Waterbody Inventory
for
Western Ontario (Oak Orchard-Twelvemile) Watershed

Water Index Number	Waterbody Segment	Category
Tribs to Western Lake Ontario, Buck-Long-Cranberry Ponds		
Ont 120	Slater Creek and tribs (0301-0020)	**Impaired Seg**
Ont 120-P151d	Little Pond (0301-0021)	**MinorImpacts**
Ont 121	Round Pond Creek and tribs (0301-0022)	**MinorImpacts**
Ont 121-P152	Round Pond (0301-0018)	**MinorImpacts**
Ont 122-P153	Buck Pond (0301-0017)	**Impaired Seg**
Ont 122-P153- 2	Larkin Creek and tribs (0301-0023)	**Impaired Seg**
Ont 123-P154	Long Pond (0301-0015)	**Impaired Seg**
Ont 123-P154- 1	Northrup Creek and tribs (0301-0019)	**Threatened**
Ont 123-P154-2-P155	Cranberry Pond (0301-0016)	**Impaired Seg**
Tribs to Western Lake Ontario, Braddock Bay		
Ont 124	Buttonwood Creek and tribs (0301-0024)	**MinorImpacts**
Ont 124/125-P155a	Braddock Bay (0301-0010)	**MinorImpacts**
Ont 125	Salmon Creek and minor tribs (0301-0025)	**MinorImpacts**
Ont 125- 1	West/Moorman Creek and minor tribs (0301-0027)	**MinorImpacts**
Ont 125- 1 -1	West Creek, Upper, and tribs (0301-0026)	UnAssessed
Ont 125- 2	Brockport Creek and minor tribs (0301-0028)	**MinorImpacts**
Ont 125- 2- 1	Otis Creek and tribs (0301-0029)	UnAssessed
Ont 126 thru 129	Minor Tribs to Lake Ontario (0301-0030)	UnAssessed
NYS Barge Canal (portion 2c)	NYS Barge Canal (portion 2c) (0301-0008)	**MinorImpacts**
Tribs to Western Lake Ontario, Sandy Creek to Point Breeze		
Ont 130	Sandy Creek and minor tribs (0301-0006)	**MinorImpacts**
Ont 130- 1	East Branch and tribs (0301-0051)	**MinorImpacts**
Ont 130- 2	West Branch and tribs (0301-0052)	**MinorImpacts**
Ont 130- 2- 3-P162s	McCargo/Jefferson Lake (0301-0031)	UnAssessed
Ont 131	Yanty Creek and tribs (0301-0032)	UnAssessed
Ont 132 thru 137 (selected)	Minor Tribs to Lake Ontario (0301-0033)	UnAssessed
Ont 134	Bald Eagle Creek and tribs (0301-0034)	**Need Verific**
Oak Orchard Creek Watershed		
Ont 138 (portion 1)	Oak Orchard Cr, Lower, and minor tribs (0301-0004)	**MinorImpacts**
Ont 138 (portion 2)/P166	Waterport Pond (0301-0035)	UnAssessed
Ont 138 (portion 3)	Oak Orchard Cr, Middle, and minor tribs (0301-0005)	**MinorImpacts**
Ont 138 (portion 4)	Oak Orchard Cr, Upper, and tribs (0301-0014)	**MinorImpacts**
Ont 138- 1	Marsh Creek and tribs (0301-0036)	UnAssessed
Ont 138- 3	Otter Creek, Lower, and tribs (0301-0037)	**Impaired Seg**
Ont 138- 3	Otter Creek, Upper, and tribs (0301-0038)	UnAssessed
Ont 138- 3-P166h	Albion Reservoir No.2 (0301-0039)	UnAssessed
Ont 138- 9	Fish Creek and tribs (0301-0040)	**MinorImpacts**

...Western Ontario (Oak Orchard-Twelvemile) Watershed

Water Index Number	Waterbody Segment	Category
Oak Orchard Creek Watershed (con't)		
Ont 138-11d-P167	Glenwood Lake (0301-0041)	UnAssessed
Ont 138-P167o	Upper Stafford Marsh (0301-0042)	UnAssessed
NYS Barge Canal (portion 2b)	NYS Barge Canal (portion 2b) (0301-0074)	**MinorImpacts**
Tribs to Western Lake Ontario, Oak Orchard Creek to Eighteenmile Creek		
Ont 139 (portion 1)	Johnson Creek, Lower, and tribs (0301-0007)	**MinorImpacts**
Ont 139 (portion 2)/P172	Lyndonville Reservoir (0301-0043)	UnAssessed
Ont 139 (portion 3)	Johnson Creek, Upper, and minor tribs (0301-0044)	UnAssessed
Ont 139- 9	Jeddo Creek and minor tribs (0301-0045)	**MinorImpacts**
Ont 139- 9- 1-P177a	Middleport Reservoir (0301-0047)	UnAssessed
Ont 139- 9- 1-P177a-	Tribs to Middleport Reservoir (0301-0046)	UnAssessed
Ont 140 thru 146	Minor Tribs to Lake Ontario (0301-0048)	UnAssessed
Ont 141	Marsh Creek and tribs (0301-0049)	UnAssessed
Ont 144	Golden Hill Creek and tribs (0301-0050)	**Impaired Seg**
Eighteenmile Creek Watershed		
Ont 148	Eighteenmile Creek, Lower, and tribs (0301-0002)	**Impaired Seg**
Ont 148	Eighteenmile Creek, Middle, and tribs (0301-0054)	**Impaired Seg**
Ont 148	Eighteenmile Creek, Upp, and minor tribs (0301-0055)	**Impaired Seg**
Ont 148- 3	East Branch 18-mile Cr, Lower, and tribs (0301-0056)	**MinorImpacts**
Ont 148- 3	East Branch 18-mile Cr, Upper, and tribs (0301-0057)	**MinorImpacts**
Ont 148- 4	18-mile trib/The Gulf trib and tribs (0301-0058)	UnAssessed
Tribs to Western Lake Ontario, Eighteenmile Creek to Niagara River		
Ont 148a thru 151	Minor Tribs to Lake Ontario (0301-0059)	UnAssessed
Ont 149	Hopkins Creek and tribs (0301-0060)	**Impaired Seg**
Ont 152	East Branch 12-mile Cr, Lower, and tribs (0301-0061)	UnAssessed
Ont 152	East Branch 12-mile Cr, Upper, and tribs (0301-0062)	UnAssessed
NYS Barge Canal (portion 2a)	NYS Barge Canal (portion 2a) (0301-0073)	**NoKnownImpct**
Ont 152a	Twelvemile Creek, Lower, and tribs (0301-0011)	UnAssessed
Ont 152a	Twelvemile Creek, Upper, and tribs (0301-0063)	UnAssessed
Ont 152a..P190b	Bond Lake (0301-0012)	UnAssessed
Ont 152b thru 157	Minor Tribs to Lake Ontario (0301-0064)	UnAssessed
Ont 154	Sixmile Creek and tribs (0301-0065)	UnAssessed
Ont 156	Fourmile Creek, Lower, and tribs (0301-0066)	**Impaired Seg**
Ont 156	Fourmile Creek, Upper, and tribs (0301-0067)	UnAssessed

Slater Creek and tribs (0301-0020) Impaired Seg

Waterbody Location Information

Revised: 04/06/2004

Water Index No:	Ont 120			**Drain Basin:**	Lake Ontario
Hydro Unit Code:	04130001/100	**Str Class:**	C		Oak Orchard/12 Mile
Waterbody Type:	River			**Reg/County:**	8/Monroe Co. (28)
Waterbody Size:	7.6 Miles			**Quad Map:**	BRADDOCK HEIGHTS (H-10-4)
Seg Description:	entire stream and tribs				

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
FISH CONSUMPTION	Impaired	Known
AQUATIC LIFE	Impaired	Known
Habitat/Hydrolgy	Stressed	Known
Aesthetics	Stressed	Known

Type of Pollutant(s)

Known:	D.O./OXYGEN DEMAND, Aesthetics (floatables, odors), Priority Organics (PCBs, mirex, dioxin)
Suspected:	Water Level/Flow, Nutrients, Oil and Grease, Pathogens, Silt/Sediment
Possible:	Metals, Salts

Source(s) of Pollutant(s)

Known:	URBAN/STORM RUNOFF
Suspected:	TOX/CONTAM. SEDIMENT, Hydro Modification, Landfill/Land Disp.
Possible:	Atmosph. Deposition, Deicing (stor/appl)

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))
Verification Status: 4 (Source Identified, Strategy Needed)
Lead Agency/Office: DEC/Reg8 **Resolution Potential:** Medium
TMDL/303d Status: 3b (Waterbody Requiring Verification of Cause/Pollutant)

Further Details

Aquatic Life Support and recreational uses in Slater Creek are impaired by various water quality impacts attributed to urban runoff and suspected illegal discharges of wastewater. The habitat and hydrology of the stream are adversely impacted by channelizing/piping portions the stream and its use for stormwater conveyance. Trash, floatables, odors reduce the aesthetics of the stream. Fish consumption is also restricted as a result of a health advisory for Lake Ontario that extends to tribs up to the first impassable barrier.

A biological (macroinvertebrate) assessment of Slater Creek at Mount Read was conducted in 2004 and 1999. Sampling results indicated severely impacted water quality conditions. Sewage was strongly indicated as the primary cause of the impact, and sewage odors were noted during sampling. The invertebrate fauna was dominated by sewage-tolerant worms, midges, snails and sowbugs. No mayflies, stoneflies or caddisflies were found at the site. (DEC/DOW, BWAM/SBU, January 2006)

Biological assessments were also conducted on Fleming Creek, a trib of Slater Creek, in Greece in 2000. Sampling results indicated moderately impacted water quality conditions at a site at Britton Road, and slightly impacted conditions upstream at Latta Road. The invertebrate fauna was dominated by tolerant midges, worms, sowbugs and black flies. The community composition is consistent with organic waste inputs. (DEC/DOW, BWAM/SBU, January 2006)

Fish consumption advisories for Lake Ontario (and all tribs to the first barrier) also applies to this tributary water. A NYSDOH health advisory recommends eating no American eel, channel catfish, carp, chinook salmon, lake trout (over 25") or brown trout (over 20"). The advisory also recommends that consumption of white perch, white sucker, rainbow trout, smaller lake and brown trout, and coho salmon (over 25") be limited to no more than one meal per month. The fish consumption advisories are a result of PCB, mirex and dioxin contamination of lake sediments. The advisory for Lake Ontario was first issued prior to 1998-99. (2006-07 NYS DOH Health Advisories and DEC/DFWMR, Habitat, December 2006).

Nutrient, metals, salts, silts/sediments, oil and grease and pathogens inputs are typical of urban/stormwater runoff from the type of urban residential and commercial development in the watershed. Possible impacts from the adjacent Rochester Gas and Electric Russell Power Plant site (existing, lined coalpile and former landfill operation) are also a concern. Results of site investigations completed to date have indicated severe impacts, but the impacts have not been attributed to site leachate/runoff. An RG&E study has demonstrated that benthic macroinvertebrate impacts in the ash deposit area are similar to (if not less than) those in an upstream control area. The impacts/impairments appear to be the result of poor water quality originating upstream or factors unrelated to sediment quality in the vicinity of Russell Station. A pump and treat system to intercept, collect and pump leachate to the existing Russell Station wastewater treatment facility has been proposed to control the visible plume in the creek from the site. (Monroe County DOH/WQCC, May 2001)

This segment includes the entire stream and all tribs. The waters of the stream and tribs, including Fleming Creek (-1) are Class C. (May 2001)

Little Pond (0301-0021) MinorImpacts

Waterbody Location Information

Revised: 06/25/2007

Water Index No: Ont 120-P151d
Hydro Unit Code: 04130001/100 **Str Class:** C
Waterbody Type: Lake
Waterbody Size: 6.4 Acres
Seg Description: entire lake

Drain Basin: Lake Ontario
Oak Orchard/12 Mile
Reg/County: 8/Monroe Co. (28)
Quad Map: BRADDOCK HEIGHTS (H-10-4)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

Known: PRIORITY ORGANICS (PCBs, mirex, dioxin), Thermal Changes
Suspected: - - -
Possible: - - -

Source(s) of Pollutant(s)

Known: - - -
Suspected: POWER GENERATION, Other Source (migratory fish species)
Possible: - - -

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))
Verification Status: 4 (Source Identified, Strategy Needed)
Lead Agency/Office: DEC/FWMR **Resolution Potential:** Medium
TMDL/303d Status: n/a

Further Details

Aquatic life support in Little Pond are thought to experience impacts from a power plant cooling water discharge. Fish consumption is also restricted as a result of a health advisory for Lake Ontario that extends to tribs up to the first impassable barrier.

