

Waterbody Inventory for Oswego River Watershed

Water Index Number	Waterbody Segment	Category
Oswego River Watershed		
Ont 66 (portion 1)	Oswego River, Lower, Main Stem (0701-0022)	MinorImpacts
Ont 66 (portion 2)	Oswego River, Lower, Main Stem (0701-0006)	Impaired Seg
Ont 66 (portion 3)	Oswego River, Upper, Main Stem (0701-0021)	Need Verific
Ont 66- 1 thru 10 (selected)	Minor Tribs to Oswego River (0701-0023)	UnAssessed
Ont 66- 2	Black Creek and tribs (0701-0024)	NoKnownImpct
Ont 66- 2-P6,P7,P8	Paddys, Crooks and Mud Ponds (0701-0025)	UnAssessed
Ont 66- 3-P9	Lake Neatahwanta (0701-0018)	Impaired Seg
Ont 66- 3-P9-	Tribs to Lake Neatahwanta (0701-0050)	UnAssessed
Ont 66- 4	Waterhouse Creek and tribs (0701-0026)	MinorImpacts
Ont 66- 6	Ox Creek and tribs (0701-0027)	UnAssessed
Ont 66- 6-1-P13	Mud Lake (0701-0028)	UnAssessed

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Oswego River, Lower, Main Stem (0701-0022)

MinorImpacts

Waterbody Location Information

Revised: 06/05/2007

Water Index No: Ont 66 (portion 1) **Drain Basin:** Oswego-Seneca-Oneida
Hydro Unit Code: 04140203/010 **Str Class:** C Oswego River
Waterbody Type: River **Reg/County:** 7/Oswego Co. (38)
Waterbody Size: 2.9 Miles **Quad Map:** OSWEGO EAST (H-15-1)
Seg Description: portion from mouth to Oswego

Water Quality Problem/Issue Information (CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Recreation	Stressed	Suspected
Aesthetics	Stressed	Suspected

Type of Pollutant(s)

Known: ---
Suspected: AESTHETICS (floatables), PATHOGENS
Possible: ---

Source(s) of Pollutant(s)

Known: ---
Suspected: COMB. SEWER OVERFLOW
Possible: ---

Resolution/Management Information

Issue Resolvability: 3 (Strategy Being Implemented)
Verification Status: 5 (Management Strategy has been Developed)
Lead Agency/Office: DEC/Reg7 **Resolution Potential:** Medium
TMDL/303d Status: n/a

Further Details

Recreational uses in this portion of the Oswego River experience impacts due to pathogens, floatables and other pollutants from combined sewer overflows.

The City of Oswego is served by a system of combined sewers originally designed to convey both stormwater and sanitary wastewater to local waterways for disposal. Subsequently, these sewers were redirected to sewage treatment facilities which were designed for dry weather flow conditions. As a result, the system's conveyance and treatment capacity is exceeded during wet weather, resulting in the overflow and discharge of untreated wastewater to local waterbodies. Although the City implemented a number of sewer separation projects, there are still locations where combined sewage overflows (CSOs) exist. An April 2004 Consent Order with NYSDEC requires implementation of the City's 2002 Combined Sewer Overflow Long Term Control Plan. The Long Term Control Plan consists of a number of phased improvements to enable the City's wastewater conveyance and treatment facilities to handle the increased volume of combined sewage that would result from eliminating the existing overflows of combined sewage. The Phase I work includes various improvements to the East Side Wastewater Treatment Facility to increase the volume of combined sewage that can be treated by the facility. Phase II of the LTCP includes components which are necessary to capture and convey more flow to the plant and eliminate sewage overflows. (DEC/DOW, Region 7, 2006)

In July of 2006 Oswego Harbor was officially removed from the list of Great Lakes Areas of Concern. The harbor is the first and only one of 31 Areas of Concern in the US to be delisted. Pollution reduction activities in the Oswego Remedial Action Plan (RAP) to date that led to the delisting include remediation of State Superfund hazardous waste sites, upgrade of the Oswego WWTP and collection system, control of point and nonpoint water discharges, reduction of nutrients and stormwater runoff, implementation of river corridor enhancement projects and the Federal Energy Regulatory Commission's (FERC) re-licensing of the Oswego River power dam license to increase and better support the suitable fish habitat in the AOC. These actions have resulted in improved water quality, a more productive fishery, expanded recreational uses and a revitalized the river shoreline and downtown area. (DEC/DOW and USEPA, July 2006)

This segment includes the portion of the river from the mouth to the Lock 6 dam in Oswego. This portion of the river is Class C.

