities, State agencies, non-governmental organizations and the public on the short and long term actions needed to protect and restore water quality and quantity in the watershed. (Draft Total Maximum Daily Load (TMDL) for Phosphorus in Upper Black Creek and Bigelow Creek (PDF), DEC/DOW, September 2013)

Section 303(d) Listing

This portion of Black Creek 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 development of a TMDL or similar strategy for phosphorus. This waterbody was first listed on the 2004 List. (DEC/DOW, BWAM, January 2016)

Segment Description

This segment includes the stream and selected/smaller tribs from the mouth to the Churchville dam. The waters of the segment, including Onion Creek (-8), Hotel Creek (-9), are primarily Class C and C(T). Mill Creek/Blue Pond Outlet (-4) is listed separately.

Churchville Reservoir (0402-0053) Minor Impacts

Waterbody Location Information

Revised: 11/01/2016

Water Index No: Ont 117- 19 (portion 2)/P13
Hydro Unit Code: Black Creek (0413000306)
Water Type/Size: Lake/Reservoir 53.9 Acres
Description: entire lake

Water Class: B
Drainage Basin: Genesee River
Reg/County: 8/Monroe (28)

Water Quality Problem/Issue Information

Uses Evaluated	Severity	Confidence
Water Supply	N/A	-
Public Bathing	Unassessed	-
Recreation	Stressed	Suspected
Aquatic Life	Unassessed	-
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: Nutrients (phosphorus), Silt/Sediment
Unconfirmed: - - -

Source(s) of Pollutant(s)

Known: Agriculture
Suspected: Urban/Storm Runoff
Unconfirmed: - - -

Management Information

Management Status: Restoration/Protection Strategy Needed
Lead Agency/Office: DOW/BWRM
IR/305(b) Code: Water Attaining Some Standards (IR Category 2)

Further Details

Overview

Churchville Reservoir is assessed as having minor impacts due to recreational uses that are thought to be stressed by nutrient loads from primarily agricultural sources. This reservoir is a run-of-river impoundment. Only limited sampling has been conducted on the reservoir; the assessment largely reflects sampling of Black Creek.

Use Assessment

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

Recreation use and public bathing are considered to be stressed due to elevated nutrients (phosphorus), excessive algae, and poor water clarity. Additional bacteriological sampling is needed to more fully evaluate the impact of pathogen levels on public bathing (swimming) use. (DEC/DOW, BWAM/LMAS, July 2015)

The reservoir is believed to support a warmwater fishery, although no specific fishery or biological reports are included in this assessment.

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 Churchville Reservoir (a single sample) was been conducted through the NYSDEC Lake Classification and Inventory (LCI) Program in 2009. Results of this sampling indicate the waterbody exhibits high phosphorus and chlorophyll levels. Clarity was also very limited, though was appeared to be a result of silt/sediment rather than algal growth. The reservoir is a run-of-river impoundment, and the overall assessment reflects conditions in Black Creek; also high in phosphorus load. (DEC/DOW, BWAM/LMAS, August 2015)

Source Assessment

Sources of nutrients and sediment loading to the waterbody are primarily attributed to agricultural activities throughout the Black Creek watershed. Nutrient loads from onsite (septic) systems and municipal and other point sources discharges in the upper Black Creek watershed are also thought to contribute to loads in the reservoir.

Management Actions

Portions of Black Creek are included on the Section 303(d) List for development of a TMDL or other restoration strategy (see below). A draft TMDL has been developed for the Upper Black Creek Watershed. The reductions outlined in this TMDL would also benefit water quality in the Churchville Reservoir. (Draft Total Maximum Daily Load (TMDL) for Phosphorus in Upper Black Creek and Bigelow Creek (PDF), DEC/DOW, September 2013)

Section 303(d) Listing

Churchville Reservoir is not included on the current (2016) NYS Section 303(d) List of Impaired/TMDL Waters. There is insufficient data to justify the listing of this waterbody at this time. However it should be acknowledged that the other reaches of Black Creek are listed as impaired by phosphorus. (DEC/DOW, BWAM/WQAS, January 2016)

Segment Description

This segment includes the total area of the reservoir. The waterbody is designated Class B.

