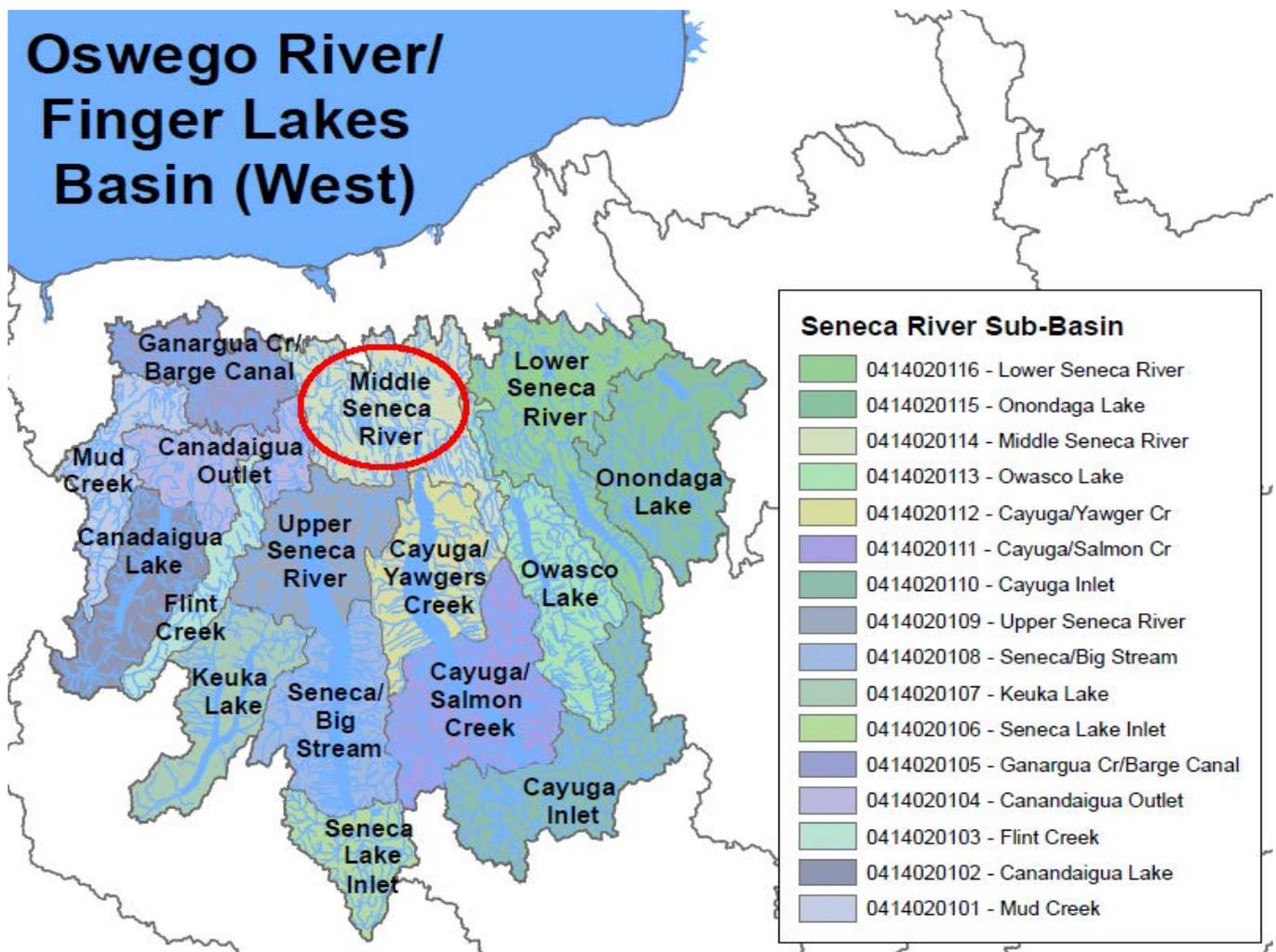


Oswego River/ Finger Lakes Basin (West)