Fish consumption advisories for Lake Ontario (and all tribs to the first barrier) also applies to this tributary water. A NYSDOH health advisory recommends eating no American eel, channel catfish, carp, chinook salmon, larger lake trout (over 25") or larger brown trout (over 20"). The advisory also recommends that consumption of white sucker, rainbow trout, smaller lake and brown trout, and larger coho salmon (over 25") be limited to no more than one meal per month. White perch is limited to one meal per month East of Point Breeze, and eat none west of the point. The fish consumption advisories are a result of PCB, mirex and dioxin contamination of lake sediments. The advisory for this lake was first issued prior to 1998-99. (2006-07 NYS DOH Health Advisories and DEC/DFWMR, Habitat, December 2006).

A permitted cooling water discharge from the Rochester Gas and Electric Russell Station generating facility provides up to 95% of the pond flow through to the lake. The thermal impacts attributed to the discharge have a potential to

impact the aquatic community in the pond. However the facility is in compliance with SPDES permit limits and adequate water quality in the stream is being maintained. RGE recently added an oil/water separator to the treatment of the discharge to the pond. (Monroe County WQCC, May 2001)

The pond also receives inputs from Slater Creek which is significantly impacted by pollutants typical of urban/stormwater runoff. The outlet of the pond in monitored by Monroe County Environmental Health Laboratory for bacteriological water quality on a weekly basis during the summer recreational season. (Monroe County WQCC, May 2001)

Round Pond Creek and tribs (0301-0022) MinorImpacts

Waterbody Location Information

Revised: 06/25/2007

Water Index No: Ont 121
Hydro Unit Code: 04130001/100 **Str Class:** C
Waterbody Type: River
Waterbody Size: 38.3 Miles
Seg Description: entire stream and tribs

Drain Basin: Lake Ontario
Oak Orchard/12 Mile
Reg/County: 8/Monroe Co. (28)
Quad Map: BRADDOCK HEIGHTS (H-10-4)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

Known: - - -
Suspected: NUTRIENTS, UNKNOWN TOXICITY
Possible: - - -

Source(s) of Pollutant(s)

Known: - - -
Suspected: URBAN/STORM RUNOFF, Other Sanitary Disch
Possible: Landfill/Land Disp., Unknown Source

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))
Verification Status: 2 (Problem Verified, Cause Unknown)
Lead Agency/Office: DOW/Reg8 **Resolution Potential:** Medium
TMDL/303d Status: n/a

Further Details

Aquatic life support in Round Pond Creek are known to experience minor impacts due to nutrient and possible unspecified toxic pollutants from nonpoint sources.

A biological (macroinvertebrate) assessment of Round Pond Creek in Rigney Bluff (at Island Cottage Road) was conducted in 2004. Sampling results indicated slightly impacted water quality conditions. Previous sampling in 1999 revealed moderately impacted water quality conditions, with fauna that most closely resembled communities affected by toxic contaminants. Additional monitoring is recommended to verify current conditions in the stream. (DEC/DOW, BWAM/SBU, June 2005) Round Pond (listed separately) experiences impacts attributed to nutrient loading from urban/stormwater runoff. There are also concerns about the impact of a former USAF site on the pond. These concerns may also apply to the creek.

This segment includes the entire stream and all tribs. The waters of the stream and tribs, including Paddy Hill Creek (-1) and Kirk Creek (-2), are Class C also.

Round Pond (0301-0018) MinorImpacts

Waterbody Location Information

Revised: 05/18/2007

Water Index No: Ont 121-P152
Hydro Unit Code: 04130001/100 **Str Class:** C
Waterbody Type: Lake (Unknown Trophic)
Waterbody Size: 57.6 Acres
Seg Description: entire lake

Drain Basin: Lake Ontario
Oak Orchard/12 Mile
Reg/County: 8/Monroe Co. (28)
Quad Map: BRADDOCK HEIGHTS (H-10-4)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Public Bathing	Stressed	Possible
Fish Consumption	Stressed	Known
Recreation	Stressed	Known
Aesthetics	Stressed	Suspected

Type of Pollutant(s)

Known: ALGAL/WEED GROWTH, NUTRIENTS (phosphorus), Priority Organics (PCBs, dioxin), Pesticides (mirex)
Suspected: Species Alteration (purple loosestrife)
Possible: Pathogens

Source(s) of Pollutant(s)

Known: URBAN/STORM RUNOFF
Suspected: Agriculture, Other Source (migratory fish species), Tox/Contam. Sediment
Possible: Habitat Modification

Resolution/Management Information

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

Further Details

Public bathing, recreational uses and aesthetics in Round Pond are known to experience minor impacts from elevated nutrient loadings and resulting algal blooms and excessive aquatic weed growth. The nutrient loads are thought to be the result of urban/stormwater runoff, residential development, agricultural activities and other nonpoint sources in the watershed. Fish consumption is also restricted as a result of a health advisory for Lake Ontario that extends to tribs up to the first impassable barrier.

Round Pond was included in the 2000 Lake Classification and Inventory monitoring effort. Results of this study found slightly elevated phosphorus (occasionally exceeding state guidance value of 20 ug/l) and algal levels and reduced water clarity (occasionally less than the minimum recommended water transparency for new bathing beaches) during the summer recreation season. These results represent improvements over previous sampling (see below) and suggest less impact than found in other nearby Class B embayments. (DEC/DOW, BWAM/Lake Services, August 2001)

Eutrophication in the pond has been previously documented in a 1995 report "Water Quality of Long, Cranberry, Buck and Round Ponds 1993-94" prepared for the Monroe County Health Department by Joe Makarewicz, SUNY Brockport. The study notes total phosphorus concentrations ranged from 20 to 120 ug/l, with a mean value of 45 ug/l (values from 30-100 ug/l are considered eutrophic). Recreational and aesthetic impacts are noted in the report. (Monroe County Health Department, March 2001)

Fish consumption advisories for Lake Ontario (and all tribs to the first barrier) also applies to this tributary water. A NYSDOH health advisory recommends eating no American eel, channel catfish, carp, chinook salmon, larger lake trout (over 25") or larger brown trout (over 20"). The advisory also recommends that consumption of white sucker, rainbow trout, smaller lake and brown trout, and larger coho salmon (over 25") be limited to no more than one meal per month. White perch is limited to one meal per month East of Point Breeze, and eat none west of the point. The fish consumption advisories are a result of PCB, mirex and dioxin contamination of lake sediments. The advisory for this lake was first issued prior to 1998-99. (2006-07 NYS DOH Health Advisories and DEC/DFWMR, Habitat, December 2006).

A former US Air Force site (Plant 51) is located adjacent to the pond and there is concern that the site could impact water quality in the pond. The US Army Corps of Engineers addressed a holding pond on te site in 2000. Purple loosestrife, an exotic and invasive plant species has also been documented by the Town of Greece Environmental Board. (Monroe County Health Department, March 2001)

Buck Pond (0301-0017) Impaired Seg

Waterbody Location Information

Revised: 05/18/2007

Water Index No: Ont 122-P153
Hydro Unit Code: 04130001/100 **Str Class:** B
Waterbody Type: Lake (Unknown Trophic)
Waterbody Size: 185.6 Acres
Seg Description: entire lake

Drain Basin: Lake Ontario
Oak Orchard/12 Mile
Reg/County: 8/Monroe Co. (28)
Quad Map: BRADDOCK HEIGHTS (H-10-4)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
PUBLIC BATHING	Impaired	Suspected
Fish Consumption	Stressed	Known
RECREATION	Impaired	Known
Aesthetics	Stressed	Known

Type of Pollutant(s)

Known: ALGAL/WEED GROWTH, NUTRIENTS (phosphorus), Priority Organics (PCBs, dioxin), Pesticides (Mirex)
Suspected: Problem Species (Eurasian milfoil, other)
Possible: Pathogens

Source(s) of Pollutant(s)

Known: URBAN/STORM RUNOFF
Suspected: Agriculture, Habitat Modification, Other Source (migratory fish species), Tox/Contam. Sediment
Possible: - - -

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))
Verification Status: 4 (Source Identified, Strategy Needed)
Lead Agency/Office: ext/WQCC **Resolution Potential:** Medium
TMDL/303d Status: 3a->1,4c

Further Details

Public bathing, recreational uses and aesthetics in Buck Pond are impaired by elevated nutrient loadings and resulting algal blooms and excessive aquatic weed growth. The nutrient loads are thought to be the result of urban/stormwater runoff, residential development, agricultural activities and other nonpoint sources in the watershed. Fish consumption is also restricted as a result of a health advisory for Lake Ontario that extends to tribs up to the first impassable barrier.

Buck Pond was included in the 2000 Lake Classification and Inventory monitoring effort. Results of this study found elevated phosphorus (exceeding state guidance value of 20 ug/l) and algal levels and reduced water clarity (less than the minimum recommended water transparency for new bathing beaches) during the summer recreation season. Surface growth of Eurasian milfoil, curly-leafed pondweed and other macrophytes is also prevalent throughout the summer. (DEC/DOW, BWAM/Lake Services, August 2001)

Eutrophication in the pond has been previously documented in a 1995 report "Water Quality of Long, Cranberry, Buck and Round Ponds 1993-94" prepared for the Monroe County Health Department by Joe Makarewicz, SUNY Brockport. The study notes total phosphorus concentrations ranged from 25 to 240 ug/l, with a mean value of 95 ug/l (values from 30-100 ug/l are considered eutrophic; greater than 100 ug/l hypereutrophic). Recreational and aesthetic impacts are noted in the report. Both the Town of Greece Environmental Board and the Monroe County SWCD cite development in the watershed as a significant source of water quality impacts. Purple loosestrife, an exotic and invasive plant species has also been documented by the Town of Greece Environmental Board. (Monroe County Health Department, March 2001)

Fish consumption advisories for Lake Ontario (and all tribs to the first barrier) also applies to this tributary water. A NYSDOH health advisory recommends eating no American eel, channel catfish, carp, chinook salmon, larger lake trout (over 25") or larger brown trout (over 20"). The advisory also recommends that consumption of white sucker, rainbow trout, smaller lake and brown trout, and larger coho salmon (over 25") be limited to no more than one meal per month. White perch is limited to one meal per month East of Point Breeze, and eat none west of the point. The fish consumption advisories are a result of PCB, mirex and dioxin contamination of lake sediments. The advisory for this lake was first issued prior to 1998-99. (2006-07 NYS DOH Health Advisories and DEC/DFWMR, Habitat, December 2006).

Buck Pond is included on the NYS 2006 Section 303(d) List of Impaired Waters. The lake is currently 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 that the lake be moved to Part 1 of the List as Waterbody Requiring TMDL Development (or other strategy to attain water quality standards).

Larkin Creek and tribs (0301-0023) Impaired Seg

Waterbody Location Information

Revised: 05/08/2007

Water Index No: Ont 122-P153- 2
Hydro Unit Code: 04130001/100 **Str Class:** C
Waterbody Type: River
Waterbody Size: 46.3 Miles
Seg Description: entire stream and tribs (includes Buck Pond tribs)

Drain Basin: Lake Ontario
Oak Orchard/12 Mile
Reg/County: 8/Monroe Co. (28)
Quad Map: BRADDOCK HEIGHTS (H-10-4)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
AQUATIC LIFE	Impaired	Suspected

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

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

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 in Larkin Creek is thought to be impaired by nutrients attributed to urban/suburban nonpoint sources. The waterbody is listed as impaired but because only one 1999 sampling event was conducted on the creek, additional monitoring is recommended to verify conditions.