Black Creek, Middle, and minor tribs (0402-0028) Impaired

Waterbody Location Information

Revised: 11/01/2016

Water Index No:	Ont 117- 19 (portion 3)	**Water Class:**	C
Hydro Unit Code:	Black Creek (0413000306)	**Drainage Basin:**	Genesee River
Water Type/Size:	River/Stream 103.1 Miles	**Reg/County:**	8/Genesee (19)
Description:	stream and select/smaller tribs fr Churchville to Byron		

Water Quality Problem/Issue Information

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

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

Known:	NUTRIENTS (phosphorus)
Suspected:	Algal/Plant Growth
Unconfirmed:	- - -

Source(s) of Pollutant(s)

Known:	Streambank Erosion
Suspected:	AGRICULTURE, MUNICIPAL DISCHARGES-
Unconfirmed:	Urban/Storm Runoff

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

This portion of Black Creek is assessed as an impaired waterbody due to aquatic life that is considered to be impaired by nutrient loads from agricultural sources and municipal discharges. Silt/sediment loads from agricultural and other nonpoint sources may also be contributing to impacts. Sampling within the actual bounds of this reach is limited by poor sampling habitat and access; the assessment reflects conditions in the upstream and downstream reaches of Black Creek.

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.

Aquatic life is evaluated as impaired based on biological sampling that shows significant impacts above and below this reach in Black Creek. This sampling can also be used to infer that there may be minor 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 Black Creek in Byron (at Route 237) and below Churchville (at Burnt Mill Road) was conducted as part of the RIBS monitoring effort in 2009 and 2004, respectively. 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. Impoundment effects are thought to have contributed to the impacts at the downstream site. Moderately impacted conditions were also found in North Branch Black Creek (-21) in Bergen (at Cook Road) in 2009. Sampling of anoth trib (-16) in Churchville (at Kendall Road) in 2014 found non-impacted conditions. (DEC/DOW, BWAM/SBU, January 2015)

This evaluation is consistent with results from previous sampling at the sites conducted in 1999 and 1996.

NYSDEC Rotating Intensive Basin Studies (RIBS) Intensive Network monitoring of Black Creek just above this segment in Byron (at State Route 237) was conducted in 2000. Biological Screening Network. Overall water quality at this site, which is downstream of the Byron (T) wastewater treatment plant, is fair. The macroinvertebrate community is moderately impacted, with nutrient and toxic inputs the likely causes. Total dissolved solids in the water column and cadmium in the bottom sediments are present at concentrations above the levels of concern. However, no fish advisories are in effect, and no acute or chronic toxicity was apparent in the water column from the three tests conducted in 2000. (DEC/DOW, BWAR/RIBS, January 2003).

Source Assessment

Based on the biologic community composition, surrounding land use and other knowledge of the waterbody, agricultural nonpoint sources are the most likely source(s) of nutrient and silt/sediment loadings to the waterbody. Municipal and possibly industrial discharges are also suspected sources. (DEC/DOW, BWAM, January 2015)

Management Actions

No specific management actions have been identified for the waterbody. This portion of Black Creek is included on the Section 303(d) List for eventual development of a TMDL or other restoration strategy (see below). A draft TMDL for the Upper Black Creek Watershed has been developed. A Black Creek Watershed Characterization Report was recently released (Genesee/Finger Lakes Regional Planning Council 2012) and work on a companion Management Plan is ongoing. The plan will serve to build consensus among watershed municipalities, State agencies, non-governmental organizations and the public on the short and long term actions needed to protect and restore water quality and quantity in the watershed. (Draft Total Maximum Daily Load (TMDL) for Phosphorus in Upper Black Creek and Bigelow Creek (PDF), DEC/DOW, September 2013)

Section 303(d) Listing

This portion of Black Creek is included on the current (2016) NYS Section 303(d) List of Impaired/TMDL Waters. The waterbody is included on Part 3c of the List as an impaired waterbody for which TMDL development is deferred pending implementation of other restoration measures. In this case, impairment in the waterbody is expected to be addressed by the proposed Upper Black Creek Phosphorus TMDL. This waterbody was first listed on the 2014 List. (DEC/DOW, BWAM, January 2016)

Segment Description

This segment includes the stream and selected/smaller tribs from the Churchville Reservoir to Bigelow Creek (-30) near Byron. The waters of the segment, including Bergen Creek (-17) and Robins Brook (-22) and Black Creek (-25), are primarily Class C and C(T). Small portions of some tribs (-14, -15) are Class B. Spring Creek (-28), Bigelow Creek (-30) and Churchville Reservoir (P13) are listed separately.

