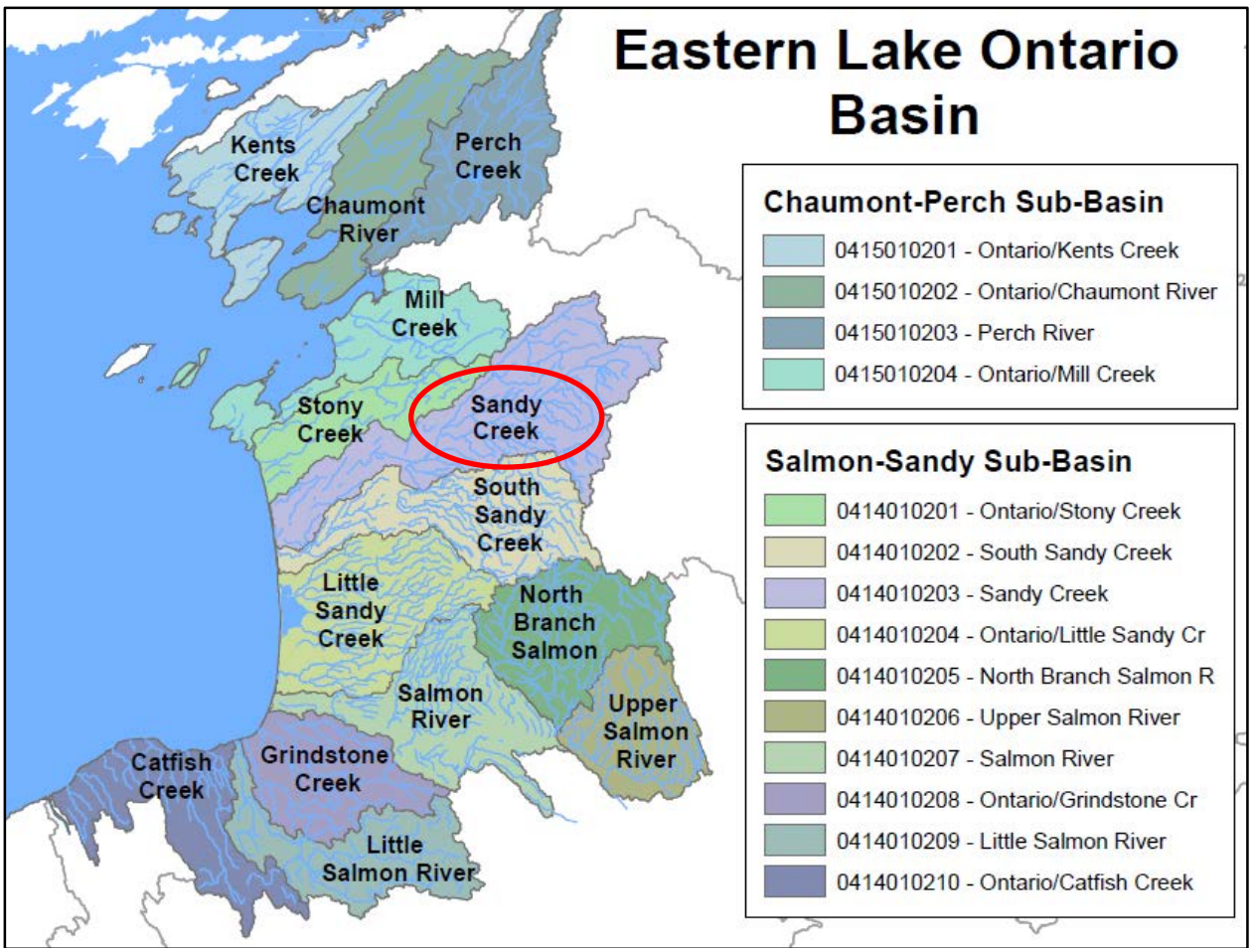

Sandy Creek Watershed
(0414010203)

