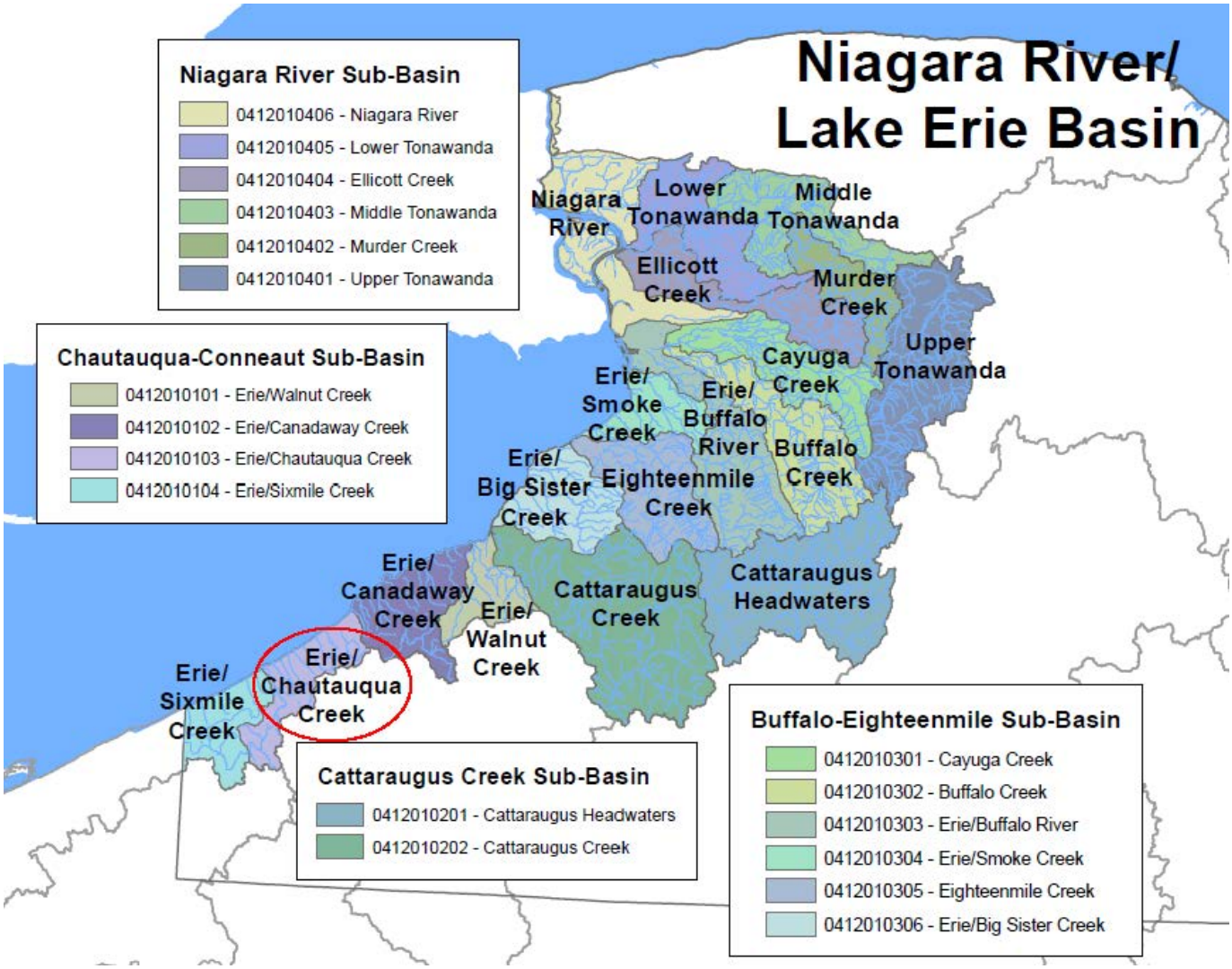

Chautauqua Creek – Frontal Lake Erie
(0412010103)