Oswego River, Lower, Main Stem (0701-0006)

Impaired Seg

Waterbody Location Information

Revised: / /

Water Index No: Ont 66 (portion 2) **Drain Basin:** Oswego-Seneca-Oneida
Hydro Unit Code: 04140203/010 **Str Class:** B Oswego River
Waterbody Type: River **Reg/County:** 7/Oswego Co. (38)
Waterbody Size: 12.1 Miles **Quad Map:** OSWEGO EAST (H-15-1)
Seg Description: portion from Oswego to Fulton

Water Quality Problem/Issue Information (CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Public Bathing	Threatened	Suspected
FISH CONSUMPTION	Impaired	Known
Aquatic Life	Stressed	Suspected
Aesthetics	Threatened	Suspected

Type of Pollutant(s)

Known: PRIORITY ORGANICS (PCBs)
Suspected: ---
Possible: Metals, Nutrients, Pathogens, Silt/Sediment

Source(s) of Pollutant(s)

Known: ---
Suspected: TOX/CONTAM. SEDIMENT
Possible: Agriculture, Hydro Modification, Streambank Erosion, Urban/Storm Runoff

Resolution/Management Information

Issue Resolvability: ()
Verification Status: (Not Applicable for Selected RESOLVABILITY)
Lead Agency/Office: **Resolution Potential:** n/a
TMDL/303d Status: 2b (Multiple Segment/Categorical Water, Fish Consumption)

Further Details

Fish consumption in this reach of the Oswego River is impaired by PCBs in river sediments assumed to be from past industrial discharges. Aquatic life support and recreational uses in the Oneida River are also known to experience minor impacts due to nutrient enrichment and periodic eutrophic conditions. Outflow of nutrients from Oneida Lake and from other nonpoint sources throughout the watershed are the likely source of the nutrients.

Fish consumption in the Oswego River from the Oswego Power Dam at Lock 6 to the upper dam at Fulton is impaired due to a NYSDOH health advisory that recommends eating no more than one meal per month of channel catfish because of elevated PCB levels. The original source of PCBs is considered to be past industrial discharges to the river. The advisory for the river was first issued prior to 1998-99. (2006-07 NYSDOH Health Advisories and DEC/DFWMR, Habitat, December 2006).

The lower portion of the Oswego River has long been identified as a International Joint Commission Great Lakes Area of Concern. In addition to fish consumption, hydromodification and other impacts to the Oswego River had been noted

as restricting uses of the river. However, the fish habitat and population recovery impacts are being addressed by the new United States Federal Energy Regulatory Commission's (FERC) Oswego River power dam license that commits to providing enhanced run-of-river flow throughout the year, thereby increasing the amount of suitable habitat for spawning and rearing within the river. Concurrently, management practices, stream flow, and water quality improvements have significantly reduced eutrophication and algae blooms in the river. As a result of these improvements, in July 2006 the USEPA in conjunction with other local, state, federal and Canadian partners removed the Lower Oswego River from among the 43 Great Lakes list of Areas of Concern. Though minor impacts from nutrient and other pollutants from nonpoint sources persist, the progress that led to delisting the Lower River as an AOC are also resulting in improvements along this reach as well. (DEC/DOW, BWAM and Great Lakes Program, July 2006)

Bathing opportunities on the river are somewhat limited by river access and hydrology (current). However the river supports a productive fishery and fishing and boating on the river are popular recreational uses. Local and state agencies are continuing to identify opportunities and develop approaches to better manage the resource to its full potential. (DEC/DOW, Region 7, 2000)

NYSDEC Rotating Intensive Basin Studies (RIBS) Routine Network monitoring (water chemistry) of the Oswego River in Minetto, Oswego County, is conducted annually at the Route 25 bridge. In addition, when RIBS Intensive Network monitoring is conducted in a targeted basin every five years, additional sampling methods are employed to gain an overall assessment of water quality. This Intensive Network sampling typically includes macroinvertebrate community analysis, sediment assessment, macroinvertebrate tissue analysis and toxicity testing, in addition to water chemistry. The most recent Intensive Network monitoring was conducted during 2001 (multiplates) and 2002. Biological (macroinvertebrate) sampling using multiplates revealed indicated slightly impacted water quality in 2001. This assessment represents no significant change from previous assessments. However zebra mussels were noted and are likely responsible for an increase in water clarity compared to previous years. Water column chemistry indicates mercury and phenol are present in concentrations that constitute parameters of concern; slightly exceeding assessment criteria in 2 of 6 samples in 2002. These results that are not unusual for a large river but conditions should continue to be monitored. Toxicity testing using water from this location detected no significant mortality or reproductive effects on the test organism. Based on the consensus of these established assessment methods, overall water quality at this site has minor impacts, but is supportive of the water's aquatic life support and recreational use.