Water Index Number	Waterbody Segment	Category
Ont 42 thru 51	Minor Tribs to L. Ontario (0303 0048)	MinorImpacts
Ont 44	Sandy Creek, Lower, and tribs (0303 0005)	MinorImpacts
Ont 44	Sandy Creek, Upper, and minor Tribs (0303 0020)	NoKnownImpct
Ont 44 10	Hart Brook and tribs (0303 0049)	UnAssessed
Ont 44 14	North Branch Sandy Creek and tribs (0303 0050)	UnAssessed
Ont 44 14 P137	Rutland Lake (0303 0051)	UnAssessed
Ont 44 1a P1031	Lakeview Pond (0303 0052)	UnAssessed

Minor Tribs to L. Ontario (0303-0048) MinorImpacts

Waterbody Location Information

Revised: 05/22/2007

Water Index No:	Ont 42 thru 51			**Drain Basin:**	Lake Ontario
Hydro Unit Code:	04140102/100	**Str Class:**	C		Salmon R/Sandy Cr
Waterbody Type:	River			**Reg/County:**	6/Jefferson Co. (23)
Waterbody Size:	22.4 Miles			**Quad Map:**	HENDERSON (F-16-4)
Seg Description:	total length of select tribs, from Sawyer Pt to Selkirk				

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

Known: - - -
Suspected: D.O./OXYGEN DEMAND, NUTRIENTS, Algal/Weed Growth
Possible: - - -

Source(s) of Pollutant(s)

Known: - - -
Suspected: AGRICULTURE, On-Site/Septic Syst
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, recreational uses and aesthetics in some of these minor tributaries to Lake Ontario are known to be stressed by nutrients, low dissolved oxygen and/or other pollutants from agricultural impacts and other nonpoint sources in the watershed. Inadequate onsite wastewater treatment systems are also a suspected source of pollutants.

One tributary in particular (Ont-42) which enters the lake south of Little Stony Creek at the Black Pond State Recreation Area is of particular concern. The DEC Regional staff has documented runoff and discharges from CAFOs in the watershed and low dissolved oxygen and odors in the stream at the Route 3 crossing. Considerable decaying vegetation is also frequently noted. (DEC/DOW, Region 6, May 2007)

Other tribs in this segment are thought to be impacted as well. Southern Jefferson County is intensely farmed and home to some of the largest farms (CAFOs) in the watershed. Also, soil conditions in much of this section of the county are not generally suitable for on-site septic systems, yet most of the communities (Villages and Hamlets) are not sewered (Villages of Sackets Harbor and Adams are the exceptions). (DEC/DOW, Region 6 and Jefferson County WQCC,

January 2007)

This segment includes the total length of selected/smaller tribs to Lake Ontario from Stony Creek (-40) near Sawyer Point the mouth of the Salmon River (-53) in Selkirk. Tribs within this segment, including Blind Creek (-49), are primarily Class C. Stony Creek (-40), Little Stony Creek (-41), Sandy Creek (-44), South Sandy Creek (-45), Skinner Creek (-47), Lindsey Creek (-48), Little Sandy Creek (-50) and Salmon River (-53), are listed separately.

Sandy Creek, Lower, and tribs (0303-0005) MinorImpacts

Waterbody Location Information

Revised: 04/12/2007

Water Index No: Ont 44
Hydro Unit Code: 04140102/090 **Str Class:** C
Waterbody Type: River
Waterbody Size: 36.3 Miles
Seg Description: stream and tribs, from mouth to Adams

Drain Basin: Lake Ontario
Salmon R/Sandy Cr
Reg/County: 6/Jefferson Co. (23)
Quad Map: HENDERSON (F-16-4)

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, SILT/SEDIMENT
Possible: - - -

Source(s) of Pollutant(s)

Known: - - -
Suspected: AGRICULTURE
Possible: Streambank Erosion

Resolution/Management Information

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

Further Details

Aquatic life support in this portion of Sandy Creek is thought to experience minor impacts from nutrients and organic loads and siltation from agricultural activities in the watershed.

