



## Oak Orchard Creek Watershed (0413000104)

Water Index Number	Waterbody Segment	Category
Ont 138 (portion 1)	<a href="#">Oak Orchard Cr, Lower, and minor tribs (0301-0004)</a>	MinorImpacts
Ont 138 (portion 2)/P166	Waterport Pond (0301-0035)	UnAssessed
Ont 138 (portion 3)	<a href="#">Oak Orchard Cr, Middle, and minor tribs (0301-0005)</a>	MinorImpacts
Ont 138 (portion 4)	<a href="#">Oak Orchard Cr, Upper, and tribs (0301-0014)</a>	MinorImpacts
Ont 138- 1	Marsh Creek and tribs (0301-0036)	UnAssessed
Ont 138- 3	<a href="#">Otter Creek, Lower, and tribs (0301-0037)</a>	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	<a href="#">Fish Creek and tribs (0301-0040)</a>	MinorImpacts
Ont 138-11d-P167	Glenwood Lake (0301-0041)	UnAssessed
Ont 138-P167o	Upper Stafford Marsh (0301-0042)	UnAssessed
NYS Barge Canal (portion 2b)	<a href="#">NYS Barge Canal (portion 2b) (0301-0074)</a>	MinorImpacts

# 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  
**TMDL/303d Status:** n/a

**Resolution Potential:** Low

## 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

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

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

<b>Use(s) Impacted</b>	<b>Severity</b>	<b>Problem Documentation</b>
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

<b>Issue Resolvability:</b>	1 (Needs Verification/Study (see STATUS))	
<b>Verification Status:</b>	4 (Source Identified, Strategy Needed)	
<b>Lead Agency/Office:</b>	DOW/Reg8	<b>Resolution Potential:</b> Medium
<b>TMDL/303d Status:</b>	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)      **Drain Basin:** Lake Ontario  
**Hydro Unit Code:** 04130001/070      **Str Class:** C      Oak Orchard/12 Mile  
**Waterbody Type:** River      **Reg/County:** 8/Genesee Co. (19)  
**Waterbody Size:** 318.3 Miles      **Quad Map:** MEDINA (I-07-1)  
**Seg Description:** stream and tribs above Medina

## 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/Hydrology	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  
**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  
**TMDL/303d Status:** 3a?

**Resolution Potential:** Medium

## 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  
**TMDL/303d Status:** n/a

**Resolution Potential:** Medium

## 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)      **Drain Basin:** Lake Ontario  
**Hydro Unit Code:** 04130001/      **Str Class:** C      **Reg/County:** 8/Orleans Co. (37)  
**Waterbody Type:** Canal      **Quad Map:** ()  
**Waterbody Size:** 20.0 Miles  
**Seg Description:** from Middleport to Holley

## 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/Hydrology	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.