Middle Seneca River Watershed (0414020114)

Water Index Number

Ont 66-12 (portion 5)
 Ont 66-12 (portion 5a)/P293
 Ont 66-12-44 thru 57 (selected)
 Ont 66-12-44-P221
 Ont 66-12-45-P222a thru I
 Ont 66-12-46-P222
 Ont 66-12-46-P222-
 Ont 66-12-50
 Ont 66-12-50- 8
 Ont 66-12-50-P225
 Ont 66-12-50-P225-
 Ont 66-12-51
 Ont 66-12-52
 Ont 66-12-52
 Ont 66-12-52- 1
 Ont 66-12-52- 1 thru 22 (selected)
 Ont 66-12-52-18
 Ont 66-12-52-18- P238,P240
 Ont 66-12-52-18-4a-P244

Waterbody Segment

Seneca River, Lower, Main Stem (0701-0051)
 Montezuma National Wildlife Refuge (0705-0045)
 Minor Tribs to Lower Seneca River (0701-0043)
 Mud Pond (0701-0044)
 Howland Island Game Refuge Ponds (0701-0045)
 Duck Lake (0704-0025)
 Tribs to Duck Lake (0701-0046)
 Crusoe Creek and tribs (0705-0028)
 Black Creek and tribs (0701-0047)
 Crusoe Lake (0701-0048)
 Tribs to Crusoe Lake/Butler Creek (0701-0049)
 Crane Brook and tribs (0704-0024)
 NYS Barge Canal/Clyde River (portion 6) (0704-0017)
 NYS Barge Canal/Clyde River (portion 7) (0704-0027)
 Black Brook and tribs (0704-0007)
 Minor Tribs to Clyde River(0704-0008)
 Pond Brook and tribs (0704-0004)
 Junius Ponds (0704-0028)
 Burnett Pond (0704-0029)

Category

UnAssessed
 UnAssessed
 UnAssessed
 Need Verific
 UnAssessed
 MinorImpacts
 UnAssessed
 UnAssessed
 UnAssessed
 UnAssessed
 Impaired Seg
 UnAssessed
 MinorImpacts
 Need Verific
 Need Verific
 Need Verific
 UnAssessed
 UnAssessed

Mud Pond (0701-0044)

Need Verific

Waterbody Location Information

Revised: 08/13/2007

Water Index No: Ont 66-12-44-P221
Hydro Unit Code: 04140201/280 **Str Class:** C
Waterbody Type: Lake
Waterbody Size: 19.3 Acres
Seg Description: entire pond

Drain Basin: Owsego-Seneca-Oneida
Seneca/Clyde Rivers
Reg/County: 7/Cayuga Co. (6)
Quad Map: VICTORY (I-14-1)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

Known: ---
Suspected: WATER LEVEL/FLOW
Possible: ---

Source(s) of Pollutant(s)

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

Resolution/Management Information

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

Resolution Potential: n/a

Further Details

Habitat and hydrology of Mud Pond may experience impacts as a result of modifications related to agricultural activities.

Local agencies have expressed concerns regarding the impact of agricultural activities in the mucklands around the pond. Hydrologic changes may be affecting uses of the waterbody. (Cayuga County WQMA, 2003)

Duck Lake (0704-0025)

MinorImpacts

Waterbody Location Information

Revised: 07/11/2007

Water Index No: Ont 66-12-46-P222	Drain Basin: Oswego-Seneca-Oneida	
Hydro Unit Code: 04140201/280	Str Class: C	Seneca/Clyde Rivers
Waterbody Type: Lake	Reg/County: 7/Cayuga Co. (6)	
Waterbody Size: 198.4 Acres	Quad Map: VICTORY (I-14-1)	
Seg Description: entire lake		

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Recreation	Stressed	Known

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

Known: OTHER SOURCE (naturally eutrophic)
Suspected: Agriculture
Possible: On-Site/Septic Syst, Streambank Erosion

Resolution/Management Information

Issue Resolvability: 5 (Not Resolvable, natural/conflicting use)
Verification Status: (Not Applicable for Selected RESOLVABILITY)
Lead Agency/Office: ext/WQCC
TMDL/303d Status: n/a

Resolution Potential: Low

Further Details

Recreational uses of Duck Lake are known to experience minor impacts due to algal and aquatic weed growth. The shallow lake is situated in a low-lying, marshy area and is largely considered to be naturally eutrophic. However, elevated nutrient loadings from various nonpoint sources contribute to these impacts.