A biological (macroinvertebrate) assessment of Larkin Creek near North Greece (at Latta Road) was conducted in 1999. Sampling results indicated moderately impacted water quality conditions. The fauna was dominated by riffle beetles and nonpoint source nutrient enrichment was indicated as the primary cause of impact to the stream. (DEC/DOW, BWAM/SBU, June 2005)

This segment includes the entire stream and all tribs. The waters of the stream are Class B from the mouth to Long Pond Road and Class C for the remainder of the reach. Tribs to this reach/segment, including Smith Creek (-3), are primarily Class C; some tribs are Class B. This segment also includes smaller tribs to Buck Pond (-1, -1a, -3).

Long Pond (0301-0015) Impaired Seg

Waterbody Location Information

Revised: 05/18/2007

Water Index No: Ont 123-P154
Hydro Unit Code: 04130001/100 **Str Class:** B
Waterbody Type: Lake (Unknown Trophic)
Waterbody Size: 473.7 Acres
Seg Description: entire lake

Drain Basin: Lake Ontario
Oak Orchard/12 Mile
Reg/County: 8/Monroe Co. (28)
Quad Map: BRADDOCK HEIGHTS (H-10-4)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
PUBLIC BATHING	Impaired	Suspected
Fish Consumption	Stressed	Known
RECREATION	Impaired	Known
Aesthetics	Stressed	Known

Type of Pollutant(s)

Known: ALGAL/WEED GROWTH, NUTRIENTS (phosphorus), Priority Organics (PCBs, dioxin), Pesticides (mirex)
Suspected: Water Level/Flow
Possible: Species Alteration, Pathogens

Source(s) of Pollutant(s)

Known: MUNICIPAL (Spencerport WWTP)
Suspected: URBAN/STORM RUNOFF, Agriculture, Habitat Modification, Other Source (migratory fish species), Tox/Contam. Sediment
Possible: Hydro Modification

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))
Verification Status: 4 (Source Identified, Strategy Needed)
Lead Agency/Office: ext/WQCC **Resolution Potential:** Medium
TMDL/303d Status: 3a->1,4c

Further Details

Public bathing, recreational uses and aesthetics in Long Pond are impaired by elevated nutrient loadings and resulting algal blooms and excessive aquatic weed growth. The nutrient loads are thought to be the result of urban/stormwater runoff, residential development, agricultural activities and other nonpoint sources in the watershed. Fish consumption is also restricted as a result of a health advisory for Lake Ontario that extends to tribs up to the first impassable barrier.

Long Pond was included in the 2000 Lake Classification and Inventory monitoring effort. Results of this study found elevated phosphorus (exceeding state guidance value of 20 ug/l) and algal levels and reduced water clarity (less than the minimum recommended water transparency for new bathing beaches) during most of the summer recreation season. Water clarity was sufficiently limited so as to greatly restrict aquatic plant growth in some near-shore areas. (DEC/DOW, BWAM/Lake Services, August 2001)

Eutrophication in the pond has been previously documented in a 1995 report "Water Quality of Long, Cranberry, Buck and Round Ponds 1993-94" prepared for the Monroe County Health Department by Joe Makarewicz, SUNY Brockport. Continuing monitoring documents severe eutrophication in the pond with summer phosphorus concentrations as high as 320 ug/l and a mean value in 11999 of 270 ug/l (values from 30-100 ug/l are considered eutrophic; greater than 100 ug/l hypereutrophic). Recreational and aesthetic impacts are detailed in the Water Quality Use Findings Document" prepared by the Monroe County Health Department Water Quality Bureau. Recreational use of the pond is quite heavy. The report notes complaint of skin irritation after primary contact. Aesthetic concerns include excessive plant growth, odor from decomposing algae, and foaming in the spring and fall months. Though used for primary recreation, the pond does not have a public beach/bathing area and therefore is not monitored for pathogens. (Monroe County Health Department, March 2001)

Fish consumption advisories for Lake Ontario (and all tribs to the first barrier) also applies to this tributary water. A NYSDOH health advisory recommends eating no American eel, channel catfish, carp, chinook salmon, larger lake trout (over 25") or larger brown trout (over 20"). The advisory also recommends that consumption of white sucker, rainbow trout, smaller lake and brown trout, and larger coho salmon (over 25") be limited to no more than one meal per month. White perch is limited to one meal per month East of Point Breeze, and eat none west of the point. The fish consumption advisories are a result of PCB, mirex and dioxin contamination of lake sediments. The advisory for this lake was first issued prior to 1998-99. (2006-07 NYS DOH Health Advisories and DEC/DFWMR, Habitat, December 2006).

A combination of low lake levels and sedimentation in the outlet channel sometimes restricts boat access between the pond and Lake Ontario. Purple Loosestrife has also been documented in the pond, but its spread appears to be stable. (Monroe County Health Department, May 2001)

Various efforts to address water quality issues have been established and continue today. The Village of Spencerport in 1995 formed a partnership with Monroe County Pure Waters to voluntarily reduce phosphorus discharge to the watershed from the Wastewater Treatment Plant. Also in 1995, Monroe County initiated an effort to bring together municipalities in the watershed to develop a Long Pond-Northrup Creek Watershed Plan. The Monroe County Health Department continues to lead this planning effort with active involvement of the Towns of Greece, Ogden and Parma, the Village of Spencerport, the county Soil and Water Conservation District and Greece Citizens for a Clean Environment. The watershed planning document is expected to be complete in 2001 with implementation to begin the same year. A second, concurrent effort is a feasibility study to evaluate the possibility of connecting the Spencerport WWTP to the Monroe County Pure Waters program. Also in 1995, citizens living in the Long Pond area began a volunteer water quality monitoring program. (Monroe County Health Department, May 2001)

Long Pond is included on the NYS 2006 Section 303(d) List of Impaired Waters. The lake is currently 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 that the lake be moved to Part 1 of the List as Waterbody Requiring TMDL Development (or other strategy to attain water quality standards).

Cranberry Pond (P155) is connected to Long Pond, but is listed separately.

Northrup Creek and tribs (0301-0019) Threatened

Waterbody Location Information

Revised: 05/08/2007

Water Index No: Ont 123-P154- 1
Hydro Unit Code: 04130001/100 **Str Class:** C*
Waterbody Type: River
Waterbody Size: 55.4 Miles
Seg Description: entire stream and tribs

Drain Basin: Lake Ontario
Oak Orchard/12 Mile
Reg/County: 8/Monroe Co. (28)
Quad Map: BRADDOCK HEIGHTS (H-10-4)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Aquatic Life	Threatened	Known

Type of Pollutant(s)

Known: NUTRIENTS (phosphorus)
Suspected: - - -
Possible: Pesticides, Silt/Sediment

Source(s) of Pollutant(s)

Known: AGRICULTURE, URBAN/STORM RUNOFF
Suspected: Municipal (Spencerport WWTP), Other Source (Barge Canal impacts), Other Sanitary Disch
Possible: - - -

Resolution/Management Information

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

Further Details

Aquatic life support in Northrup Creek is known to experience threats due to nutrient loads from various nonpoint sources in the watershed. Municipal discharges in the watershed may also be contributing to the impacts.

A biological (macroinvertebrate) assessment of Northrup Creek near Long Pond (at North Greece Road) was conducted in 1999. Sampling results indicated slightly impacted water quality conditions. Nonpoint source nutrient enrichment was indicated as the primary source of impacts to the stream. Although aquatic life is 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)

Since 1989, Monroe County and USGS have operated a cooperative water quality monitoring station on the creek. The site is used to evaluate discharge, nutrients, turbidity and other parameters. Prior to that, a water quality report on the creek was prepared for Monroe county by Joe Makarewicz, SUNY Brockport. Turbidity and related aesthetic issues are also a concern. Operation of the NYS Barge Canal is thought to contribute to this issue. (Monroe County Health Department, May 2001) Various efforts to address water quality issues have been established and continue today. The Village of Spencerport in 1995 formed a partnership with Monroe County Pure Waters to voluntarily reduce phosphorus

discharge to the watershed from the Wastewater Treatment Plant. Also in 1995, Monroe County initiated an effort to bring together municipalities in the watershed to develop a Long Pond-Northrup Creek Watershed Plan. The Monroe County Health Department continues to lead this planning effort with active involvement of the Towns of Greece, Ogden and Parma, the Village of Spencerport, the county Soil and Water Conservation District and Greece Citizens for a Clean Environment. The watershed planning document is expected to be complete in 2001 with implementation to begin the same year. A second, concurrent effort is a feasibility study to evaluate the possibility of connecting the Spencerport WWTP to the Monroe County Pure Waters program. Also in 1995, citizens living in the Long Pond area began a volunteer water quality monitoring program. (Monroe County Health Department, May 2001)

The local NRCS office reports that agriculture makes up more than 50% of the watershed land use. Numerous orchards in the watershed are a potential source of pesticides to the creek. (Monroe County Health Department, May 2001)

Northrup Creek has been identified as the primary source of nutrients to Long Pond (listed separately) which has been documented to be suffering from severe hypereutrophication.

This segment includes the entire stream and all tribs. The waters of the stream are Class B from the mouth to Black Creek (-1) and Class C for the remainder of the reach. Tribs to this reach/segment, including Black Creek (-1), are Class C. (May 2001)

Cranberry Pond (0301-0016) Impaired Seg

Waterbody Location Information

Revised: 05/18/2007

Water Index No: Ont 123-P154-2-P155
Hydro Unit Code: 04130001/100 **Str Class:** B
Waterbody Type: Lake (Eutrophic)
Waterbody Size: 236.7 Acres
Seg Description: entire lake

Drain Basin: Lake Ontario
Oak Orchard/12 Mile
Reg/County: 8/Monroe Co. (28)
Quad Map: BRADDOCK HEIGHTS (H-10-4)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
PUBLIC BATHING	Impaired	Suspected
Fish Consumption	Stressed	Known
RECREATION	Impaired	Known
Aesthetics	Stressed	Known

Type of Pollutant(s)

Known: ALGAL/WEED GROWTH, NUTRIENTS (phosphorus), Water Level/Flow, Priority Organics (PCBs, dioxin), Pesticides (mirex)
Suspected: - - -
Possible: Species Alteration, Pathogens

Source(s) of Pollutant(s)

Known: MUNICIPAL (Spencerport WWTP)
Suspected: URBAN/STORM RUNOFF, Agriculture, Hydro Modification, Other Source (migratory fish species), Tox/Contam. Sediment
Possible: Habitat Modification

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))
Verification Status: 4 (Source Identified, Strategy Needed)
Lead Agency/Office: ext/WQCC **Resolution Potential:** Medium
TMDL/303d Status: 3a->1,4c

Further Details

Public bathing, recreational uses and aesthetics in Cranberry Pond are impaired by elevated nutrient loadings and resulting algal blooms and excessive aquatic weed growth. The nutrient loads are thought to be the result of urban/stormwater runoff, residential development, agricultural activities and other nonpoint sources in the watershed. Fish consumption is also restricted as a result of a health advisory for Lake Ontario that extends to tribs up to the first impassable barrier.

Cranberry Pond was included in the 2000 Lake Classification and Inventory monitoring effort. Results of this study found elevated phosphorus (exceeding state guidance value of 20 ug/l) and algal levels and reduced water clarity (less than the minimum recommended water transparency for new bathing beaches) during most of the summer recreation season. Surface growth of Eurasian milfoil, curly-leafed pondweed and other macrophytes is prevalent in near-shore

areas throughout the summer recreation season. (DEC/DOW, BWAM/Lake Services, August 2001)

Eutrophication in the pond has been previously documented in a 1995 report "Water Quality of Long, Cranberry, Buck and Round Ponds 1993-94" prepared for the Monroe County Health Department by Joe Makarewicz, SUNY Brockport. Continuing monitoring documents severe eutrophication in the pond with summer phosphorus concentrations as high as 320 ug/l and a mean value in 1999 of 270 ug/l (values from 30-100 ug/l are considered eutrophic; greater than 100 ug/l hypereutrophic). Recreational and aesthetic impacts are detailed in the Water Quality Use Findings Document" prepared by the Monroe County Health Department Water Quality Bureau. Recreational use of the pond is quite heavy. The report notes complaint of skin irritation after primary contact. Aesthetic concerns include excessive plant growth, odor from decomposing algae, and foaming in the spring and fall months. Though used for primary recreation, the pond does not have a public beach/bathing area and therefore is not monitored for pathogens. (Monroe County Health Department, March 2001)

Fish consumption advisories for Lake Ontario (and all tribs to the first barrier) also applies to this tributary water. A NYSDOH health advisory recommends eating no American eel, channel catfish, carp, chinook salmon, larger lake trout (over 25") or larger brown trout (over 20"). The advisory also recommends that consumption of white sucker, rainbow trout, smaller lake and brown trout, and larger coho salmon (over 25") be limited to no more than one meal per month. White perch is limited to one meal per month East of Point Breeze, and eat none west of the point. The fish consumption advisories are a result of PCB, mirex and dioxin contamination of lake sediments. The advisory for this lake was first issued prior to 1998-99. (2006-07 NYS DOH Health Advisories and DEC/DFWMR, Habitat, December 2006).