A biological (macroinvertebrate) assessment of Sandy Creek in North Landing (at Route 3) was conducted in 2002. Sampling results indicated slightly impacted water quality conditions. These results were consistent with results from a multiple site survey of Sandy Creek conducted in 1997 that found slightly impacted conditions at all sites from North Landing to Rodman (see below). The creek appears to be very productive, supporting significant amounts of algae on substrate rocks. In spite of these minor impacts, aquatic life is considered to be fully supported in the stream. Fish sampling conducted as part of the 1997 study found communities typical of good water quality. (DEC/DOW, BWAM/SBU, June 2005)

A biological (macroinvertebrate and fishery) survey of Sandy Creek conducted in 1997 recorded slightly impacted conditions at four sites along the creek. Impact Source Determination (ISD) indicated nutrient enrichment, organic loadings and siltation as likely sources. Analysis of crayfish from the most downstream site found no metals above levels of concern and no pesticides above levels of detection. PCBs were present but not above levels of concern; and two

PAHs, chrysene and benzo(a)anthracene were found to exceed levels of concern. (Sandy Creek Biological Assessment Report, DEC/DOW, BWAM, SBU, May 1998)

The Jefferson County SWCD considers Sandy Creek to be a priority watershed. It has over 100 active farms (encompassing nearly 100,000 acres), including some of the largest farms in the county. A dairy processing plant is also located in the watershed. The USDA/SWCD has directed significant funding into agricultural management projects in the watershed. Further agricultural environmental management planning is being conducted and grants for implementation are being pursued. The Cooperative Extension also conducts outreach programs in the watershed. (DEC/DOW Region 6, April 1998)

The Jefferson County WQCC is also involved with water quality activities on the stream, maintaining routine water quality monitoring on the creek. The most recent analysis of this sampling data indicates the overall water quality of the Sandy Creek to be quite good with relatively low levels of nutrients and dissolved oxygen levels and other conditions adequate to support a desirable and healthy aquatic community. (Analysis of the Existing Water Quality Database for the Sandy and South Sandy Creek Watersheds - 1997 to 2005, Jefferson County WQCC, October 2006)

The Tug Hill Commission is also involved in resource protection efforts in the Sandy and South Sandy Creeks Watershed. The commission assists local governments in the region in protecting natural resources of the Tug Hill while also providing opportunities of economic development. The commission is currently undertaking an ecosystem-based management demonstration project in the watershed. This numerous components of this project include Invasive species control, forestry practices, agricultural riparian corridor restoration and fishery habitat improvements. (Tug Hill Commission, December 2006)

The Sandy Creek watershed represents a significant fishery. Wetlands at the mouth of the creek have been designated "globally significant" habitat by New York Heritage Program/Nature Conservancy. This portion of the watershed is also a wildlife management area. See Black Pond (segment ID 0303-0008).

This segment includes the portion of the stream and all tribs from the mouth to Hart Brook (-10) in Adams. The waters of this portion of the stream are Class C. Tribs to this reach/segment are Class C,C(T). Hart Brook (-10) and Upper Sandy Creek are listed separately.

Sandy Creek, Upper, and minor Tribs (0303-0020) Threatened

Waterbody Location Information

Revised: 06/25/2012

Water Index No:	Ont 44			**Drain Basin:**	Lake Ontario
Hydro Unit Code:	04140102/090	**Str Class:**	C(T)		Salmon R/Sandy Cr
Waterbody Type:	River			**Reg/County:**	6/Jefferson Co. (23)
Waterbody Size:	191.2 Miles			**Quad Map:**	RODMAN (F-17-4)
Seg Description:	stream and select tribs, above Adams				

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

Known: - - -
Suspected: THERMAL CHANGES, NUTRIENTS (Phosphorus)
Possible: - - -

Source(s) of Pollutant(s)

Known: - - -
Suspected: INDUSTRIAL (Dairy Processing)
Possible: - - -

Resolution/Management Information

Issue Resolvability:	3 (Strategy being Implemented)		
Verification Status:	(Not Applicable for Selected RESOLVABILITY)		
Lead Agency/Office:	DEC/Reg 6	**Resolution Potential:**	High
TMDL/303d Status:	n/a		

Further Details

Overview
Habitat and aquatic life in this portion of Sandy Creek are considered to experience threats due to thermal changes and nutrient loads attributed to a dairy processing facility discharge.