Duck Lake has been sampled as part of the NYSDEC Citizen Statewide Lake Assessment Program (CSLAP) beginning in 1988 and continuing off and on through the present. An Interpretive Summary report of the findings of this sampling was published in 2006. These data indicate that the lake continues to be best characterized as eutrophic, or highly productive. However, the lake was much less productive in the last two years than in most previous sampling seasons. While these changes were probably within the normal variability for this lake, variable due to impacts from weather, long-term changes in the lake should continue to be evaluated. Phosphorus levels in the lake regularly exceed the state guidance values indicating impacted/stressed recreational uses. Corresponding transparency measurements typically fail to meet what is recommended for swimming beaches. Measurements of pH are somewhat high but typically fall within the state water quality range of 6.5 to 8.5. The lake water is moderately

colored but lake color does not appear to impact transparency. Oxygen levels do not appear to be significantly reduced at lower lake depths and internal nutrient cycling is not significant. Nitrate and ammonia levels do not appear to warrant a threat to the lake, and the primary component of nitrogen appears to be organic (within algae cells). Calcium levels are high enough to support zebra mussels, but they are not found at the lake, although the threat of introduction from nearby lakes is significant. (DEC/DOW, BWAM/CSLAP, March 2006)

Public perception of the lake and its uses is also evaluated as part of the CSLAP program. This assessment indicates recreational suitability of the lake to vary from "excellent" to "slightly impaired for most uses." The lake itself is most often described as having "definite algal greenness." This assessment is more favorable than expected given the water clarity. However the assessments appear to reflect limited impact from aquatic weed growth which only rarely grow to the lake surface. Aquatic plant survey to determine the presence of invasive plants have not been conducted on the lake. (DEC/DOW, BWAM/CSLAP, March 2006)

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

Crane Brook and tribs (0704-0024)

Impaired Seg

Waterbody Location Information

Revised: 07/11/2007

Water Index No: Ont 66-12-51
Hydro Unit Code: 04140201/150 **Str Class:** C
Waterbody Type: River
Waterbody Size: 79.9 Miles
Seg Description: entire stream and tribs

Drain Basin: Oswego-Seneca-Oneida
Seneca/Clyde Rivers
Reg/County: 7/Cayuga Co. (6)
Quad Map: MONTEZUMA (I-14-4)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
AQUATIC LIFE	Impaired	Suspected
Recreation	Stressed	Known
Aesthetics	Stressed	Known

Type of Pollutant(s)

Known: SALTS, Nutrients (phosphorus)
Suspected: Silt/Sediment
Possible: - - -

Source(s) of Pollutant(s)

Known: Agriculture, Urban/Storm Runoff
Suspected: OTHER SOURCE (salt spring)
Possible: - - -

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))
Verification Status: 3 (Cause Identified, Source Unknown)
Lead Agency/Office: DEC/Reg7
TMDL/303d Status: 3b*

Resolution Potential: Medium

Further Details

Aquatic life support and recreational use in Crane Brook are thought to be impaired due to impacts due to high conductance from a salt spring, which might be natural. Nonpoint source nutrient enrichment from agricultural activities in the watershed and urban runoff in and around Auburn also contribute to water quality impacts in the stream. Previous severe impacts appear to have been addressed with the elimination of an unpermitted food processing plant discharge to the stream.