This portion of Oswego River is included on the NYS 2006 Section 303(d) List of Impaired Waters. The lake is included on Part 2b of the List as a Fish Consumption Water due to PCB contamination.

This segment includes the portion of the river from the Lock 6 dam in Oswego to the foot of Nestle Avenue about 0.6 miles above the Lock 2 dam in Fulton. This portion of the river is Class B.

Oswego River, Upper, Main Stem (0701-0021)

Need Verific

Waterbody Location Information

Revised: 05/21/2007

Water Index No: Ont 66 (portion 3)
Hydro Unit Code: 04140203/010 **Str Class:** B
Waterbody Type: River
Waterbody Size: 16.4 Miles
Seg Description: portion from Fulton to Three Rivers

Drain Basin: Oswego-Seneca-Oneida
Oswego River
Reg/County: 7/Oswego Co. (38)
Quad Map: FULTON (H-15-4)

Water Quality Problem/Issue Information (CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

Known: ---
Suspected: NUTRIENTS
Possible: Pathogens, Silt/Sediment

Source(s) of Pollutant(s)

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

Resolution/Management Information

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

Resolution Potential: Medium

Further Details

Aquatic life support and recreational uses in this portion of the Oswego River are thought to experience minor threats due to nutrient enrichment that results in periodic eutrophic conditions. Agricultural and other nonpoint sources throughout the watershed are the likely source of the nutrients.

A biological (macroinvertebrate) assessment of this portion of the Oswego River below Phoenix (at Bouy 30) was conducted in 2001. Sampling results indicated slightly impacted water quality conditions. The assessment is based on three months of multiplate sampling. Zebra mussels were noted and are likely responsible for an increase in water clarity compared to previous sampling. Otherwise, the assessment represents no significant change from previous results for 1990 and 1995 sampling. Although these effects on the fauna are minor and aquatic life support is considered to be fully supported in the stream, nutrient biotic evaluation suggests the level of eutrophication is sufficient to threaten aquatic life support. (DEC/DOW, BWAM/SBU, June 2005)

This segment includes the portion of the river from the foot of Nestle Avenue about 0.6 miles above the Lock 2 dam in Fulton to the confluence of the Seneca and Oneida Rivers in Three Rivers. This portion of the river is Class B.

Black Creek and tribs (0701-0024)

NoKnownImpet

Waterbody Location Information

Revised: 05/21/2007

Water Index No:	Ont 66- 2	Drain Basin:	Owsego-Seneca-Oneida
Hydro Unit Code:	04140203/010	Str Class:	C
Waterbody Type:	River		Oswego River
Waterbody Size:	47.5 Miles	Reg/County:	7/Oswego Co. (38)
Seg Description:	entire stream and tribs	Quad Map:	OSWEGO EAST (H-15-1)

Water Quality Problem/Issue Information (CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
NO USE IMPAIRMNT		

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

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

Resolution/Management Information

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

Further Details

A biological (macroinvertebrate) assessment of Black Creek in Bundy Crossing (at Route 57) was conducted in 2001. Sampling results indicated slightly impacted water quality conditions. Nonpoint source nutrient enrichment was identified as the primary cause of the impacts to the stream. However, nutrient biotic evaluation determined these effects on the fauna to be minor. Aquatic life support is considered to be fully supported in the stream, and there are no other apparent water quality impacts to designated uses. (DEC/DOW, BWAM/SBU, June 2005)

This segment includes the entire stream and all tribs. The waters of the stream are Class C,C(T). Tribs to this reach/segment are Class C,C(T),C(TS).

Lake Neatahwanta (0701-0018)

Impaired Seg

Waterbody Location Information

Revised: 05/21/2007

Water Index No:	Ont 66- 3-P9	Drain Basin:	Owsego-Seneca-Oneida
Hydro Unit Code:	04140203/010	Str Class:	B
Waterbody Type:	Lake		Oswego River
Waterbody Size:	748.7 Acres	Reg/County:	7/Oswego Co. (38)
Seg Description:	entire lake	Quad Map:	FULTON (H-15-4)

Water Quality Problem/Issue Information (CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

Known: ALGAL/WEED GROWTH, NUTRIENTS (phosphorus), PATHOGENS
 Suspected: D.O./Oxygen Demand, Salts, Silt/Sediment
 Possible: - - -