Water Quality Sampling
A biological (macroinvertebrate) assessment of Sandy Creek in Adams (at Route 69) was conducted in 2002. Sampling results indicated non-impacted water quality conditions. Sampling revealed numerous mayflies, stoneflies and caddisflies. These results represent an improvement from results of a multiple site survey of Sandy Creek conducted in 1997 that found slightly impacted conditions at all sites including upstream sites in Adams and Rodman. Fish sampling conducted as part of the 1997 study found communities typical of good water quality. (DEC/DOW, BWAM/SBU, June 2005)

Sampling of Fish Creek, a tributary, to determine possible impact from a regional landfill was also conducted as part of the 1997 biological survey. Results showed non- to slightly impacted conditions at the time and no effects

from the landfill were detected. (Sandy Creek Biological Assessment Report, DEC/DOW, BWAM, SBU, May 1998)

DEC Regional Fisheries staff is considering conducting a survey during 2012 to evaluate the impact of the dairy processing facility discharge. (DEC/DOW, Region 6, May 2012)

Source Assessment

A dairy processing facility on the stream has increased (doubled) its discharge flow to 0.4 MDG. The temperature of the discharge is as high as 90 degrees F, while the temperature standard in this trout water is 70 degrees. DEC has taken enforcement action against the facility in the form of a consent order signed in June 2012 requiring the discharge to be brought into compliance with SPDES regulations and that assessed appropriate penalties. (DEC/DOW, Region 6, June 2012)

Water Quality Management

The Jefferson County SWCD considers Sandy Creek to be a priority watershed. It has over 100 active farms (encompassing nearly 100,000 acres), including some of the largest farms in the county. A dairy processing plant is also located in the watershed. The USDA/SWCD has directed significant funding into agricultural management projects in the watershed. Further agricultural environmental management planning is being conducted and grants for implementation are being pursued. The Cooperative Extension also conducts outreach programs in the watershed. (DEC/DOW Region 6, April 1998)

The Jefferson County WQCC is also involved with water quality activities on the stream, maintaining routine water quality monitoring on the creek. The most recent analysis of this sampling data indicates the overall water quality of the Sandy Creek to be quite good with relatively low levels of nutrients and dissolved oxygen levels and other conditions adequate to support a desirable and healthy aquatic community. (Analysis of the Existing Water Quality Database for the Sandy and South Sandy Creek Watersheds - 1997 to 2005, Jefferson County WQCC, October 2006)

Watershed Management

The Tug Hill Commission is also involved in resource protection efforts in the Sandy and South Sandy Creeks Watershed. The commission assists local governments in the region in protecting natural resources of the Tug Hill while also providing opportunities of economic development. The commission is currently undertaking an ecosystem-based management demonstration project in the watershed. This numerous components of this project include Invasive species control, forestry practices, agricultural riparian corridor restoration and fishery habitat improvements. (Tug Hill Commission, December 2006)

Segment Description

This segment includes the portion of the stream and selected/smaller tribs above Hart Brook (-10) in Adams. The waters of this portion of the stream are Class C,C(T). Tribs to this reach/segment, including Fish Creek (-13), Gulf Creek (-16), Shingle Gulf Creek (-19) and Bear Gulf Creek (-21), are Class C,C(T),C(TS). North Branch Sandy Creek (-14) and Lower Sandy Creek are listed separately.