This stream has been sampled numerous times since an unpermitted discharge to the creek was identified in July 2002. Most recently, a biological (macroinvertebrate) survey of Crane Brook at multiple sites above and below the discharge near Auburn was conducted in 2006. Sampling results indicated that the elimination of the discharge has resulted in improved water quality conditions. Sampling of the upstream site indicated slightly impacted conditions with nonpoint source nutrient enrichment being the primary influence on the assessment. Below the discharge water

quality improved from severely impacted in 2002, to moderately impacted in 2003 and 2004 after the cessation of the discharge. Assessments in 2005 and 2006 were also determined to be moderately impacted. During the 2005 sampling an effort was made to identify the source of continued high conductance in the stream. This effort revealed a tributary spring/pool of orange color and very high specific conductance (>100,000 microsiemen/cm). Natural salt springs are not uncommon in central New York, but it was not determined whether this seep is a natural occurrence or is related to human disturbance. The conclusions drawn from the multiple surveys is that the impacts from the previous discharge have been remediated, that impacts from agricultural activities and urban runoff in the watershed are likely to result in slight impacts to the stream and that implementation of practices to reduce these nonpoint sources would have benefits to water quality. However until and unless the impacts from the salt spring are addressed, the downstream reaches of the stream cannot be expected to improve to reflect conditions upstream. (DEC/DOW, BWAM/SBU, March 2007)

Local agencies have expressed concerns regarding other possible sources of impact including streambank erosion and agricultural nonpoint sources. (Cayuga County WQMA, 2003)

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

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NYS Barge Canal/Clyde River (portion 7) (0704-0027) MinorImpacts

Waterbody Location Information

Revised: 08/13/2007

Water Index No: Ont 66-12-52
Hydro Unit Code: 04140201/280 **Str Class:** C
Waterbody Type: River
Waterbody Size: 31.5 Miles
Seg Description: portion from Montezuma to Clyde
Drain Basin: Oswego-Seneca-Oneida
Seneca/Clyde Rivers
Reg/County: 8/Wayne Co. (59)
Quad Map: SAVANNAH (I-13-3)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

Known: ---
Suspected: D.O./OXYGEN DEMAND, NUTRIENTS
Possible: Pathogens

Source(s) of Pollutant(s)

Known: ---
Suspected: AGRICULTURE, Municipal
Possible: On-Site/Septic Syst

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))
Verification Status: 3 (Cause Identified, Source Unknown)
Lead Agency/Office: DOW/Reg8
TMDL/303d Status: n/a

Resolution Potential: Medium

Further Details

Aquatic life support and recreational uses in this portion of the NYS Barge Canal and Clyde River are known to experience impacts due to organic wastes from various nonpoint and/or discharges in the area.

A biological (macroinvertebrate) assessment of the Barge Canal/Clyde River in Clyde (at canal light 586) was conducted in 2001. Sampling results indicated moderately impacted water quality conditions. This represented a decline in water quality from previous sampling. The samples indicated organic (decomposable) wastes were the primary cause of the impacts. Zebra mussels, which have significant impact on other portions of the canal, did not appear to influence this sample. (DEC/DOW, BWAM/SBU, June 2004)

This segment includes the portion of the canal/river from the confluence with the Seneca River near Montezuma to Melvin Brook (-10) in Clyde. The waters of this portion of the river/canal are Class C. Tribs to this reach/segment are listed separately.

Black Brook and tribs (0704-0007)

Need Verific

Waterbody Location Information

Revised: 08/13/2007

Water Index No: Ont 66-12-52- 1
Hydro Unit Code: 04140201/260 **Str Class:** C
Waterbody Type: River
Waterbody Size: 39.3 Miles
Seg Description: entire stream and tribs

Drain Basin: Oswego-Seneca-Oneida
Seneca/Clyde Rivers
Reg/County: 8/Seneca Co. (50)
Quad Map: SENECA FALLS (J-13-2)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

Known: ---
Suspected: UNKNOWN TOXICITY
Possible: Nutrients

Source(s) of Pollutant(s)

Known: ---
Suspected: LANDFILL/LAND DISP.
Possible: Agriculture

Resolution/Management Information

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

Resolution Potential: Medium

Further Details

Aquatic life support and recreational uses in Black Brook may continue to experience minor impacts due to toxic pollutants from land disposal activities.