Black Creek, Upper, and minor tribs (0402-0048) Impaired

Waterbody Location Information

Revised: 11/01/2016

Water Index No: Ont 117- 19 (portion 4)
Hydro Unit Code: Black Creek (0413000306)
Water Type/Size: River/Stream 56.3 Miles
Description: stream and tribs above Byron

Water Class: C
Drainage Basin: Genesee River
Reg/County: 8/Genesee (19)

Water Quality Problem/Issue Information

Uses Evaluated	Severity	Confidence
Water Supply	N/A	-
Public Bathing	N/A	-
Recreation	Stressed	Known
Aquatic Life	Impaired	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: NUTRIENTS (phosphorus), Silt/Sediment
Suspected: - - -
Unconfirmed: - - -

Source(s) of Pollutant(s)

Known: - - -
Suspected: AGRICULTURE, MUNICIPAL DISCHARGES, Urban/Storm Runoff
Unconfirmed: - - -

Management Information

Management Status: Restoration/Protection Strategy Needed
Lead Agency/Office: DOW/Reg8
IR/305(b) Code: Impaired Water Requiring a TMDL (IR Category 5)

Further Details

Overview

This portion of Black Creek is assessed as an impaired waterbody due to aquatic life that is known to be impaired by nutrient loads from agricultural sources and municipal discharges. Silt/sediment loads from agricultural and other nonpoint sources may also be contributing to impacts.

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.

Aquatic life is evaluated as impaired based on biological sampling that shows significant impacts. This sampling can also be used to infer that there may be minor impacts to recreational (fishing) uses, although more specific sampling is necessary to confirm this is the case. Debris in the stream was also previously cited as contributing to flooding and recreational impacts. (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 Black Creek in South Byron (at Cockram Road) and in Byron (at Route 237) was conducted as part of the RIBS monitoring effort in 2012. Sampling at the Byron site was also conducted in 2009 and 2004. Sampling results reflect slight (Byron) to moderately (South Byron) impacted 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. (DEC/DOW, BWAM/SBU, January 2015)

This evaluation is more favorable that results from previous sampling at the site conducted in 1999 and 1996, which found moderately impacted conditions. NYSDEC Rotating Intensive Basin Studies (RIBS) Intensive Network monitoring of Black Creek in Byron (at State Route 237) was conducted in 2000. Overall water quality at this site, which is downstream of the Byron (T) wastewater treatment plant, was fair. Total dissolved solids in the water column and cadmium in the bottom sediments are present at concentrations above the levels of concern. However, no fish advisories are in effect, and no acute or chronic toxicity was apparent in the water column from the three tests conducted in 2000. (DEC/DOW, BWAR/RIBS, January 2003).

A biological (macroinvertebrate) assessment of Black Creek in South Byron was conducted in 1999. Sampling results indicated moderately impacted water quality conditions, with municipal and/or industrial waste discharges identified as the most likely causes. These findings were similar to those of a biomonitoring survey of Black Creek conducted in 1996. That survey found slight to moderate impacts from nutrient enrichment and organic wastes were indicated at sites along the reach. Prolific growths of algae in the stream were also noted. The Byron and South Byron WWTP discharges and nonpoint agricultural sources were identified as possible sources. (Biological Assessment of Black Creek, Bode et al, DEC/DOW, SBU, June 1997)

Source Assessment

A draft TMDL for phosphorus in the Upper Black Creek has identified agricultural activities and municipal wastewater discharges as the primary sources of nutrient loadings to the waterbody. South Byron Sewage District Sewage Treatment Plant and the Byron Sewer District Sewage Treatment Plant both discharge into Black Creek above the respective sampling locations. Agricultural and other nonpoint sources are the likely sources of silt/sediment loads. (DEC/DOW, BWAM, January 2015)