A combination of low lake levels and sedimentation restricts boating uses. Purple Loosestrife has also been documented in the pond, but its spread appears to be stable. (Monroe County Health Department, May 2001)

Various efforts to address water quality issues have been established and continue today. The Village of Spencerport in 1995 formed a partnership with Monroe County Pure Waters to voluntarily reduce phosphorus discharge to the watershed from the Wastewater Treatment Plant. Also in 1995, Monroe County initiated an effort to bring together municipalities in the watershed to develop a Long Pond-Northrup Creek Watershed Plan. The Monroe County Health Department continues to lead this planning effort with active involvement of the Towns of Greece, Ogden and Parma, the Village of Spencerport, the county Soil and Water Conservation District and Greece Citizens for a Clean Environment. The watershed planning document is expected to be complete in 2001 with implementation to begin the same year. A second, concurrent effort is a feasibility study to evaluate the possibility of connecting the Spencerport WWTP to the Monroe County Pure Waters program. Also in 1995, citizens living in the Long Pond area began a volunteer water quality monitoring program. (Monroe County Health Department, May 2001)

Cranberry Pond is included on the NYS 2006 Section 303(d) List of Impaired Waters. The lake is currently 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 that the lake be moved to Part 1 of the List as Waterbody Requiring TMDL Development (or other strategy to attain water quality standards).

Long Pond (P154) is connected to Cranberry Pond, but is listed separately.

Buttonwood Creek and tribs (0301-0024) MinorImpacts

Waterbody Location Information

Revised: 05/08/2007

Water Index No: Ont 124
Hydro Unit Code: 04130001/090 **Str Class:** C*
Waterbody Type: River
Waterbody Size: 26.1 Miles
Seg Description: entire stream and tribs

Drain Basin: Lake Ontario
Oak Orchard/12 Mile
Reg/County: 8/Monroe Co. (28)
Quad Map: BRADDOCK HEIGHTS (H-10-4)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

Known: - - -
Suspected: NUTRIENTS
Possible: D.O./Oxygen Demand, Pesticides, Pathogens

Source(s) of Pollutant(s)

Known: - - -
Suspected: AGRICULTURE
Possible: Landfill/Land Disp.

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))
Verification Status: 3 (Cause Identified, Source Unknown)
Lead Agency/Office: ext/WQCC **Resolution Potential:** Medium
TMDL/303d Status: n/a

Further Details

Aquatic life support in Buttonwood Creek is thought to experience minor impacts due to nutrient loads from various nonpoint sources in the watershed.

A biological (macroinvertebrate) assessment of Buttonwood Creek in Hilton (at Route 259) was conducted in 1999. Sampling results indicated moderately impacted water quality conditions. However the assessment reflects poor sampling habitat and may not be representative of actual water quality conditions. While no mayflies were found, a few clean-water species were present. Nutrient biotic evaluation indicates the level of eutrophication is sufficient to stress aquatic life support. (DEC/DOW, BWAM/SBU, June 2005)

The creek flows through agricultural lands, primarily dairy operations. Concerns have been raised regarding the impact of milkhouse wastes, silage leachate and manure from these activities on the stream. There are also concerns about potential impacts from the Spencerport Village Dump and Trimmer Road Landfill site. Previous investigations of these sites found some groundwater contamination, but no significant threat to the creek or public health. Both sites are on the NYS DEC Inactive Hazardous Waste Disposal Site Registry. (Monroe County WQCC, May 2001)

This segment includes the entire stream and all tribs. The waters of the stream are Class B from the mouth to Frisbee Hill Road and Class C for the remainder of the reach. Tribs to this reach/segment are Class C. (May 2001)

Braddock Bay (0301-0010) MinorImpacts

Waterbody Location Information

Revised: 05/16/2007

Water Index No: Ont 124/125-P155a
Hydro Unit Code: 04130001/090 **Str Class:** B
Waterbody Type: Bay
Waterbody Size: 20.0 Acres
Seg Description: entire bay

Drain Basin: Lake Ontario
Oak Orchard/12 Mile
Reg/County: 8/Monroe Co. (28)
Quad Map: BRADDOCK HEIGHTS (H-10-4)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Public Bathing	Stressed	Suspected
Fish Consumption	Stressed	Known
Recreation	Stressed	Suspected

Type of Pollutant(s)

Known: PRIORITY ORGANICS (PCBs, dioxin), PESTICIDES (mirex), SILT/SEDIMENT
Suspected: Nutrients
Possible: Pathogens

Source(s) of Pollutant(s)

Known: - - -
Suspected: OTHER SOURCE (migratory fish species), URBAN/STORM RUNOFF, Agriculture, Construction (residential development), Tox/Contam. Sediment
Possible: - - -

Resolution/Management Information

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

Further Details

Fish Consumption in Braddock Bay is known to experience minor impacts as a result of a health advisory for Lake Ontario that extends to tribs up to the first impassable barrier. Public bathing and recreational uses in the bay are also impacted by elevated sediment loadings thought to be the result of urban/stormwater runoff, residential development and agricultural activities in the watershed.

Fish consumption in Lake Ontario (and all tribs to the first impassable barrier) is impaired due to a NYS DOH health advisory that recommends eating no American eel, channel catfish, carp, larger lake trout (over 25 inches), larger brown trout (over 20 inches) and chinook salmon and eating no more than one meal per month of white sucker, rainbow trout, smaller lake trout, smaller brown trout and larger coho salmon (over 25 inches) because of elevated levels of PCBs, dioxin and mirex. The advisory also recommends eating no more than on meal per month of white perch for portions of the lake east of Point Breeze. The source of organics/pesticides is contaminated lake sediments, the result of past/historic industrial discharges to the lake, the Niagara River and the Upper Great Lakes. The advisory for this lake

was first issued prior to 1998-99. (2006-07 NYS DOH Health Advisories and DEC/DFWMR, Habitat, December 2006).

Sediment loads to the bay from throughout the watershed restrict boating and other recreation in the bay. Sedimentation may also affect fish passage, but this needs verification. Loading from agricultural activities and increased development (home construction) is exacerbated by highly erodible soils. Operation of the NYS Barge Canal (particularly seasonal de-watering) is also thought to contribute to the problem.

The Town of Greece and NYS Department of State are working with other municipalities along the Lake Ontario shoreline to develop a regional dredging management plan which would address some of these issues. (Monroe County Health Department, May 2001)

Purple Loosestrife has also been documented in the pond, but its spread appears to be stable. (Monroe County Health Department, May 2001)

Salmon Creek and minor tribs (0301-0025) MinorImpacts

Waterbody Location Information

Revised: 03/05/2002

Water Index No: Ont 125
Drain Basin: Lake Ontario
Hydro Unit Code: 04130001/090 **Str Class:** C*
Waterbody Type: River
Reg/County: 8/Monroe Co. (28)
Waterbody Size: 93.2 Miles
Quad Map: HILTON (H-09-3)
Seg Description: entire stream and selected/smaller tribs

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

Known: PRIORITY ORGANICS (PCBs, mirex), Silt/Sediment
Suspected: NUTRIENTS
Possible: - - -

Source(s) of Pollutant(s)

Known: AGRICULTURE, Deicing (stor/appl)
Suspected: OTHER SOURCE (migratory fish species), Other Sanitary Disch, 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 **Resolution Potential:** Medium
TMDL/303d Status: n/a

Further Details

Aquatic life support in Salmon Creek is known to experience minor impacts due to nutrient loads from various nonpoint sources in the watershed.

A biological (macroinvertebrate) assessment of Salmon Creek in Hilton (at Route 259) was conducted in 1999. Sampling results indicated slightly impacted water quality conditions. The fauna was heavily dominated by algal-feeding beetles and nonpoint source nutrient enrichment was identified as the primary cause of impacts to the stream. Although aquatic life is supported in the stream, nutrient biotic evaluation indicates the level of eutrophication is sufficient to stress aquatic life support. (DEC/DOW, BWAM/SBU, June 2005)

Land use in the watershed is primarily agricultural (80%). Within the small Village of Hilton about two dozen stormwater discharges flow into the creek. A 1990 stream survey by the Conservation Board noted streambank erosion problems at various locations along the stream and its tributaries. A Monroe County SWCD Streambank Erosion Assessment Project evaluated sites along Hill Road and in the Village of Hilton in 2000. Local plans are in place to address these problems. (Monroe County Health Department, April 2001)

Fish consumption in the creek is limited by the Lake Ontario advisory that applies to the first impassable barrier (the fall at Parma Center Road). Sampling by NYS DEC detected PCBs in sediments in tributary waters (Brockport Creek). This sampling to investigate two inactive hazardous waste disposal sites, began in 1999 and is continuing. Additional contaminant (priority organics) sampling is being conducted by Dr. James Haynes (SUNY Brockport). (Monroe County Health Department, April 2001)

This segment includes the entire stream and selected/smaller tribs. The waters of the stream are Class B from the mouth to Trib -1a and Class C for the remainder of the reach. Tribs to this reach/segment are Class C. Brockport Creek (-2) is listed separately. (May 2001)

West/Moorman Creek and minor tribs (0301-0027) MinorImpacts

Waterbody Location Information

Revised: 03/05/2002

Water Index No: Ont 125- 1
Drain Basin: Lake Ontario
Hydro Unit Code: 04130001/090 **Str Class:** C*
Waterbody Type: River
Reg/County: 8/Monroe Co. (28)
Waterbody Size: 52.6 Miles
Quad Map: HILTON (H-09-3)
Seg Description: entire stream and selected/smaller tribs

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

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

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))
Verification Status: 3 (Cause Identified, Source Unknown)
Lead Agency/Office: ext/WQCC
Resolution Potential: Medium
TMDL/303d Status: n/a

Further Details

Aquatic life support in Moorman Creek is known to experience minor impacts due to nutrient loads from various nonpoint sources in the watershed.

A biological (macroinvertebrate) assessment of Moorman Creek in Walker (at Route 18) was conducted in 1999. Sampling results indicated slightly impacted water quality conditions. Nonpoint source nutrient enrichment and siltation were indicated as the primary cause of the impacts to the stream. Although aquatic life is supported in the stream, nutrient biotic evaluation indicates/suggests the level of eutrophication is sufficient to stress/threaten aquatic life support. (DEC/DOW, BWAM/SBU, June 2005)

This segment includes the entire stream and selected/smaller tribs. The waters of the stream are primarily Class C; a small lower reach is Class B. Tribs to this reach/segment, are Class C. Upper West Creek (-1) is listed separately. (May 2001)

Brockport Creek and minor tribs (0301-0028) MinorImpacts

Waterbody Location Information

Revised: 06/25/2007

Water Index No:	Ont 125- 2			**Drain Basin:**	Lake Ontario
Hydro Unit Code:	04130001/090	**Str Class:**	C		Oak Orchard/12 Mile
Waterbody Type:	River			**Reg/County:**	8/Monroe Co. (28)
Waterbody Size:	23.9 Miles			**Quad Map:**	HILTON (H-09-3)
Seg Description:	entire stream and selected/smaller tribs				

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

Known: - - -
Suspected: NUTRIENTS
Possible: D.O./Oxygen Demand

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 **Resolution Potential:** Medium
TMDL/303d Status: n/a

Further Details

Aquatic life support in Brockport Creek is known to experience minor impacts due to elevated nutrient loadings likely from nonpoint sources. Impacts from a hazardous waste site had been previously noted as having impacts to the stream, but the site has since been remediated.