The stream flows through the Seneca Meadows Landfill. This is an active landfill site with a site monitor. Previous Part 360 violations have been issued in the past (1990s) due to leachate runoff. Current conditions and verification of any impacts need to be documented.

The barnyard and on-site system problems are isolated incidents.

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

Minor Tribs to Clyde River (0704-0008)

Need Verific

Waterbody Location Information

Revised: 08/13/2007

Water Index No: Ont 66-12-52- 1 thru 22 (selected) **Drain Basin:** Oswego-Seneca-Oneida
Hydro Unit Code: 04140201/260 **Str Class:** C Seneca/Clyde Rivers
Waterbody Type: River **Reg/County:** 8/Wayne Co. (59)
Waterbody Size: 159.8 Miles **Quad Map:** LYONS (I-13-4)
Seg Description: total length of selected tribs, fr Montezuma to Lyons

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

Known: ---
Suspected: D.O./OXYGEN DEMAND, Nutrients
Possible: ---

Source(s) of Pollutant(s)

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

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))
Verification Status: 1 (Waterbody Nominated, Problem Not Verified)
Lead Agency/Office: DOW/Reg8 **Resolution Potential:** Medium
TMDL/303d Status: n/a

Further Details

Aquatic life support and recreational uses in these tribs the Clyde River may continue to experience minor impacts due to nutrients and low dissolved oxygen from agricultural activities in the watershed.

Previous assessments noted that barnyard runoff and the dumping of excess milk in the stream had impact on the fishery as well as the aesthetics of the stream. These problems were not considered to be widespread at the time. Current conditions and verification of any impacts need to be documented.

This segment includes the total length of selected/smaller tribs to the Clyde River from the confluence with the Seneca River near Montezuma to Canandaigua Outlet in Lyons. Tribs within this segment, including White Brook (-2), Melvin Brook (-10) and Black Brook (-12), are Class C. Black Brook (-1), Pond Brook (-18) and Canandaigua Outlet are listed separately.

Pond Brook and tribs (0704-0004)

Need Verific

Waterbody Location Information

Revised: 08/13/2007

Water Index No: Ont 66-12-52-18
Hydro Unit Code: 04140201/260 **Str Class:** C
Waterbody Type: River
Waterbody Size: 31.3 Miles
Seg Description: entire stream and tribs

Drain Basin: Oswego-Seneca-Oneida
Seneca/Clyde Rivers
Reg/County: 8/Seneca Co. (50)
Quad Map: LYONS (I-13-4)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

Known: ---
Suspected: D.O./OXYGEN DEMAND
Possible: Nutrients

Source(s) of Pollutant(s)

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

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))
Verification Status: 1 (Waterbody Nominated, Problem Not Verified)
Lead Agency/Office: DOW/BWAM
TMDL/303d Status: 3a (Waterbody Requiring Verification of Impairment)

Resolution Potential: Medium

Further Details

Aquatic life support and recreational uses in Pond Brook may continue to experience minor impacts due to low dissolved oxygen and nutrients from agricultural activities in the watershed.

Previous assessments noted that barnyard runoff and silage leakage had impact on the fishery as well as the aesthetics of the stream. Fisheries surveys at the time documented impacts below the agricultural areas. Formal enforcement action was taken again one of the farms in 1990. Current conditions and verification of any impacts need to be documented.

Pond Brook is currently included on the NYS 2006 Section 303(d) List of Impaired Waters. The lake is included on Part 3a of the List as a Water Requiring Verification of Impairment.

This segment includes the entire stream and all tribs. The waters of the stream are primarily Class C. Some tribs (those connecting the Junius Ponds) are Class A. Other tribs to this reach/segment, including Dublin Brook, are also Class C.