Management Actions

A draft TMDL for the Upper Black Creek Watershed has been developed to reduce nutrient loadings in the watershed. A Black Creek Watershed Characterization Report was recently released (Genesee/Finger Lakes Regional Planning Council 2012) and work on a companion Management Plan is ongoing. The plan will serve to build consensus among watershed municipalities, State agencies, non-governmental organizations and the public on the short and long term actions needed to protect and restore water quality and quantity in the watershed. (Draft Total Maximum Daily Load (TMDL) for Phosphorus in Upper Black Creek and Bigelow Creek (PDF), DEC/DOW, September 2013)

Section 303(d) Listing

This portion of Black Creek 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 development of a TMDL or similar strategy for phosphorus; a draft TMDL has been proposed. This waterbody was first listed on the 2004 List. (DEC/DOW, BWAM, January 2016)

Segment Description

This segment includes the entire stream and all tribs above Bigelow Creek (-30) near Byron. The waters of this segment are Class C.

Mill Creek/Blue Pond Outlet and tribs (0402-0049) Impaired

Waterbody Location Information

Revised: 11/01/2016

Water Index No: Ont 117- 19- 4
Hydro Unit Code: Black Creek (0413000306)
Water Type/Size: River/Stream 29.2 Miles
Description: entire stream and tribs

Water Class: C
Drainage Basin: Genesee River
Reg/County: 8/Monroe (28)

Water Quality Problem/Issue Information

Uses Evaluated	Severity	Confidence
Water Supply	N/A	-
Public Bathing	N/A	-
Recreation	Stressed	Suspected
Aquatic Life	Impaired	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: NUTRIENTS (PHOSPHORUS)
Unconfirmed: - - -

Source(s) of Pollutant(s)

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

Management Information

Management Status: Restoration/Protection Strategy Needed
Lead Agency/Office: DOW/Reg8
IR/305(b) Code: Impaired Water Requiring a TMDL (IR Category 5)

Further Details

Overview
Mill Creek/Blue Pond Outlet is assessed as an impaired waterbody due to aquatic life that is known to be impaired. No specific pollutant or sources have been identified, but land use suggests agricultural sources contribute to the impacts.

Use Assessment
Mill Creek Blue Pond 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 impaired based on biological sampling that shows significant impacts. This sampling can also be used to infer that there may be minor 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/Blue Pond Outlet in Wheatland (at Wheatland Center Road) and in Scottsville (at Blue Pond Manor) 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 these sampling sites exhibited some impoundment effects. These results are consistent with samples collected at the Wheatland site in 2009 and in Chili Center (at Stottle Road) in 2004. (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 source of nutrients to the waterbody are agricultural sources. Other nonpoint sources (golf course runoff and the NYS Thruway crossing) have also been noted as potential sources.

Management Actions
No specific management actions have been identified for the waterbody. The waterbody is included on the Section 303(d) List for eventual development of a TMDL or other restoration strategy (see below).

Section 303(d) Listing
Mill Creek/Blue Pond Outlet 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 development of a TMDL or other watershed loading plan for phosphorus. This waterbody was first listed on the 2012 List. (DEC/DOW, BWAM/, January 2016)

Segment Description
This segment includes the entire stream and all tribs. The waters of the segment are primarily Class C, with one trib, Blue Pond Inlet (-P11-1), designated Class C(T). Blue Pond (P11) is listed separately.

Blue Pond (0402-0079) No Known Impacts

Waterbody Location Information

Revised: 10/28/2015

Water Index No: Ont 117- 19- 4-P11
Hydro Unit Code: Black Creek (0413000306)
Water Type/Size: Lake/Reservoir 16.2 Acres
Description: entire lake

Water Class: B
Drainage Basin: Genesee River
Reg/County: 8/Monroe (28)

Water Quality Problem/Issue Information

Uses Evaluated	Severity	Confidence
Water Supply	N/A	-
Public Bathing	Fully Supported	Unconfirmed
Recreation	Fully Supported	Known
Aquatic Life	Fully Supported	Suspected
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
Blue Pond is assessed as having no known impacts; all evaluated uses are considered to be fully supported.