A biological (macroinvertebrate) assessment of Brockport Creek near Hilton was conducted in 1999. Sampling results indicated slightly impacted water quality conditions. Nonpoint source nutrient enrichment was strongly indicated to be the primary factor affecting the invertebrate fauna. Although aquatic life is supported in the stream, nutrient biotic evaluation indicates the level of eutrophication is sufficient to stress aquatic life support. (DEC/DOW, BWAM/SBU, June 2005)

In 2000, PCBs were found in sediment in the storm sewer system. The source of this contamination was identified as the being the former General Electric and Black and Decker site (Site number 8-28-003). Investigation of the extent of contamination started in 2001. Between 2001 and 2004 a number of on-site and off-site IRMs were completed to remove PCB contaminated soil, sediment, debris (including storm sewer piping). This included removal of approximately 18,000 tons of materials from the off-site drainageway of Tributary #3 to Brockport Creek. This removal and restoration work

occurred primarily in the residential area north of the site. DEC issued a PRAP for the off-site drainageway operable unit during March 2005. A no further action remedy, based on the IRMs that were completed, was finalized in 2005 without significant revisions. (DEC/DER, Environmental Site Remediation Database, 2005).

This segment includes the entire stream and selected/smaller tribs. The waters of the stream and its tribs are Class C. Otis Creek (-1) is listed separately.

NYS Barge Canal (portion 2c) (0301-0008) MinorImpacts

Waterbody Location Information

Revised: 05/08/2007

Water Index No: NYS Barge Canal (portion 2c)
Hydro Unit Code: 04130001/ **Str Class:** C
Waterbody Type: Canal (Med. Flow)
Waterbody Size: 15.0 Miles
Seg Description: from Holley to Rochester

Drain Basin: Lake Ontario
Oak Orchard/12 Mile
Reg/County: 8/Monroe Co. (28)
Quad Map: MEDINA (I-07-1)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Fish Consumption	Stressed	Possible
Aquatic Life	Stressed	Suspected
Recreation	Stressed	Suspected
Habitat/Hydrolgy	Stressed	Known

Type of Pollutant(s)

Known: WATER LEVEL/FLOW, Problem Species (zebra mussels)
Suspected: NUTRIENTS, Oil and Grease, Thermal Changes
Possible: Priority Organics

Source(s) of Pollutant(s)

Known: HYDRO MODIFICATION
Suspected: COMB. SEWER OVERFLOW, URBAN/STORM RUNOFF, Other Source (boat traffic)
Possible: - - -

Resolution/Management Information

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

Further Details

Aquatic life support and recreational uses in this portion of the Barge Canal are thought to experience minor impacts due to nutrients and other pollutants from urban and stormwater runoff, boat traffic and other nonpoint sources. The hydrology of the canal is artificially modified by dewatering and diversions for the support of navigation. These modification also affect temperatures in the canal.

Biological (macroinvertebrate) assessments of the Barge Canal in Holley (at Canal Road) was conducted in 2004. Multiplate sampling results indicated slightly impacted water quality conditions. The slight impacts in Holley represent an apparent decline from non-impacted conditions in 1990 and 1995. The influx of zebra mussels, first observed in 1990, have apparently changed the ecosystem dynamics of the canal and may be responsible for some of the observed changes. Though this sampling point is just outside (to the west) of the described segment, it is considered representative of water quality in this upper reach. (DEC/DOW, BWAM/SBU, June 2005)

The canal generally supports a diverse warm water fishery. While no waterbody-specific fish consumption advisory is currently in place for the canal, boat traffic and other urban and industrial impacts suggest this use might be affected. Similarly, while there are no public bathing areas along the canal, surrounding land uses suggest additional monitoring of pathogens should be conducted to verify the support or non-support of recreational uses. The presence of zebra mussels have been noted in the canal, and their impact on water quality is a concern. The dumping of snow cleared from roadways and parking lots into the canal during the winter is also thought to impact water quality. (Orleans County WQCC, May 2001)

There are also concerns regarding the discharge of barge canal water into other streams and tribs. These issues are addressed in the data sheets for the specific tribs.

This segment includes the portion of the canal from the Orleans-Monroe County line near Holley to the Lake Ontario-Genesee watershed boundary at the I-390 crossing near Gates. The waters in this portion of the canal are Class C.

Sandy Creek and minor tribs (0301-0006) MinorImpacts

Waterbody Location Information

Revised: 05/08/2007

Water Index No: Ont 130
Hydro Unit Code: 04130001/080 **Str Class:** C
Waterbody Type: River
Waterbody Size: 32.7 Miles
Seg Description: entire stream and selected/smaller tribs

Drain Basin: Lake Ontario
Oak Orchard/12 Mile
Reg/County: 8/Monroe Co. (28)
Quad Map: HAMLIN (H-09-4)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

Known: - - -
Suspected: NUTRIENTS
Possible: D.O./Oxygen Demand

Source(s) of Pollutant(s)

Known: - - -
Suspected: 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 **Resolution Potential:** Medium
TMDL/303d Status: n/a

Further Details

Aquatic life support in Sandy Creek is known to experience minor impacts due to nutrient loads from various nonpoint sources in the watershed.

A biological (macroinvertebrate) assessment of Sandy Creek near North Hamlin (at Route 19) was conducted in 2006 and 2004. Sampling results indicated slightly impacted water quality conditions. Nonpoint source nutrient enrichment is identified as the primary cause of the impacts to the stream. Although aquatic life is supported in the stream, nutrient biotic evaluation indicates/suggests the level of eutrophication is sufficient to stress/threaten aquatic life support. (DEC/DOW, BWAM/SBU, June 2005)

The fishery resource of the creek provides substantial recreational opportunities and it experiences heavy fishing pressure. The Monroe County Water Watch program has adopted a portion of Sandy Creek. Monitoring by the group finds good to excellent water quality. Sedimentation in the harbor near the mouth of the creek limits boating by larger vessels. Agriculture is the dominant land use in the watershed. (Monroe County Health Department, April 2001)

This segment includes the entire stream and selected/smaller tribs. The waters of the stream and its tribs are primarily

Class C. East Branch (-1) and West Branch (-2) are listed separately. (May 2001)

East Branch and tribs (0301-0051) MinorImpacts

Waterbody Location Information

Revised: 05/08/2007

Water Index No: Ont 130- 1
Hydro Unit Code: 04130001/080 **Str Class:** C
Waterbody Type: River
Waterbody Size: 58.9 Miles
Seg Description: entire stream and tribs

Drain Basin: Lake Ontario
Oak Orchard/12 Mile
Reg/County: 8/Monroe Co. (28)
Quad Map: ()

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

Known: - - -
Suspected: NUTRIENTS (phos)
Possible: D.O./Oxygen Demand

Source(s) of Pollutant(s)

Known: - - -
Suspected: 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 **Resolution Potential:** Medium
TMDL/303d Status: n/a

Further Details

Aquatic life support in East Branch Sandy Creek is known to experience minor impacts due to nutrient loads from various nonpoint sources in the watershed.

A biological (macroinvertebrate) assessment of East Branch Sandy Creek in Murray (at Groth Road) was conducted in 2006. Sampling results indicated slightly impacted water quality conditions. Nonpoint source nutrient enrichment was identified as the primary cause of the impacts to the stream. Similar conditions were noted during a field assessment and laboratory-sorting of the sample to order level in 1999. Although aquatic life is supported in the stream, nutrient biotic evaluation indicates/suggests the level of eutrophication is sufficient to stress/threaten aquatic life support. (DEC/DOW, BWAM/SBU, June 2007)

This segment includes the entire stream and all tribs. The waters of the stream and its tribs are primarily Class C. (May 2001)

West Branch and tribs (0301-0052) MinorImpacts

Waterbody Location Information

Revised: 05/08/2007

Water Index No: Ont 130- 2
Hydro Unit Code: 04130001/080 **Str Class:** C
Waterbody Type: River
Waterbody Size: 76.8 Miles
Seg Description: entire stream and tribs

Drain Basin: Lake Ontario
Oak Orchard/12 Mile
Reg/County: 8/Monroe Co. (28)
Quad Map: ()

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

Known: - - -
Suspected: NUTRIENTS
Possible: D.O./Oxygen Demand

Source(s) of Pollutant(s)

Known: - - -
Suspected: 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 **Resolution Potential:** Medium
TMDL/303d Status: n/a

Further Details

Aquatic life support in West Branch Sandy Creek is known to experience minor impacts due to nutrient loads from various nonpoint sources in the watershed.

A biological (macroinvertebrate) assessment of West Branch Sandy Creek in Murray (at Route 33) was conducted in 2006. Sampling results indicated slightly impacted water quality conditions. Nonpoint source nutrient enrichment is identified as the primary cause of the impacts to the stream. Although aquatic life is supported in the stream, nutrient biotic evaluation indicates/suggests the level of eutrophication is sufficient to stress/threaten aquatic life support. (DEC/DOW, BWAM/SBU, November 2006)

This segment includes the entire stream and all tribs. The waters of the stream and its tribs are primarily Class C. (May 2001)

Bald Eagle Creek and tribs (0301-0034) Need Verific

Waterbody Location Information

Revised: 03/05/2002

Water Index No: Ont 134
Hydro Unit Code: 04130001/080 **Str Class:** C
Waterbody Type: River
Waterbody Size: 38.9 Miles
Seg Description: entire stream and tribs

Drain Basin: Lake Ontario
Reg/County: 8/Orleans Co. (37)
Quad Map: KENDALL (H-08-3)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

Known: ALGAL/WEED GROWTH (algal blooms)
Suspected: NUTRIENTS, Oil and Grease
Possible: Pathogens

Source(s) of Pollutant(s)

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

Resolution/Management Information

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

Further Details

Recreational uses and aesthetics in Bald Eagle Creek may experience minor impacts from algal growth. Nonpoint source agricultural sources and the suspected source of nutrients that support the algal growth.

Previously, algal growth in the harbor at the mouth of Bald Eagle Creek was reported. Agricultural activity is the dominant land use in the watershed. Inadequate and/or failing on-site septic systems may also contribute to the problem. (Orleans County WQCC, April 2001)

This segment includes the entire stream and all tribs. The waters of the stream and its tribs are Class C. (May 2001)

Oak Orchard Cr, Lower, and minor tribs (0301-0004) MinorImpacts

Waterbody Location Information

Revised: 05/08/2007

Water Index No:	Ont 138 (portion 1)			**Drain Basin:**	Lake Ontario
Hydro Unit Code:	04130001/070	**Str Class:**	C		Oak Orchard/12 Mile
Waterbody Type:	River			**Reg/County:**	8/Orleans Co. (37)
Waterbody Size:	7.7 Miles			**Quad Map:**	KENT (H-08-4)
Seg Description:	stream and selected tribs fr mouth to Waterport Reserv.				

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Fish Consumption	Stressed	Known
Recreation	Stressed	Possible

Type of Pollutant(s)

Known: PRIORITY ORGANICS (PCBs, mirex, dioxin)
Suspected: - - -
Possible: Pathogens

Source(s) of Pollutant(s)

Known: - - -
Suspected: OTHER SOURCE (migratory fish species), Agriculture
Possible: On-Site/Septic Syst

Resolution/Management Information

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

Further Details

Fish consumption in this portion of Oak Orchard Creek is restricted by the Lake Ontario advisory that extends to tribs up to the first impassable barrier.

Fish consumption advisories for Lake Ontario (and all tribs to the first barrier) also applies to this tributary water. A NYSDOH health advisory recommends eating no American eel, channel catfish, carp, chinook salmon, larger lake trout (over 25") or larger brown trout (over 20"). The advisory also recommends that consumption of white sucker, rainbow trout, smaller lake and brown trout, and larger coho salmon (over 25") be limited to no more than one meal per month. White perch is limited to one meal per month East of Point Breeze, and eat none west of the point. The fish consumption advisories are a result of PCB, mirex and dioxin contamination of lake sediments. Because the advisory is a result of contamination of Lake Ontario and affects only a portion of the stream, the use is assessed as stressed. (2006-07 NYS-DOH Health Advisories)

The fishery resource of the creek is considered excellent. However there are some concerns regarding the impact of failing and/or inadequate on-site septic systems in the watershed. Heavy boat traffic may also impact water quality.

