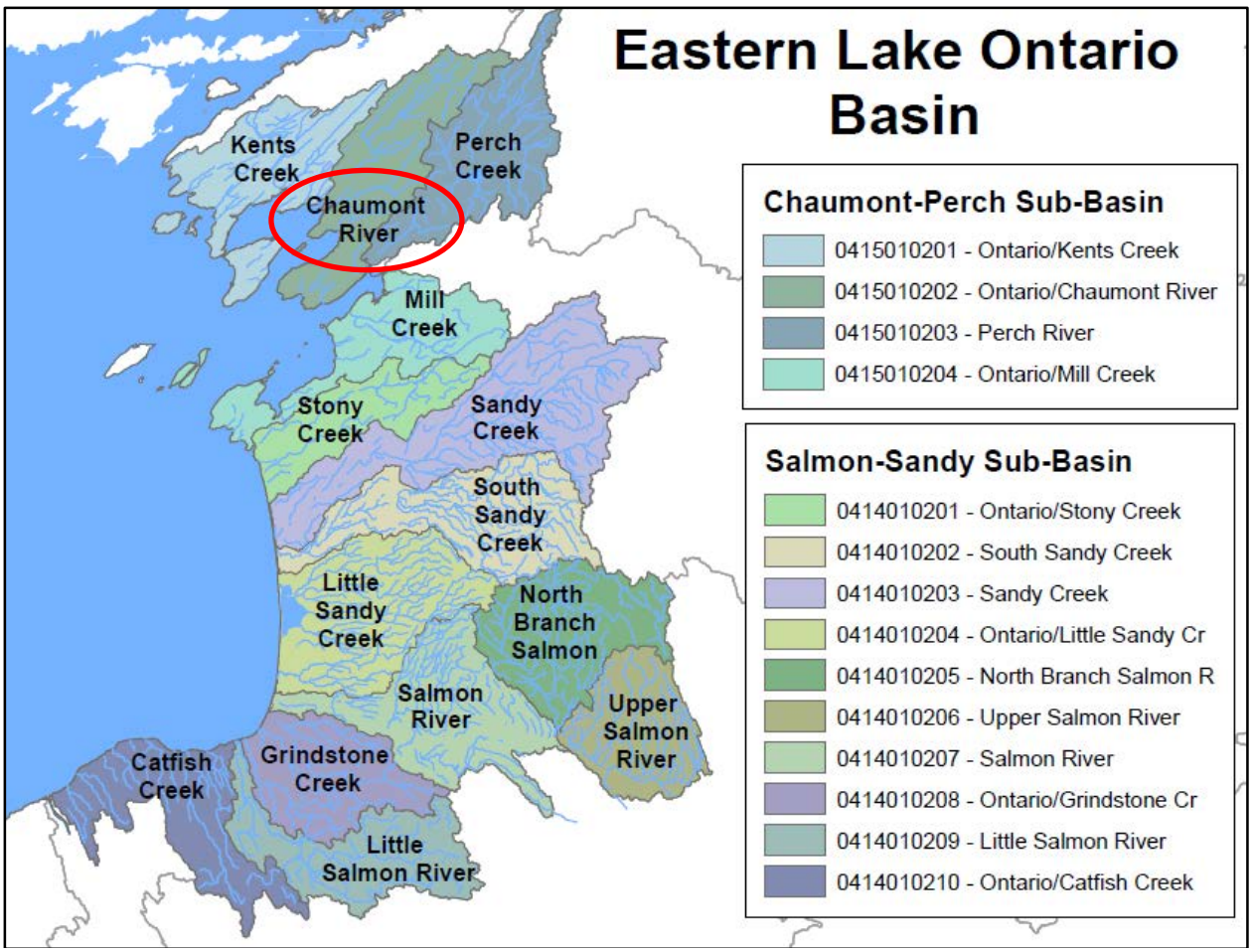

Lake Ontario/Chaumont River Watershed
(0415010202)