Water Index Number	Waterbody Segment	Category
Ont 158..E-44 thru 67 (selected)	Minor Tribs to Lake Erie (0105-0024)	**Need Verific**
Ont 158..E-50	Slippery Rock Creek and tribs (0105-0010)	**NoKnownImpct**
Ont 158..E-50-P160k	Brocton Reservoir (0105-0025)	**Threatened**
Ont 158..E-50-P160k-	Tribs to Brocton Reservoir (0105-0026)	**Threatened**
Ont 158..E-68	Chautauqua Creek, Lower, and minor tribs (0105-0001)	**NoKnownImpct**
Ont 158..E-68	Chautauqua Creek, Upper and tribs (0105-0027)	**Threatened**
Ont 158..E-68- 1	Little Chautauqua Creek and tribs (0105-0028)	UnAssessed
Ont 158..E-68- 2-P165a	Minton Reservoir (0105-0029)	**Threatened**

Minor Tribs to Lake Erie (0105-0024) Need Verific

Waterbody Location Information

Revised: 06/02/2010

Water Index No:	Ont 158..E-44 thru 67 (selected)			**Drain Basin:**	Lake Erie-Niagara River
Hydro Unit Code:	04120101/120	**Str Class:**	C		Lake Erie-Chautauqua
Waterbody Type:	River			**Reg/County:**	9/Chautauqua Co. (7)
Waterbody Size:	74.4 Miles			**Quad Map:**	BROCKTON (L-03-1)
Seg Description:	total length of selected tribs, L.Canadawy to Chautaqua				

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

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

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

Overview
Aquatic life in these tribs to Lake Erie may experience minor impacts and threats. Specific pollutants and sources have not been identified.

Water Quality Sampling
A biological (macroinvertebrate) assessment of Bourne Creek in Westfield (at Route 5) was conducted as part of the RIBS biological screening effort in 2005. Sampling results indicated the lower range of slightly impacted conditions. In such samples some replacement of sensitive ubiquitous species by more tolerant species occurs, although the sample also includes a balanced distribution of all expected species. Aquatic life is thought to be fully supported in the stream, however the community composition and nutrient biotic evaluation suggest conditions and levels of enrichment are sufficient to cause stress to aquatic life. Despite the noted impacts, impact source determination found the fauna to have high similarity to natural communities. Additional sampling to verify the level of impact in the stream. (DEC/DOW, BWAM/SBU, June 2010)

Though Bourne Creek is just one of several streams that make up this waterbody segment, it is considered representative of water quality in the segment as a whole. Additional sampling on other trib within this segment is recommended.

Segment Description

This segment includes the total length of all selected/smaller tribs to the Lake Erie between Little Canadaway Creek (-43) and Chautauqua Creek (-68). Tribs within this segment, including Corell Creek (-51), Walker Creek (-54), Bournes Creek (-61), Spring Creek (-63) and Doty Creek (-64), are Class C. Little Canadaway Creek (-43), Slippery Rock Creek (-50) and Chautauqua Creek (-68) are listed separately.

Slippery Rock Creek and tribs (0105-0010) NoKnownImpct

Waterbody Location Information

Revised: 05/14/2003

Water Index No: Ont 158..E-50
Hydro Unit Code: 04120101/120 **Str Class:** C
Waterbody Type: River
Waterbody Size: 11.3 Miles
Seg Description: entire stream and tribs

Drain Basin: Lake Erie-Niagara River
Lake Erie-Chautauqua
Reg/County: 9/Chautauqua Co. (7)
Quad Map: BROCKTON (L-03-1)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
NO USE IMPAIRMNT		

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

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

Resolution/Management Information

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

Further Details

Water Quality Sampling

A biological (macroinvertebrate) assessment of Slippery Rock Creek in Brockton (at Route 5) was conducted in 2000. Sampling results indicated slightly impacted water quality conditions. Nonpoint source nutrient enrichment was the primary cause of impact. Midges and caddisflies dominated the fauna. Despite these conditions, aquatic life is considered to be fully supported in the stream, and there are no other apparent impacts to designated uses. (DEC/DOW, BWAR/SBU, April 2003)

Source Assessment

The Village of Brocton applied for funding to construct a sanitary line to construct a sanitary sewer to tie filter backwash from the village water treatment plan, as well as several homes with failing septics, into the WWTP. The most recent (2003) SPDES permit reduces the allowable flow of the WWTP to 0.372 MGD from 0.4 MGD previously. (DEC/DOW, BWC and Region 9, February 2005)

Segment Description

This segment includes the entire stream and selected/smaller tribs. The waters of the stream are Class C. Tribs to this reach/segment are also Class C. Brocton Reservoir (P160k) and tribs are is listed separately.