(Orleans County WQCC, April 2001)

This segment includes the portion of the stream and selected/smaller tribs from the mouth to Waterport Pond (P166). The waters of the stream are Class C in this reach. Tribs to this reach/segment are primarily Class C. Marsh Creek (-1) is listed separately. (May 2001)

Oak Orchard Cr, Middle, and minor tribs (0301-0005) MinorImpacts

Waterbody Location Information

Revised: 06/25/2007

Water Index No:	Ont 138 (portion 3)			**Drain Basin:**	Lake Ontario
Hydro Unit Code:	04130001/070	**Str Class:**	C		Oak Orchard/12 Mile
Waterbody Type:	River			**Reg/County:**	8/Orleans Co. (37)
Waterbody Size:	55.6 Miles			**Quad Map:**	ASHWOOD (H-07-3)
Seg Description:	stream and selected tribs fr Waterport R to Medina				

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

Known: - - -
Suspected: COMB. SEWER OVERFLOW, 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: DOW/Reg8 **Resolution Potential:** Medium
TMDL/303d Status: n/a

Further Details

Aquatic life support in this portion of Oak Orchard Creek is thought to experience minor impacts due to nutrient loads from both urban/municipal and agricultural nonpoint runoff.

Biological (macroinvertebrate) assessments of this portion of Oak Orchard Creek in Oak Orchard-on-the-Ridge (at Route 104) were conducted in 1999 and 2004. Sampling results indicated slightly impacted water quality conditions. Mayflies dominated the sample and Impact Source Determination showed the community to have highest similarity to natural conditions, although nonpoint source nutrient enrichment was also indicated. Nutrient biotic evaluation determined these effects on the fauna to be minor and aquatic life support is considered to be fully supported in the stream (DEC/DOW, BWAM/SBU, June 2005)

Previously reported water quality concerns included urban/storm runoff and CSOs in the Village of Medina. Nutrient and sediment loss to the creek has been studied by researchers from SUNY Brockport (Makarewicz and Lewis) and found to be significant. Some of the loading is attributable to the upstream muckland area; agricultural activity in the watershed also contributes. (Orleans County WQCC, April 2001)

This segment includes the portion of the stream and selected/smaller tribs from Waterport Pond (P116) to the NYS Barge Canal in Medina. The waters of the stream are Class C. Tribs to this reach/segment, are Class C. Fish Creek (-9) is listed separately. (May 2001)

Oak Orchard Cr, Upper, and tribs (0301-0014) MinorImpacts

Waterbody Location Information

Revised: 06/25/2007

Water Index No: Ont 138 (portion 4)
Hydro Unit Code: 04130001/070 **Str Class:** C
Waterbody Type: River
Waterbody Size: 318.3 Miles
Seg Description: stream and tribs above Medina

Drain Basin: Lake Ontario
Oak Orchard/12 Mile
Reg/County: 8/Genesee Co. (19)
Quad Map: MEDINA (I-07-1)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Aquatic Life	Stressed	Suspected
Recreation	Stressed	Suspected
Habitat/Hydrolgy	Stressed	Suspected

Type of Pollutant(s)

Known: - - -
Suspected: NUTRIENTS (phosphorus), Silt/Sediment
Possible: D.O./Oxygen Demand, Pesticides

Source(s) of Pollutant(s)

Known: - - -
Suspected: AGRICULTURE, HABITAT MODIFICATION, Municipal (Elba WWTP)
Possible: Streambank Erosion

Resolution/Management Information

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

Further Details

Aquatic life support and recreational uses in this portion of Oak Orchard Creek are thought to experience impacts from nutrient and sediment loads that enter the creek from the large area of cultivated mucklands along this reach. Natural resource habitat are also impacted.

A biological (macroinvertebrate) assessment of Oak Orchard Creek in Shelby was conducted in 1999. Sampling results indicated moderately impacted water quality conditions, although this assessment is somewhat uncertain. Mossy substrate is likely to have contributed to the unusual fauna at the site and impacts from actual water quality changes are considered to be slight. Additional sampling at an alternate site is recommended. (DEC/DOW, BWAM/SBU, January 2001)

Nutrient and sediment loss to the creek has been studied by researchers from SUNY Brockport (Makarewicz and Lewis) and found to be significant. Between 3000 and 4000 acres of cultivated muckland farms in the watershed are considered to be the primary source. Pesticide use in the area is also a concern. (Genesee and Orleans WQCCs, April 2001)

Previously, it was reported that the Village of Elba WWTP discharge into a tributary of Oak Orchard Creek was a concern. Decaying algal blooms in the lagoon system cause excessive discharges of BOD and suspended solids in the summer and reduced biological activity result in excessive ammonia discharges in winter. Town is working to correct the problem. (Genesee and Orleans WQCCs, April 2001)

This segment includes the portion of the stream and all tribs above the NYS Barge Canal in Medina. The waters of the stream are Class C. Tribs to this reach/segment are primarily Class C. (May 2001)

Otter Creek, Lower, and tribs (0301-0037) Impaired Seg

Waterbody Location Information

Revised: 05/08/2007

Water Index No: Ont 138- 3
Hydro Unit Code: 04130001/070 **Str Class:** C
Waterbody Type: River
Waterbody Size: 22.2 Miles
Seg Description: stream and tribs from mouth to Albion

Drain Basin: Lake Ontario
Oak Orchard/12 Mile
Reg/County: 8/Orleans Co. (37)
Quad Map: ASHWOOD (H-07-3)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

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

Resolution/Management Information

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

Further Details

Aquatic life support and recreational uses in Otter Creek are thought to be impaired due to nutrient loads from agricultural and other nonpoint sources in the watershed.

A biological (macroinvertebrate) assessment of Otter Creek in Waterport (at Route 31) was conducted in 1999. Sampling results indicated moderately impacted water quality conditions. The fauna was heavily dominated by algal-feeding beetles and nonpoint source nutrient enrichment was identified as the primary cause of impacts to the stream. Although aquatic life is supported in the stream, nutrient biotic evaluation indicates the level of eutrophication is sufficient to stress aquatic life support. Agricultural activity and other nonpoint sources are the likely cause of the impact. (DEC/DOW, BWAM/SBU, June 2005)

This segment includes the portion of the stream and all tribs from the mouth to the Albion water supply dam. The waters of the stream and its tribs are Class C. (May 2001)

Fish Creek and tribs (0301-0040) MinorImpacts

Waterbody Location Information

Revised: 03/06/2002

Water Index No: Ont 138- 9
Hydro Unit Code: 04130001/070 **Str Class:** C
Waterbody Type: River
Waterbody Size: 32.4 Miles
Seg Description: entire stream and tribs

Drain Basin: Lake Ontario
Reg/County: 8/Orleans Co. (37)
Quad Map: OAKFIELD (I-07-3)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

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

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))
Verification Status: 3 (Cause Identified, Source Unknown)
Lead Agency/Office: ext/WQCC **Resolution Potential:** Medium
TMDL/303d Status: n/a

Further Details

Aquatic life support in Fish Creek is known to experience minor impacts due to nutrient loads from agricultural and other nonpoint sources in the watershed.

A biological (macroinvertebrate) assessment of Fish Creek in Oak Orchard-on-the-Ridge (at East Scott Road) was conducted in 1999. Sampling results indicated slightly impacted water quality conditions. The fauna was diverse but was dominated by midges and contained many facultative organisms. Nonpoint source enrichment was identified as the primary cause of the impact. Although aquatic life is supported in the stream, nutrient biotic evaluation indicates the level of eutrophication is sufficient to stress aquatic life support. (DEC/DOW, BWAM/SBU, June 2005)

This segment includes the entire stream and all tribs. The waters of the stream and its tribs are Class C.

NYS Barge Canal (portion 2b) (0301-0074) MinorImpacts

Waterbody Location Information

Revised: 08/02/2007

Water Index No: NYS Barge Canal (portion 2b)
Hydro Unit Code: 04130001/ **Str Class:** C
Waterbody Type: Canal
Waterbody Size: 20.0 Miles
Seg Description: from Middleport to Holley

Drain Basin: Lake Ontario
Oak Orchard/12 Mile
Reg/County: 8/Orleans Co. (37)
Quad Map: ()

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Fish Consumption	Stressed	Possible
Aquatic Life	Stressed	Suspected
Recreation	Stressed	Suspected
Habitat/Hydrolgy	Stressed	Known

Type of Pollutant(s)

Known: Water Level/Flow, Problem Species (zebra mussels)
Suspected: NUTRIENTS, Oil and Grease, Thermal Changes
Possible: Priority Organics

Source(s) of Pollutant(s)

Known: Hydro Modification
Suspected: COMB. SEWER OVERFLOW, URBAN/STORM RUNOFF, Other Source (boat traffic)
Possible: - - -

Resolution/Management Information

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

Further Details

Aquatic life support and recreational uses in this portion of the Barge Canal are thought to experience minor impacts due to nutrients and other pollutants from urban and stormwater runoff, boat traffic and other nonpoint sources. The hydrology of the canal is artificially modified by dewatering and diversions for the support of navigation. These modification also affect temperatures in the canal.

Biological (macroinvertebrate) assessments of the Barge Canal in Holley (at Canal Road) was conducted in 2004. Multiplate sampling results indicated slightly impacted water quality conditions. The slight impacts in Holley represent an apparent decline from non-impacted conditions in 1990 and 1995. The influx of zebra mussels, first observed in 1990, have apparently changed the ecosystem dynamics of the canal and may be responsible for some of the observed changes. (DEC/DOW, BWAM/SBU, June 2005)

The canal generally supports a diverse warm water fishery. While no waterbody-specific fish consumption advisory is

currently in place for the canal, boat traffic and other urban and industrial impacts suggest this use might be affected. Similarly, while there are no public bathing areas along the canal, surrounding land uses suggest additional monitoring of pathogens should be conducted to verify the support or non-support of recreational uses. The presence of zebra mussels have been noted in the canal, and their impact on water quality is a concern. The dumping of snow cleared from roadways and parking lots into the canal during the winter is also thought to impact water quality. (Orleans County WQCC, May 2001)

There are also concerns regarding the discharge of barge canal water into other streams and tribs. These issues are addressed in the data sheets for the specific tribs.

This segment includes the portion of the canal from the Niagara-Orleans County line near Middleport to the Orleans-Monroe County line near Holley. The waters in this portion of the canal are Class C.

Johnson Creek, Lower, and tribs (0301-0007) MinorImpacts

Waterbody Location Information

Revised: 05/08/2007

Water Index No:	Ont 139 (portion 1)			**Drain Basin:**	Lake Ontario
Hydro Unit Code:	04130001/060	**Str Class:**	C		Oak Orchard/12 Mile
Waterbody Type:	River			**Reg/County:**	8/Orleans Co. (37)
Waterbody Size:	46.5 Miles			**Quad Map:**	ASHWOOD (H-07-3)
Seg Description:	stream and tribs from mouth to Lyndonville				

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

Known:	NUTRIENTS, PRIORITY ORGANICS (PCBs, dioxin), PESTICIDES (mirex)
Suspected:	Silt/Sediment
Possible:	Pathogens

Source(s) of Pollutant(s)

Known:	- - -
Suspected:	AGRICULTURE, Other Source (migratory fish species), Streambank Erosion, Tox/Contam. Sediment
Possible:	Landfill/Land Disp.

Resolution/Management Information

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

Further Details

Aquatic life support and recreational uses in this portion of Johnson Creek are known to experience minor impacts due to nutrient loads from agricultural and various other nonpoint sources in the watershed. Fish consumption is also restricted as a result of a health advisory for Lake Ontario that extends to tribs up to the first impassable barrier.