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

There is no evidence of recreation use impacts in Blue Pond, consistent with relatively low lake productivity, acceptable water clarity, and the lack of invasive species and/or excessive aquatic vegetation. Public bathing is also thought to be fully supported based on the evaluation of overall recreational use, however bacteriological sampling is needed to more fully evaluate swimming use. (DEC/DOW, BWAM/LCI, March 2014)

The waterbody is believed to support a warmwater fishery, although no specific fishery or biological reports are included in this assessment. Oxygen deficits in the bottom waters may stress some aquatic life; however, it appears that the oxygen-rich surface waters stay relatively cool throughout the summer. Additional biological studies would need to be conducted to fully evaluate impact to the aquatic life of the pond. (DEC/DOW, BWAM/LCI, 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 Blue Pond has been conducted through the NYSDEC Lake Classification and Inventory (LCI) program in 2009 and 2010. Results of this sampling indicate the lake is best characterized as mesotrophic, or moderately productive. Chlorophyll/algal levels are well below criteria corresponding to impaired/stressed recreational uses, while phosphorus concentrations are also typically low. 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, July 2015)

Source Assessment

There are no apparent sources of pollutants causing impacts to the waterbody. The presence of waterfowl on the pond are a potential source of pollutants. Previous concerns had been raised regarding impacts from agricultural activities in the watershed and onsite (septic) systems serving lakeshore homes, but no impacts from such sources are noted in the waterbody.

Management Actions

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

Section 303(d) Listing

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

Segment Description

This segment includes the total area of Blue Pond. The pond is designated Class B.

Spring Creek and tribs (0402-0036) Needs Verification

Waterbody Location Information

Revised: 10/7/2015

Water Index No: Ont 117- 19-28
Hydro Unit Code: Black Creek (0413000306)
Water Type/Size: River/Stream 39.2 Miles
Description: entire stream and tribs

Water Class: C
Drainage Basin: Genesee River
Reg/County: 8/Genesee (19)

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	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: Low D.O./Oxygen Demand

Source(s) of Pollutant(s)

Known: - - -
Suspected: Unknown Sources
Unconfirmed: - - -

Management Information

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

Further Details

Overview
Spring Creek is 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.

Use Assessment
Spring 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. Portions of the waterbody are also designated as a cold water (trout) fishery.

Aquatic life may experience significant impacts and may be impaired, however due to the limited data available additional sampling is needed to verify current impacts/impairment. 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, 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 Spring Creek in Byron (at Dryer Hill Road) was conducted as part of the RIBS biological screening effort in 2009. 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. Additional sampling is needed to confirm this result. (DEC/DOW, BWAM/SBU, January 2015)

Source Assessment

Based on the biologic community composition, impacts are consistent with toxic inputs; this suggests point sources may be a contributing source.

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 recommended.

Section 303(d) Listing

Spring Creek is not included on the current (2016) NYS Section 303(d) List of Impaired/TMDL Waters. There is currently insufficient information to justify the listing of this waterbody. But additional sampling is needed to verify possible impairment. (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 -3, Class C(T) from trib -3 to trib -7, and Class C for the remainder of the reach). Tribs to this reach/segment, including Mill Creek (-6), are also/primarily Class C and C(T).

Mill Pond (0402-0050) Impaired

Waterbody Location Information

Revised: 11/01/2016

Water Index No: Ont 117- 19-28a-P 16
Hydro Unit Code: Black Creek (0413000306)
Water Type/Size: Lake/Reservoir 6.1 Acres
Description: entire lake

Water Class: C
Drainage Basin: Genesee River
Reg/County: 8/Genesee (19)

Water Quality Problem/Issue Information

Uses Evaluated	Severity	Confidence
Water Supply	N/A	-
Public Bathing	N/A	-
Recreation	Impaired	Known
Aquatic Life	Stressed	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: NUTRIENTS (phosphorus)
Unconfirmed: - - -

Source(s) of Pollutant(s)

Known: - - -
Suspected: AGRICULTURE
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
Mill Pond is currently assessed as an impaired waterbody due to recreation uses that are known to be impaired. The impacts/impairments are the result of high nutrient loading from agricultural nonpoint sources.