Water Index Number	Waterbody Segment	Category
Ont (portion 2)	Lake Ontario Shoreline, Eastern (0303 0024)	Impaired Seg
Ont (portion 2a)	Chaumont Bay (0303 0011)	Impaired Seg
Ont (portion 2b)	Guffin Bay (0303 0025)	Impaired Seg
Ont 8	Chaumont River, Lower, and Tribs (0303 0010)	MinorImpacts
Ont 8	Chaumont River, Upper, and tribs (0303 0037)	UnAssessed
Ont 9	Horse Creek and tribs (0303 0038)	UnAssessed
Ont 9a thru 18a	Minor Tribs to Lake Ontario (0303 0039)	UnAssessed

Lake Ontario Shoreline, Eastern (0303-0024) Impaired Seg

Waterbody Location Information

Revised: 10/06/2004

Water Index No: Ont (portion 2)
Drain Basin: Lake Ontario
Hydro Unit Code: 04150102/ **Str Class:** A
Chaumont-Perch River
Waterbody Type: G.Lakes
Reg/County: 6/Jefferson Co. (23)
Waterbody Size: 53.1 ShrMi
Quad Map: HENDERSON BAY (F-16-1)
Seg Description: shoreline from Point Peninsula to Bull Rock Point

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
FISH CONSUMPTION	Impaired	Known

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

Known: TOX/CONTAM. SEDIMENT
Suspected: - - -
Possible: - - -

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 Lake Ontario, including this length of the lake shoreline, is impaired by contamination from the past/historic discharge of organics (PCBs, dioxin) and pesticides (mirex).

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).

The governments of the United States and Canada made a commitment in 1987, as part of the Great Lakes Water Quality Agreement (GLWQA), to develop a Lakewide Management Plan (LaMP) for each of the five Great Lakes. The Lake Ontario LaMP is a binational, cooperative effort that also involves a large number of local, statewide and federal

partners. The goals of the LaMP are to restore and protect the health of Lake Ontario by reducing chemical pollutants entering the lake and addressing the biological and physical factors impacting the lake. The LaMP evaluates use impairments, identifies sources of the identified impairments and recommends strategies for resolution of the impairments and restoration of beneficial uses.

An outline of the most recent Lake Ontario LaMP activities and progress can be found in the Lake Ontario Lakewide Management Plan Status 2006 Report (www.epa.gov/glnpo/lakeont/2006/index.ht ml). The LaMP 2006 Status Report is the latest, comprehensive compilation of existing LaMP reports. The document contains new/updated information on the current status of beneficial use impairments, sources and loads of critical pollutants, public involvement and communication and significant ongoing and emerging issues. (DEC/DOW, BWAM/WQM, January 2007)

This length of Lake Ontario Shoreline 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 Lake Ontario shoreline from Point Peninsula at the southern most tip of the peninsula to Bull Rock Point, encompassing the shorelines of Chaumont and Guffin Bays. The waters of this portion of the shoreline are Class A. Tribs to this reach/segment, as well as Chaumont Bay and Guffin Bay proper, are listed separately.

Chaumont Bay (0303-0011) Impaired Seg

Waterbody Location Information

Revised: 04/12/2007

Water Index No: Ont (portion 2a)
Hydro Unit Code: 04150102/ **Str Class:** C
Waterbody Type: Bay
Waterbody Size: 20.0 Acres
Seg Description: entire bay, see description

Drain Basin: Lake Ontario
Reg/County: 6/Jefferson Co. (23)
Quad Map: CHAUMONT (E-16-4)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
FISH CONSUMPTION	Impaired	Known
Recreation	Stressed	Suspected

Type of Pollutant(s)

Known: PRIORITY ORGANICS (PCBs), PRIORITY ORGANICS (dioxin), PESTICIDES (mirex)
Suspected: Algal/Weed Growth, Nutrients
Possible: - - -

Source(s) of Pollutant(s)

Known: TOX/CONTAM. SEDIMENT
Suspected: - - -
Possible: Agriculture, 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:** Medium
TMDL/303d Status: 2b (Multiple Segment/Categorical Water, Fish Consumption)

Further Details

Fish consumption in Lake Ontario is impaired by contamination from the past/historic discharge of organics (PCBs, dioxin) and pesticides (mirex). Recreational uses in the bay are also considered to be stressed by excessive aquatic weed growth and algal blooms.