A biological (macroinvertebrate) assessment of Johnson Creek in Lyndonville (at Blood Road) was conducted in 2004 and 2005. Sampling results indicated slightly impacted water quality conditions. Nonpoint source nutrient enrichment was identified as the primary cause of impacts to the stream. Sampling results at this site have varied between slightly (1995, 2004, 2005) and moderately (1996, 1999) impacted. Although aquatic life is supported in the stream, nutrient biotic evaluation indicates the level of eutrophication is sufficient to stress aquatic life support. (DEC/DOW, BWAM/SBU, June 2005)

A study of the creek by researchers at SUNY Brockport (Analysis of Johnson Creek, Makarewicz and Lewis) found high levels of nutrient and sediment loadings. Contaminated sediments are also documented in the report. An inactive

hazardous waste disposal site is also a concern. (Orleans County WQCC, April 2001)

Fish consumption advisories for Lake Ontario (and all tribs to the first barrier) also applies to this tributary water. A NYSDOH health advisory recommends eating no American eel, channel catfish, carp, chinook salmon, larger lake trout (over 25") or larger brown trout (over 20"). The advisory also recommends that consumption of white sucker, rainbow trout, smaller lake and brown trout, and larger coho salmon (over 25") be limited to no more than one meal per month. White perch is limited to one meal per month East of Point Breeze, and eat none west of the point. The fish consumption advisories are a result of PCB, mirex and dioxin contamination of lake sediments. Priority organics have also been found in sediments behind the Lyndonville Dam and may be impacting uses. (2006-07 NYS-DOH Health Advisories)

This segment includes the portion of the stream and all tribs from the mouth to the Lyndonville Reservoir. The waters of the stream and its tribs are Class C. (May 2001)

Jeddo Creek and minor tribs (0301-0045) MinorImpacts

Waterbody Location Information

Revised: 05/08/2007

Water Index No:	Ont 139- 9			**Drain Basin:**	Lake Ontario
Hydro Unit Code:	04130001/060	**Str Class:**	C		Oak Orchard/12 Mile
Waterbody Type:	River			**Reg/County:**	8/Orleans Co. (37)
Waterbody Size:	55.9 Miles			**Quad Map:**	LYNDONVILLE (H-07-4)
Seg Description:	stream and tribs from mouth to Middleport				

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: Metals, Pesticides, Pathogens

Source(s) of Pollutant(s)

Known: - - -
Suspected: INDUSTRIAL, MUNICIPAL (unknown), Agriculture
Possible: Hydro Modification

Resolution/Management Information

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

Further Details

Aquatic life support and recreational uses in Jeddo Creek are known to experience minor impacts due to nutrient loads from agricultural and various other nonpoint sources in the watershed.

A biological (macroinvertebrate) assessment of Jeddo Creek in North Ridgeway (at Mill Road) was conducted in 2004. Sampling results indicated slightly impacted water quality conditions. Sampling results at this site have varied between slightly (2000, 2005) and moderately (1999) impacted. Previously, municipal and/or industrial inputs were identified as the likely primary cause of the impact. However, in the most recent sampling nutrient biotic evaluation determined the effects on the fauna to be minor. In spite of these minor impacts, aquatic life support is considered to be fully supported in the stream. (DEC/DOW, BWAM/SBU, June 2005)

NYSDEC Rotating Intensive Basin Studies (RIBS) Intensive Network monitoring of Jeddo Creek in North Ridgeway, Orleans County, (at Mill Road) was conducted in 2000. 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. However this was a high flow year and may have masked impacts that were apparent during biological screening at this site in 1999. At that time the site was assessed as having moderate impacts. The fauna was dominated by filter-feeding caddisflies and species richness was very low. Water column sampling revealed iron to be the only parameter of concern. Bottom sediment sampling results revealed no parameters to be exceeding the Probable Effects Level - a level at which adverse impacts are expected. Arsenic was found at a level exceeding the Threshold Effects Level - levels at which adverse impacts occasionally occur. Toxicity testing of the water column showed no significant mortality or reproductive impacts. (DEC/DOW, BWAM/RIBS, January 2005)

A number of possible sources of impacts have been previously suggested. These include municipal inputs in Middleport, urban/stormwater runoff, an industrial facility (FMC), an inactive hazardous waste site (also FMC) and nonpoint agricultural impacts. Study of the creek by researchers at SUNY Brockport (Makarewicz and Lewis) found high levels of organic nitrogen and sediment loads. A stone cutter (Carter Stone) pumps clean water into the creek. Though this does not impact water quality, hydrology of the creek may be affected. (Orleans County WQCC, April 2001)

This segment includes the entire stream and selected/smaller tribs. The waters of the stream and its tribs are primarily Class C. Middleport Reservoir (P177a) and tribs to the reservoir are listed separately. (May 2001)

Golden Hill Creek and tribs (0301-0050) Impaired Seg

Waterbody Location Information

Revised: 05/07/2007

Water Index No: Ont 144
Hydro Unit Code: 04130001/050 **Str Class:** C
Waterbody Type: River
Waterbody Size: 53.1 Miles
Seg Description: entire stream and tribs

Drain Basin: Lake Ontario
Oak Orchard/12 Mile
Reg/County: 9/Niagara Co. (32)
Quad Map: BARKER (H-06-3)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
AQUATIC LIFE	Impaired	Known
RECREATION	Impaired	Known

Type of Pollutant(s)

Known: - - -
Suspected: UNKNOWN TOXICITY, Chlorine, D.O./Oxygen Demand, Ammonia, Nutrients
Possible: Pathogens

Source(s) of Pollutant(s)

Known: - - -
Suspected: - - -
Possible: UNKNOWN SOURCE, Municipal (unknown), On-Site/Septic Syst, Private/Comm/Inst

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))
Verification Status: 2 (Problem Verified, Cause Unknown)
Lead Agency/Office: DOW/Reg9 **Resolution Potential:** Medium
TMDL/303d Status: 3b*

Further Details

Aquatic life support and recreational uses (fishing) in Golden Hill Creek are impaired by unknown pollutants. Organic wastes are the suspected cause though other factors may also contribute.

A biological (macroinvertebrate) assessment of Golden Hill Creek in Somerset was conducted in 2000. Sampling results indicated severely impacted water quality conditions. Organic wastes were identified as the likely cause of the impact. Slow current speed may also be a factor, but water quality impacts were clearly indicated. The fauna was heavily dominated by snails and sowbugs, with no mayflies, stoneflies, or caddisflies. A fish kill earlier that year (March 2000) from a chlorine discharge may have had residual effects on the macroinvertebrate fauna. (DEC/DOW, BWAM/SBU, April 2003)

This segment includes the entire stream and all tribs. The waters of the stream and its tribs are Class C. (May 2001)

Eighteenmile Creek, Lower, and tribs (0301-0002) Impaired Seg

Waterbody Location Information

Revised: 05/07/2007

Water Index No:	Ont 148			**Drain Basin:**	Lake Ontario
Hydro Unit Code:	04130001/040	**Str Class:**	B		Oak Orchard/12 Mile
Waterbody Type:	River			**Reg/County:**	9/Niagara Co. (32)
Waterbody Size:	0.4 Miles			**Quad Map:**	NEWFANE (H-06-4)
Seg Description:	stream and tribs, from mouth to Olcott				

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

Known:	PRIORITY ORGANICS (PCBs)
Suspected:	- - -
Possible:	Metals, Nutrients, Unknown Toxicity

Source(s) of Pollutant(s)

Known:	TOX/CONTAM. SEDIMENT
Suspected:	- - -
Possible:	Agriculture, Private/Comm/Inst, Urban/Storm Runoff

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))
Verification Status: 4 (Source Identified, Strategy Needed)
Lead Agency/Office: ext/EPA **Resolution Potential:** Medium
TMDL/303d Status: 2b (Multiple Segment/Categorical Water, Fish Consumption)

Further Details

Fish consumption in this portion of Eighteenmile Creek is impaired due to a health advisory due to PCB levels from past industrial discharges. Aquatic life and recreational uses are also thought to be impacted by these and various other sources.

Fish consumption in Eighteenmile Creek is impaired/precluded due to a NYS DOH health advisory that recommends eating no fish of any species because of elevated PCB levels. The source of PCBs is contaminated sediments from past/historic industrial discharges. A health advisory for Lake Ontario (and all tribs to the first barrier) also applies to Lower Eighteenmile Creek and Olcott Harbor. The Lake Ontario advisory recommends eating no American eel, channel catfish, carp, chinook salmon, lake trout (over 25") or brown trout (over 20"). The advisory also recommends that consumption of white perch, white sucker, rainbow trout, smaller lake and brown trout, and coho salmon (over 25") be limited to no more than one meal per month. The fish consumption advisories are a result of PCB, mirex and dioxin contamination of lake sediments. The advisories for these waters were first issued prior to 1998-99. is (2006-07 NYS DOH Health Advisories and DEC/DFWMR, Habitat, December 2006).

In 1985, Eighteenmile Creek (downstream of the Burt Dam) was designated as a Great Lakes Area of Concern (AOC) by the International Joint Commission because of water quality and bottom sediment problems associated with past industrial and municipal discharge practices, the disposal of waste and the use of pesticides. Over the years, numerous contaminants have been identified in creek sediments which have a detrimental effect to the AOC and Lake Ontario. These contaminants include but are not limited to; Polychlorinated Biphenyls (PCBs); Mercury; Dioxins and Furans; Dieldrin; Mirex; DDT; Lead; and Copper. Sediments contaminated with these substances have contributed to the restrictions of fish and wildlife consumption, degradation of benthic organisms, and restrictions on dredging activities in the AOC. It is also suspected that these contaminated sediments contribute to a degradation of fish and wildlife populations, the presence of fish tumors, and the prevalence of bird and animal deformities or reproductive problems. A Remedial Action Plan (RAP) to assess conditions in the Area of Concern and evaluate sources of problems identified is under development. The Niagara County Soil and Water Conservation District took responsibility for coordination of the Eighteenmile Creek RAP in 2005.

Biological (macroinvertebrate) assessments of Eighteenmile Creek upstream of this segment near Lockport (at Stone Road) and in Corwin (at Jacques Road) were conducted in 2000. Sampling results indicated moderately to slightly impacted water quality conditions. Moderately impacted water quality was assessed for the site below Lockport. Impact Source Determination indicated that toxic inputs were the primary cause of impact. No prior data were available for this site. Water quality at Corwin was assessed as slightly-impacted, an apparent improvement from moderately impacted conditions in 1989 and 1990. Municipal/industrial inputs were the likely cause of impacts in Corwin. Further sampling is recommended to verify the improving trend at this site. Past macroinvertebrate tissue sampling in the creek has shown elevated levels of PCBs, dioxins and metals. Various sources contribute to impacts in the stream. Inorganic/toxic pollutants from industrial activities and in sediments are a suspected cause of impacts. Municipal inputs are also a contributing source. Though this sampling point is just above the described segment, it is considered representative of water quality in this downstream reach. (DEC/DOW, BWAM/SBU, April 2003)

Eighteenmile Creek 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.

This segment includes the portion of the stream from to mouth to unnamed trib (-a) in Olcott. The waters of this portion of the stream are Class B.

Eighteenmile Creek, Middle, and tribs (0301-0054) Impaired Seg

Waterbody Location Information

Revised: 05/07/2007

Water Index No:	Ont 148			**Drain Basin:**	Lake Ontario
Hydro Unit Code:	04130001/040	**Str Class:**	C		Oak Orchard/12 Mile
Waterbody Type:	River			**Reg/County:**	9/Niagara Co. (32)
Waterbody Size:	9.5 Miles			**Quad Map:**	NEWFANE (H-06-4)
Seg Description:	stream and tribs from Olcott to Newfane				

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

Known: - - -
Suspected: PRIORITY ORGANICS, Nutrients, Silt/Sediment, Unknown Toxicity
Possible: Metals

Source(s) of Pollutant(s)

Known: TOX/CONTAM. SEDIMENT
Suspected: Agriculture, Municipal, 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: DEC/Reg9 **Resolution Potential:** Medium
TMDL/303d Status: 2b*

Further Details

Fish consumption in this portion of Eighteenmile Creek is impaired due to a health advisory due to PCB levels from past industrial discharges. Aquatic life support and recreational uses of this reach are also thought to experience impacts due unidentified toxic inputs and nonpoint sources.

Fish consumption in Eighteenmile Creek is impaired/precluded due to a NYS DOH health advisory that recommends eating no fish of any species because of elevated PCB levels. The source of PCBs is contaminated sediments from past/historic industrial discharges. The advisory for this stream was first issued prior to 1998-99. (2006-07 NYS DOH Health Advisories and DEC/DFWMR, Habitat, December 2006).