Use Assessment
Mill 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.

Recreation uses are known to be impaired due to elevated nutrients (phosphorus), excessive algae, poor water clarity, and shoreline harmful algal blooms. Aesthetic conditions of the lake are considered to be poor due to excessive algae and shoreline algal blooms. (DEC/DOW, BWAM/LMAS, September 2015)

There is no available assessment of the fishery or other aquatic life in the pond.

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
Select the appropriate language below based on the source of water quality information.

Water quality sampling of Mill Pond was conducted through the NYSDEC Lake Classification and Inventory (LCI) Program in 2015 and 2014. Results of this sampling indicate eutrophic, or highly productive, conditions. Chlorophyll/algal levels were are well above criteria corresponding to impaired recreational uses, while phosphorus concentrations are also very high. Lake clarity measurements indicate water transparency that fails to meet the recommended minimum criteria for swimming beaches. (DEC/DOW, BWAM/LMAS, August 2016)

Source Assessment
Specific sources of pollutants to the waterbody have not been identified. Based on surrounding land use and other knowledge of the waterbody, the most likely source(s) of nutrients and other pollutants impacts to the waterbody is agricultural activities.

Management Actions
No specific management actions have been identified for the waterbody. The waterbody is proposed for inclusion on the next Section 303(d) List for eventual development of a TMDL or other restoration strategy (see below).

Section 303(d) Listing
Mill Pond is not included on the current (2016) NYS Section 303(d) List of Impaired/TMDL Waters. However this updated assessment suggests it is appropriate to include this waterbody on the next List. It is recommended that this waterbody be added to Part 1 of the List as an impaired waterbody requiring development of a TMDL to address phosphorus. (DEC/DOW, BWAM/WQAS, August 2016)

Segment Description
This segment includes the total area of Mill Pond. The pond is designated Class C.

Bigelow Creek and tribs (0402-0016) Impaired

Waterbody Location Information

Revised: 11/01/2016

Water Index No: Ont 117- 19-30
Hydro Unit Code: Black Creek (0413000306)
Water Type/Size: River/Stream 11.3 Miles
Description: entire stream and tribs

Water Class: C
Drainage Basin: Genesee River
Reg/County: 8/Genesee (19)

Water Quality Problem/Issue Information

Uses Evaluated	Severity	Confidence
Water Supply	N/A	-
Public Bathing	N/A	-
Recreation	Stressed	Suspected
Aquatic Life	Impaired	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: NUTRIENTS (phosphorus), Silt/Sediment
Suspected: - - -
Unconfirmed: Pathogens

Source(s) of Pollutant(s)

Known: Streambank Erosion
Suspected: AGRICULTURE, On-Site/Septic Syst
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
Bigelow Creek is assessed as an impaired waterbody having known impairment to aquatic life by excessive nutrient loads. Agricultural activities and onsite (septic) systems have been identified as contributing sources of nutrients and possibly pathogens.

Use Assessment
Bigelow 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 small portion of the waterbody is also designated as a cold water (trout) fishery.

Aquatic life is evaluated as impaired, although conditions range from impaired to minor impacts. 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, 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 Bigelow Creek in Stafford (at Griswold Road) was conducted as part of the RIBS biological screening effort in 2009. Sampling results reflect slightly (fair) but close to moderately impacted water quality, with the macroinvertebrate community altered from what is expected under natural conditions and indications of toxic inputs. 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. (DEC/DOW, BWAM/SBU, January 2015)

Previous biological sampling of Bigelow Creek in South Byron was conducted in 1999. These sampling results indicated more clearly moderately impacted water quality conditions. Nutrient enrichment and toxic inputs were indicated by Impact Source Determination. (DEC/DOW, BWAR/SBU, January 2001)

Source Assessment
A draft TMDL for phosphorus in the Upper Black Creek has identified agricultural activities and inadequate onsite (septic) systems as the primary sources of nutrient loadings to Bigelow Creek. Agricultural and other nonpoint sources are the likely sources of silt/sediment loads. (DEC/DOW, BWAM, January 2015)