Fish consumption in Lake Ontario/Chaumont Bay (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).

Previous assessments of the bay have cited nutrient loads and other impacts from failing and/or inadequate on-site septic

systems. However the Village of Chaumont completed construction of new sewers and a new WWTP in March 2002 for the entire village which is expected to address most onsite system impacts to the Bay. The sewering project did not reach several seasonal as well as some year-round homes on the Bay which remain septic systems and may still be contribute loadings to the bay. However, poor circulation and flushing in this arm of Lake Ontario is a factor that affects water quality. (DE/DOW, Region 6, August 2005)

The governments of the United States and Canada made a commitment in 1987, as part of the Great Lakes Water Quality Agreement (GLWQA), to develop a Lakewide Management Plan (LaMP) for each of the five Great Lakes. The Lake Ontario LaMP is a binational, cooperative effort that also involves a large number of local, statewide and federal partners. The goals of the LaMP are to restore and protect the health of Lake Ontario by reducing chemical pollutants entering the lake and addressing the biological and physical factors impacting the lake. The LaMP evaluates use impairments, identifies sources of the identified impairments and recommends strategies for resolution of the impairments and restoration of beneficial uses.

An outline of the most recent Lake Ontario LaMP activities and progress can be found in the Lake Ontario Lakewide Management Plan Status 2006 Report (www.epa.gov/glnpo/lakeont/2006/index.ht ml). The LaMP 2006 Status Report is the latest, comprehensive compilation of existing LaMP reports. The document contains new/updated information on the current status of beneficial use impairments, sources and loads of critical pollutants, public involvement and communication and significant ongoing and emerging issues. (DEC/DOW, BWAM/WQM, January 2007)

This waterbody 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 waters of the bay north of a line from Clines Point east to Point Salubrious. The waters of the bay are Class C.

Guffin Bay (0303-0025) Impaired Seg

Waterbody Location Information

Revised: 08/01/2007

Water Index No: Ont (portion 2b)
Hydro Unit Code: 04150102/ **Str Class:** C
Waterbody Type: Bay
Waterbody Size: 20.0 Acres
Seg Description: entire bay, see description

Drain Basin: Lake Ontario
Reg/County: 6/Jefferson Co. (23)
Quad Map: CHAUMONT (E-16-4)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
FISH CONSUMPTION	Impaired	Known
Recreation	Stressed	Known

Type of Pollutant(s)

Known: PRIORITY ORGANICS (PCBs), PRIORITY ORGANICS (dioxin), PESTICIDES (mirex), Algal/Weed Growth
Suspected: Nutrients, Pathogens
Possible: - - -

Source(s) of Pollutant(s)

Known: TOX/CONTAM. SEDIMENT, On-Site/Septic Syst
Suspected: - - -
Possible: - - -

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 Lake Ontario/Guffin Bay is impaired by contamination from the past/historic discharge of organics (PCBs, dioxin) and pesticides (mirex). In addition, various recreational uses (swimming, boating, fishing) in Guffin Bay are known to experience impacts as a result of inadequately treated sewage discharges from failing and/or inadequate on-site septic systems serving cottage communities and seasonal homes along the bay.

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).