Brocton Reservoir (0105-0025) Threatened

Waterbody Location Information

Revised: 05/10/2010

Water Index No: Ont 158..E-50-P160k
Hydro Unit Code: 04120101/120 **Str Class:** A
Waterbody Type: Lake(R)
Waterbody Size: 17.4 Acres
Seg Description: entire reservoir

Drain Basin: Lake Erie-Niagara River
Lake Erie-Chautauqua
Reg/County: 9/Chautauqua Co. (7)
Quad Map: HARTFIELD (L-03-4)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Water Supply	Threatened	Suspected

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

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

Resolution/Management Information

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

Further Details

Overview

Water supply use of Brockton Reservoir (also known as Slippery Rock Creek Reservoir) is thought to experience threats from pathogens due to the level of agricultural pastureland in the watershed. Current information does not indicate any impacts to water supply or other uses, but the use of the resources as a water supply and the activities in the watershed suggest additional protection efforts may be appropriate.

Source (Drinking) Water Assessment

A source water assessment of Brockton Reservoir found an elevated susceptibility to contamination for this source of drinking water due to the amount of pasture in the assessment area. This assessment was conducted through the NYSDOH Source Waters Assessment Program (SWAP) which compiles, organizes, and evaluates information regarding possible and actual threats to the quality of public water supply (PWS) sources. The information contained in SWAP assessment reports assists in the oversight and protection of public water systems. It is important to note that SWAP reports estimate the potential for untreated drinking water sources to be impacted by contamination and do not address the quality of treated finished potable tap water. This water supply source provides water to the Village of Brockton. (NYSDOH, Source Water Assessment Program, 2005)

Tribs to Brocton Reservoir (0105-0026) Threatened

Waterbody Location Information

Revised: 05/10/2010

Water Index No: Ont 158..E-50-P160k-
Hydro Unit Code: 04120101/120 **Str Class:** A
Waterbody Type: River
Waterbody Size: 5.5 Miles
Seg Description: total length of all tribs to Brocton Reservoir

Drain Basin: Lake Erie-Niagara River
Lake Erie-Chautauqua
Reg/County: 9/Chautauqua Co. (7)
Quad Map: HARTFIELD (L-03-4)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Water Supply	Threatened	Suspected

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

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

Resolution/Management Information

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

Further Details

Overview

Water supply use of Brockton Reservoir (also known as Slippery Rock Creek Reservoir) is thought to experience threats from pathogens due to the level of agricultural pastureland in the watershed. Current information does not indicate any impacts to water supply or other uses, but the use of the resources as a water supply and the activities in the watershed suggest additional protection efforts may be appropriate.

Source (Drinking) Water Assessment

A source water assessment of Brockton Reservoir found an elevated susceptibility to contamination for this source of drinking water due to the amount of pasture in the assessment area. This assessment was conducted through the NYSDOH Source Waters Assessment Program (SWAP) which compiles, organizes, and evaluates information regarding possible and actual threats to the quality of public water supply (PWS) sources. The information contained in SWAP assessment reports assists in the oversight and protection of public water systems. It is important to note that SWAP reports estimate the potential for untreated drinking water sources to be impacted by contamination and do not address the quality of treated finished potable tap water. This water supply source provides water to the Village of Brockton. (NYSDOH, Source Water Assessment Program, 2005)

Segment Description
This segment includes the total length of all tribs to the Brocton Reservoir (P160k). Tribs within this segment are Class A.

Chautauqua Creek, Lower, and minor tribs (0105-0001) NoKnownImpct

Waterbody Location Information

Revised: 05/05/2010

Water Index No:	Ont 158..E-68			**Drain Basin:**	Lake Erie-Niagara River
Hydro Unit Code:	04120101/120	**Str Class:**	C(T)		Lake Erie-Chautauqua
Waterbody Type:	River			**Reg/County:**	9/Chautauqua Co. (7)
Waterbody Size:	6.0 Miles			**Quad Map:**	WESTFIELD (L-02-3)
Seg Description:	stream and selected tribs, fr mouth to near Minton Res				

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

Water Quality Sampling
A biological (macroinvertebrate) assessment of Chautauqua Creek in Barcelona (at Route 5) was conducted as part of the RIBS biological screening effort in 2005. Sampling results indicated the upper range of slightly impacted conditions. In such samples the community is slightly altered from natural conditions. Some sensitive species are not present and the overall abundance of macroinvertebrates is lower. However, the effects on the fauna appear to be relatively insignificant and water quality is considered to be good. The nutrient biotic index and impact source determination indicate low/some enrichment in the stream and fauna that is most similar to communities influenced by nonpoint nutrients and urban sources. Aquatic life support is considered to be fully supported in the stream, and there are no other apparent water quality impacts to designated uses. (DEC/DOW, BWAM/SBU, May 2010)