Source(s) of Pollutant(s)

Known: AGRICULTURE, URBAN/STORM RUNOFF
 Suspected: Deicing (stor/appl)
 Possible: On-Site/Septic Syst

Resolution/Management Information

Issue Resolvability:	3 (Strategy Being Implemented)	
Verification Status:	5 (Management Strategy has been Developed)	
Lead Agency/Office:	ext/WQCC	Resolution Potential: Medium
TMDL/303d Status:	3a->1	

Further Details

Public bathing and other recreational uses in Lake Neatahwanta are impaired by nutrients, pathogens, excessive aquatic weed/algae growth and other pollutants attributed to agricultural and other nonpoint sources in the watershed. Aquatic life support and aesthetics also experience impacts as well.

Bathing beach closures on Lake Neatahwanta are the result of elevated coliform levels from contaminated urban/stormwater runoff. Other recreational uses (boating, fishing) are limited at times due to dense weed growth (extends 50-100 feet shore). The lake is shallow and typically eutrophic. As a consequence, the occurrence of toxic algae has increased and the diversity of aquatic vegetation has decreased.

Lake Neatahwanta is 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, however this updated assessment suggests that the suspected impairments are confirmed and the lake be moved to Part 1 of the List as Waterbody Requiring TMDL Development (or other strategy to attain water quality standards).

Lake Neatahwanta is also designated as the number one local priority in Oswego County's Water Quality Strategy report. The Lake Neatahwanta Reclamation Committee recently announced that the City of Fulton was awarded a Lake Neatahwanta project grant from the USEPA in the amount of \$433,700. Local agency matching funds bring the total available for the project to \$788,500. The objective of this project is to reduce the amount of sediment and nutrient pollutants entering Lake Neatahwanta and its tributaries. The majority of the grant funds will be made available to agricultural producers for the purpose of implementing resource conservation practices on their farms. The necessary planning will continue through the fall and winter with construction to begin in the spring. Under the guidance of the Committee, the project is being coordinated by the Central New York Regional Planning and Development Board (CNYRPDB) on behalf of the City of Fulton and Town of Granby. The CNYRPDB is also working closely with Cornell Cooperative Extension of Oswego County, the Oswego County Soil and Water Conservation District, and the U.S. Department of Agriculture Natural Resources Conservation Service. Local matching funds will be used for the construction of a road salt storage shed by the Town of Granby, the purchase of lakeshore property by the City of Fulton, ongoing water quality monitoring in the lake, and other means. (Oswego County WQCC, August 2005)

Waterhouse Creek and tribs (0701-0026)

MinorImpacts

Waterbody Location Information

Revised: 05/21/2007

Water Index No: Ont 66-4
Hydro Unit Code: 04140203/010 **Str Class:** C
Waterbody Type: River
Waterbody Size: 16.2 Miles
Seg Description: entire stream and tribs

Drain Basin: Oswego-Seneca-Oneida
Oswego River
Reg/County: 7/Oswego Co. (38)
Quad Map: FULTON (H-15-4)

Water Quality Problem/Issue Information (CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

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

Resolution/Management Information

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

Resolution Potential: Medium

Further Details

Aquatic life support and recreation uses in Waterhouse Creek are known to experience minor impacts due to nutrient enrichment from urban runoff and other nonpoint sources.

NYSDEC Rotating Intensive Basin Studies (RIBS) Intensive Network monitoring of Waterhouse Creek in Fulton, Oswego County, (at Fremont Street) was conducted in 2002. Intensive Network sampling typically includes macroinvertebrate community analysis, water column chemistry, sediment and invertebrate tissues analysis and toxicity evaluation. During this sampling the biological (macroinvertebrate) sampling results indicated slightly impacted water quality conditions. Urban runoff and siltation were the likely cause of the impacts to the fauna. Although aquatic life is supported in the stream, nutrient biotic evaluation indicates the level of eutrophication is sufficient to stress aquatic life support. Water column sampling revealed dissolved solids to be a parameter of concern. Mercury and iron exceeded assessment criteria in only one of 9 samples collected. Toxicity testing of the water column showed no significant mortality or reproductive impacts. (DEC/DOW, BWAM/RIBS, January 2005)

A biological (macroinvertebrate) assessment of Waterhouse Creek in Fulton (at Fremont Road) was also conducted in 2001 as part of the RIBS Biological Screening effort. Sampling results also indicated slightly impacted water quality.

(DEC/DOW, BWAM/SBU, January 2005)

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.