Sanitary surveys have confirmed household discharges to the bay. These discharges contribute pathogens as well as nutrients that result in excessive aquatic weed and algal growth, increased oxygen demand and a general decrease in water quality and aesthetics. Aesthetic complaints regarding weeds and odors have been received. (DEC/DOW, Region 6, May 2007)

The governments of the United States and Canada made a commitment in 1987, as part of the Great Lakes Water Quality Agreement (GLWQA), to develop a Lakewide Management Plan (LaMP) for each of the five Great Lakes. The Lake Ontario LaMP is a binational, cooperative effort that also involves a large number of local, statewide and federal partners. The goals of the LaMP are to restore and protect the health of Lake Ontario by reducing chemical pollutants entering the lake and addressing the biological and physical factors impacting the lake. The LaMP evaluates use impairments, identifies sources of the identified impairments and recommends strategies for resolution of the impairments and restoration of beneficial uses.

An outline of the most recent Lake Ontario LaMP activities and progress can be found in the Lake Ontario Lakewide Management Plan Status 2006 Report (www.epa.gov/glnpo/lakeont/2006/index.ht ml). The LaMP 2006 Status Report is the latest, comprehensive compilation of existing LaMP reports. The document contains new/updated information on the current status of beneficial use impairments, sources and loads of critical pollutants, public involvement and communication and significant ongoing and emerging issues. (DEC/DOW, BWAM/WQM, January 2007)

This waterbody 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 waters of the bay north of a line from Point Peninsula east to Pillar Point, and south of a line from Clines Point east to Point Salubrious. The waters of the bay are Class C.

Chaumont River, Lower, and Tribs (0303-0010) MinorImpacts

Waterbody Location Information

Revised: 04/12/2007

Water Index No: Ont 8 **Drain Basin:** Lake Ontario
Hydro Unit Code: 04150102/040 **Str Class:** C
Waterbody Type: River **Reg/County:** 6/Jefferson Co. (23)
Waterbody Size: 29.1 Miles **Quad Map:** DEXTER (E-16-3)
Seg Description: stream and tribs, from mouth to Depauville

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

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

Known: - - -
Suspected: AGRICULTURE, ON-SITE/SEPTIC SYST (Depauville)
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 and recreational uses in Chaumont River are thought to experience minor impacts due to nutrient loads and other affects from agricultural nonpoint sources. Inadequate on-site septic systems may also be affecting water quality.

Previously high levels of phosphorus and resulting dissolved oxygen sags were suspected of are suspected of limiting the fishery and recreational use (boating) in the river. More recently, the Village of Depauville completed construction of an adequate WWTP in 1989. In addition, this watershed was identified as a priority for the Jefferson County WQCC, which has spent $60,000 of grant money as well as $100,000 contributed by an area farmer to address water quality concerns. Specific agricultural concerns in the watershed that were previously cited have generally been addressed by DEC/DOW and the county SWCD. There remains some concerns regarding the impacts of failing and/or inadequate on-site septic systems may were not included in the sewering project and may still be contributing nutrients to the river, although this has not been verified. (DEC/DOW Region 6, April 1998)

A biological (macroinvertebrate) survey/assessment of Chaumont River in Depauville (at Route 179) was conducted in

2002. Sampling results indicated moderately impacted water quality conditions. However, the sampling habitat was less than ideal, consisting of a very small riffle below a pooled area and the results may not be entirely representative. The fauna was dominated by caddisflies and riffle beetles and livestock waste was indicated as the primary stressor to the stream - a finding that is consistent with concerns in the watershed. Similar sampling circumstances and results were found in 1996 sampling. (DEC/DOW, BWAM/SBU, June 2005)

The Jefferson County WQCC maintained a routine sampling site on the river as well for several years, but is no longer routinely monitoring. Previous results showed a drop in dissolved oxygen from Zang Road downstream to the dam in the hamlet of Depauville during warmer weather, believed to be caused by agricultural runoff and septic conditions in the pool behind the dam due to organic decay, etc. (Jefferson County WQCC, January 2007)

This segment includes the portion of the stream and all tribs from the mouth to a point 7.0 miles above the mouth, just above Depauville. The waters of this portion of the stream are Class C. Tribs to this reach/segment, including Buttermilk Creek (-1), are also Class C. Upper Chaumont River is listed separately.