Management Actions
A draft TMDL for the Upper Black Creek Watershed has been developed to reduce nutrient loadings in the watershed. A Black Creek Watershed Characterization Report was recently released (Genesee/Finger Lakes Regional Planning Council 2012) and work on a companion Management Plan is ongoing. The plan will serve to build consensus among watershed municipalities, State agencies, non-governmental organizations and the public on the short and long term actions needed to protect and restore water quality and quantity in the watershed. (Draft Total Maximum Daily Load (TMDL) for Phosphorus in Upper Black Creek and Bigelow Creek (PDF), DEC/DOW, September 2013)

Section 303(d) Listing
Bigelow Creek 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 for which a TMDL may be deferred pending verification of pollutant sources. This assessment suggests additional follow-up assessments may be appropriate to determine the most appropriate listing status. (DEC/DOW, BWAM/WQAS, January 2016)

Segment Description
This segment includes the entire stream and all tribs. The waters of the segment, including Thornell Brook (-3), are Class C and C(T). Mill Pond (-16), Godfrey Pond (-17) and Horseshoe Lake (-18) are listed separately.

Godfrey Pond (0402-0051) Unassessed

Waterbody Location Information

Revised: 10/28/2015

Water Index No: Ont 117- 19-30-P 17
Hydro Unit Code: Black Creek (0413000306)
Water Type/Size: Lake/Reservoir 23.8 Acres
Description: entire lake

Water Class: B
Drainage Basin: Genesee River
Reg/County: 8/Genesee (19)

Water Quality Problem/Issue Information

Uses Evaluated	Severity	Confidence
Water Supply	Unassessed	-
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. There are unverified reports of impacts related to aquatic plant growth.

Use Assessment
This waterbody segment is a Class B waterbody, suitable for public bathing, 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. The waterbody is privately owned by a hunting

and fishing club which oversees some lake management efforts. Baseline sampling to evaluate conditions in this waterbody segment is needed

Section 303(d) Listing
This trib 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 Godfrey Pond. The pond is designated Class B.

Horseshoe Lake (0402-0052) No Known Impacts

Waterbody Location Information

Revised: 11/01/2016

Water Index No: Ont 117- 19-30-P 18
Hydro Unit Code: Black Creek (0413000306)
Water Type/Size: Lake/Reservoir 24.8 Acres
Description: entire lake

Water Class: B
Drainage Basin: Genesee River
Reg/County: 8/Genesee (19)

Water Quality Problem/Issue Information

Uses Evaluated	Severity	Confidence
Water Supply	N/A	-
Public Bathing	Fully Supported	Unconfirmed
Recreation	Fully Supported	Known
Aquatic Life	Fully Supported	Suspected
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 with Insufficient Data (IR Category 3)

Further Details

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

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

There is no evidence of recreation use impacts in Horseshoe Lake, consistent with relatively low lake productivity, high water clarity, and the lack of invasive species and/or excessive aquatic vegetation. Public bathing is also thought to be fully supported based on the evaluation of overall recreational use, however bacteriological sampling is needed to more fully evaluate swimming use. (DEC/DOW, BWAM/LCI, March 2014)

The waterbody is believed to support a warmwater fishery, although no specific fishery or biological reports are included in this assessment. Additional biological studies would need to be conducted to fully evaluate impact to the aquatic life of the pond. (DEC/DOW, BWAM/LCI, 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 Horseshoe Lake was conducted through the NYSDEC Lake Classification and Inventory (LCI) program in 2009. Results of this single event sampling indicate the lake is best characterized as mesotrophic, or moderately productive. Chlorophyll/algal levels are well below criteria corresponding to impaired/stressed recreational uses, while phosphorus concentrations are also typically low. Lake clarity measurements indicate water transparency greatly exceed 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. There were no water quality issues present that suggested the lake was a candidate for more intensive sampling during the 2010 survey of the basin. (DEC/DOW, BWAM/LMAS, July 2015)

Source Assessment

There are no apparent sources of pollutants causing impacts to the waterbody.

Management Actions

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

Section 303(d) Listing

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

Segment Description

This segment includes the total area of Horseshoe Lake. The pond is designated Class B.