Biological (macroinvertebrate) assessments of Eighteenmile Creek below Lockport (at Stone Road) and in Corwin (at Jacques Road) were conducted in 2000. Sampling results indicated moderately to slightly impacted water quality conditions. Moderately impacted water quality was assessed for the site below Lockport. Impact Source Determination indicated that toxic inputs were the primary cause of impact. No prior data were available for this site. Water quality

at Corwin was assessed as slightly-impacted, an apparent improvement from moderately impacted conditions in 1989 and 1990. Municipal/industrial inputs were the likely cause of impacts in Corwin. Further sampling is recommended to verify the improving trend at this site. Past macroinvertebrate tissue sampling in the creek has shown elevated levels of PCBs, dioxins and metals. Various sources contribute to impacts in the stream. Inorganic/toxic pollutants from industrial activities and in sediments are a suspected cause of impacts. Municipal inputs are also a contributing source. Though this sampling point is just above the described segment, it is considered representative of water quality in this downstream reach. (DEC/DOW, BWAM/SBU, April 2003)

Eighteenmile Creek 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.

This segment includes the portion of the stream and all tribs from/including unnamed trib (-a) to/including unnamed trib (-d) in Newfane. The waters of this portion of the stream are Class C. Tribs to this reach/segment are primarily Class D.

Eighteenmile Creek, Upp, and minor tribs (0301-0055) Impaired Seg

Waterbody Location Information

Revised: 05/07/2007

Water Index No:	Ont 148			**Drain Basin:**	Lake Ontario
Hydro Unit Code:	04130001/040	**Str Class:**	D		Oak Orchard/12 Mile
Waterbody Type:	River			**Reg/County:**	9/Niagara Co. (32)
Waterbody Size:	75.7 Miles			**Quad Map:**	NEWFANE (H-06-4)
Seg Description:	stream and selected tribs above Newfane				

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
FISH CONSUMPTION	Impaired	Known
AQUATIC LIFE	Impaired	Suspected
RECREATION	Impaired	Suspected

Type of Pollutant(s)

Known:	PRIORITY ORGANICS (PCBs)
Suspected:	NUTRIENTS, UNKNOWN TOXICITY
Possible:	Pathogens

Source(s) of Pollutant(s)

Known:	TOX/CONTAM. SEDIMENT
Suspected:	COMB. SEWER OVERFLOW, INDUSTRIAL, MUNICIPAL (unknown), Agriculture, Urban/Storm Runoff
Possible:	- - -

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))
Verification Status: 3 (Cause Identified, Source Unknown)
Lead Agency/Office: DOW/Reg9 **Resolution Potential:** Medium
TMDL/303d Status: 2b*

Further Details

Fish consumption in this portion of Eighteenmile Creek is impaired due to a health advisory due to PCB levels from past industrial discharges. Aquatic life support and recreational uses of this reach are also know to experience impacts due unidentified toxic inputs and nonpoint sources.

Fish consumption in Eighteen Mile Creek is impaired/precluded due to a NYS DOH health advisory that recommends eating no fish of any species because of elevated PCB levels. The source of PCBs is contaminated sediments from past/historic industrial discharges. The advisory for this stream was first issued prior to 1998-99. (2006-07 NYS DOH Health Advisories and DEC/DFWMR, Habitat, December 2006).

Biological (macroinvertebrate) assessments of Eighteenmile Creek below Lockport (at Stone Road) and in Corwin (at Jacques Road) were conducted in 2000. Sampling results indicated moderately to slightly impacted water quality conditions. Moderately impacted water quality was assessed for the site below Lockport. Impact Source Determination

indicated that toxic inputs were the primary cause of impact. No prior data were available for this site. Water quality at Corwin was assessed as slightly-impacted, an apparent improvement from moderately impacted conditions in 1989 and 1990. Municipal/industrial inputs were the likely cause of impacts in Corwin. Further sampling is recommended to verify the improving trend at this site. Past macroinvertebrate tissue sampling in the creek has shown elevated levels of PCBs, dioxins and metals. Various sources contribute to impacts in the stream. Inorganic/toxic pollutants from industrial activities and in sediments are a suspected cause of impacts. Municipal inputs are also a contributing source. (DEC/DOW, BWAM/SBU, April 2003)

Eighteenmile Creek 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.

This segment includes the portion of the stream and selected/smaller tribs above unnamed trib (-d) in Newfane. The waters of this portion of the stream are Class D. Tribs to this reach/segment are also/primarily Class D. East Branch (-3) and Eighteenmile Trib/The Gulf (-4) are listed separately.

East Branch 18-mile Cr, Lower, and tribs (0301-0056) MinorImpacts

Waterbody Location Information

Revised: 05/07/2007

Water Index No:	Ont 148- 3			**Drain Basin:**	Lake Ontario
Hydro Unit Code:	04130001/040	**Str Class:**	C		Oak Orchard/12 Mile
Waterbody Type:	River			**Reg/County:**	9/Niagara Co. (32)
Waterbody Size:	87.8 Miles			**Quad Map:**	LOCKPORT (I-06-1)
Seg Description:	stream and tribs, from mouth to Gasport				

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

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

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 **Resolution Potential:** Medium
TMDL/303d Status: n/a

Further Details

Aquatic life support in East Branch Eighteenmile Creek are thought to experience minor impacts due to nutrient enrichment from nonpoint sources.

A biological (macroinvertebrate) assessment of East Branch Eighteenmile Creek near Gasport (at Quaker Road) was conducted in 2000. Sampling results indicated slightly impacted water quality conditions, similar to previous sampling in 1989. Nonpoint source nutrient enrichment was identified as the most significant contributing factor causing the impacts. Although aquatic life is supported in the stream, nutrient biotic evaluation indicates the level of eutrophication is sufficient to stress aquatic life support. (DEC/DOW, BWAM/SBU, June 2005)

This segment includes the portion of the stream and all tribs from the mouth to Mirror Lake (P182b) in Gasport. The waters of this portion of the stream are Class C. Tribs to this reach/segment are primarily Class D; with a portion of an unnamed trib (-2) designated Class C(T).

East Branch 18-mile Cr, Upper, and tribs (0301-0057) MinorImpacts

Waterbody Location Information

Revised: 05/07/2007

Water Index No: Ont 148- 3
Hydro Unit Code: 04130001/040 **Str Class:** A
Waterbody Type: River
Waterbody Size: 32.1 Miles
Seg Description: stream and tribs, above Gasport

Drain Basin: Lake Ontario
Oak Orchard/12 Mile
Reg/County: 9/Niagara Co. (32)
Quad Map: GASPORT (I-06-2)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

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

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 **Resolution Potential:** Medium
TMDL/303d Status: n/a

Further Details

Aquatic life support in East Branch Eighteenmile Creek are thought to experience minor impacts due to nutrient enrichment from nonpoint sources.

A biological (macroinvertebrate) assessment of East Branch Eighteenmile Creek below this reach near Gasport (at Quaker Road) was conducted in 2000. Sampling results indicated slightly impacted water quality conditions, similar to previous sampling in 1989. Nonpoint source nutrient enrichment was identified as the most significant contributing factor causing the impacts. Although aquatic life is supported in the stream, nutrient biotic evaluation indicates the level of eutrophication is sufficient to stress aquatic life support. (DEC/DOW, BWAM/SBU, June 2005)

This segment includes the portion of the stream and all tribs above/including Mirror Lake (P182b) in Gasport. The waters of this portion of the stream are Class B to unnamed pond (P182d), and Class A for the remainder of the reach. Tribs to this reach/segment are Class A.

Hopkins Creek and tribs (0301-0060) Impaired Seg

Waterbody Location Information

Revised: 05/07/2007

Water Index No: Ont 149
Hydro Unit Code: 04130001/030 **Str Class:** C
Waterbody Type: River
Waterbody Size: 35.6 Miles
Seg Description: entire stream and tribs

Drain Basin: Lake Ontario
Oak Orchard/12 Mile
Reg/County: 9/Niagara Co. (32)
Quad Map: WILSON (H-05-3)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
AQUATIC LIFE	Impaired	Known
RECREATION	Impaired	Known

Type of Pollutant(s)

Known: - - -
Suspected: UNKNOWN TOXICITY, Ammonia, Nutrients
Possible: Pathogens

Source(s) of Pollutant(s)

Known: - - -
Suspected: - - -
Possible: UNKNOWN SOURCE, Municipal, On-Site/Septic Syst, Private/Comm/Inst

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))
Verification Status: 2 (Problem Verified, Cause Unknown)
Lead Agency/Office: DOW/Reg9 **Resolution Potential:** Medium
TMDL/303d Status: 3b*

Further Details

Aquatic life support and recreational uses (fishing) in Hopkins Creek are impaired by as yet unidentified pollutants. Biological sampling suggests sewage and/or ammonia toxicity attributed to direct discharges are the likely source.

A biological (macroinvertebrate) assessment of Hopkins Creek in Burt was conducted in 2000. Sampling results indicated moderately impacted water quality conditions. Impact Source Determination determined municipal/industrial sources to be the likely source of impacts. Such impacts suggest domestic sewage, ammonia toxicity or other pollutants frequently associated with a direct discharge of wastewater. (DEC/DOW, BWAM/SBU, April 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.

Fourmile Creek, Lower, and tribs (0301-0066) Impaired Seg

Waterbody Location Information

Revised: 06/25/2007

Water Index No:	Ont 156			**Drain Basin:**	Lake Ontario
Hydro Unit Code:	04130001/010	**Str Class:**	B		Oak Orchard/12 Mile
Waterbody Type:	River			**Reg/County:**	9/Niagara Co. (32)
Waterbody Size:	1.5 Miles			**Quad Map:**	SIXMILE CREEK (H-05-4)
Seg Description:	stream and tribs, from mouth to Towers Corners				

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
AQUATIC LIFE	Impaired	Known
RECREATION	Impaired	Known

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

Known: - - -
Suspected: Other Sanitary Disch
Possible: UNKNOWN SOURCE, Municipal, On-Site/Septic Syst, Private/Comm/Inst

Resolution/Management Information

Issue Resolvability: 1 (Needs Verification/Study (see STATUS))
Verification Status: 2 (Problem Verified, Cause Unknown)
Lead Agency/Office: DOW/Reg9 **Resolution Potential:** Medium
TMDL/303d Status: 3b*

Further Details

Aquatic life support and corresponding recreational uses (fishing) in Fourmile Creek are impaired by as yet unidentified pollutants. Biological sampling revealed significant water quality impacts.

A biological (macroinvertebrate) assessment of Fourmile Creek near Towers Corners Smithville (at Route 18) was conducted in 2000. Sampling results indicated severely impacted water quality conditions. The fauna was dominated by pollution-tolerant flatworms and scuds. Impact Source Determination indicated the municipal/industrial wastes were the primary cause of the impacts. Such impacts suggest domestic sewage, ammonia toxicity or other pollutants frequently associated with a direct discharge of wastewater. There are known stormwater discharges to the creek. The sample was collected at a golf course where related runoff may also influence water quality. (DEC/DOW, BWAM/SBU, June 2005)

This segment includes the portion of the stream and all tribs from the mouth to unnamed trib (-1) near Towers Corners. The waters of this portion of the stream are Class B. Tribs to this reach/segment are Class C.

NYS Barge Canal (portion 2a) (0301-0073) NoKnownImpct

Waterbody Location Information

Revised: 08/02/2007

Water Index No: NYS Barge Canal (portion 2a)
Hydro Unit Code: 04130001/ **Str Class:** C
Waterbody Type: Canal
Waterbody Size: 20.0 Miles
Seg Description: from Lockport to Middleport

Drain Basin: Lake Ontario
Oak Orchard/12 Mile
Reg/County: 9/Niagara Co. (32)
Quad Map: ()

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 the Barge Canal in Gasport (at Telegraph Road) was conducted in 2004. Multiplate sampling results indicated non-impacted water quality conditions. Conditions at the Gasport site have steadily improved since sampling in 1975 showed clearly moderate impacts. The most recent sampling revealed fauna with several species of mayflies and caddisflies. Diminished municipal/industrial inputs is thought to be the likely cause of improvement. The influx of zebra mussels, first observed in 1990, have apparently changed the ecosystem dynamics of the canal and may also be responsible for some of the observed changes. (DEC/DOW, BWAM/SBU, June 2005)

This segment includes the portion of the canal from Lock 34 in Lockport at the Niagara River-Lake Ontario watershed boundary to the Niagara-Orleans County line near Middleport. The waters in this portion of the canal are Class C.