NYSDEC Rotating Intensive Basin Studies (RIBS) Intensive Network monitoring of Chautauqua Creek in Barcelona, Chautauqua County, (at Route 5) was conducted in 2000 and 2001. This sampling location is 0.3 miles above the mouth at Lake Erie. Sampling of the water column, sediments, and invertebrate tissues was conducted, as well as macroinvertebrate community analysis. Biological (macroinvertebrate) sampling results indicated non-impacted water quality conditions, although the 2000 assessment was based only on field screening. It was assessed as non-impacted in 1994, a high-flow year, but slightly impacted in 1993, a low-flow year, and in 1987 and 1988. Based on the most recent assessments, water quality is considered non-impacted. The improvements may be related to the 1988 upgrading of the

Westfield (V) Wastewater Treatment Facility, located 2 miles upstream. Water column sampling revealed iron to be the only parameter of concern. However, this is considered to be naturally occurring and not a source of water quality impacts. Toxicity testing of the water column showed no significant mortality or reproductive impacts. Bottom sediment sampling results revealed cadmium and one PAH (dibenzo(a,h)anthracene) to be exceeding the Threshold Effects Level - levels at which adverse impacts occasionally occur. (DEC/DOW, BWAR/RIBS, January 2005)

Water Quality Management

Improvements/repairs to the Westfield WWTP corrected total suspended solids violation reported in 2003. However overflows at a pump station remain an issue. A consent order required the village to reduce Infiltration/Inflow (I/I) to the pump station; this action was driven by a citizen law suit. The discharge of filter backwash water from the municipal water treatment facility was tied into the WWTP in 2007. While this eliminated a direct discharge to the surface waters, the additional flow has not been offset by reductions in I/I. (DEC/DOW, BWC and Region 9, August 2010)

Segment Description

This segment includes the portion of the stream and selected/smaller tribs from the mouth to 0.25 miles above trib -2. The waters of this portion of the stream are Class C(T). Tribs to this reach/segment are Class C,C(T). Little Chautauqua Creek (-1) and Minton Reservoir (P165a) are listed separately.

Chautauqua Creek, Upper and tribs (0105-0027) Threatened

Waterbody Location Information

Revised: 05/10/2010

Water Index No:	Ont 158..E-68			**Drain Basin:**	Lake Erie-Niagara River
Hydro Unit Code:	04120101/120	**Str Class:**	A(T)		Lake Erie-Chautauqua
Waterbody Type:	River			**Reg/County:**	9/Chautauqua Co. (7)
Waterbody Size:	56.5 Miles			**Quad Map:**	WESTFIELD (L-02-3)
Seg Description:	stream and selected tribs, above Minton Reservoir				

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Water Supply	Threatened	Suspected

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

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

Resolution/Management Information

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

Further Details

Overview

Water supply use of this portion of Chautauqua Creek is thought to experience threats from pathogens due to the level of agricultural pastureland in the watershed. Current information does not indicate any impacts to water supply or other uses, but the use of the resources as a water supply and the activities in the watershed suggest additional protection efforts may be appropriate.

Source (Drinking) Water Assessment

A source water assessment of Upper Chautauqua Creek found an elevated susceptibility to contamination for this source of drinking water due to the amount of pasture in the assessment area. This assessment was conducted through the NYSDOH Source Waters Assessment Program (SWAP) which compiles, organizes, and evaluates information regarding possible and actual threats to the quality of public water supply (PWS) sources. The information contained in SWAP assessment reports assists in the oversight and protection of public water systems. It is important to note that SWAP reports estimate the potential for untreated drinking water sources to be impacted by contamination and do not address the quality of treated finished potable tap water. This water supply source provides water to the Village of Westfield. (NYSDOH, Source Water Assessment Program, 2005)

Water Quality Sampling

A biological (macroinvertebrate) assessment of Chautauqua Creek in Summerdale (at Putnam Road) was conducted as part of the RIBS biological screening effort in 2005. Sampling results indicated slightly impacted conditions. In such samples the community is slightly altered from natural conditions. Some sensitive species are not present and the overall abundance of macroinvertebrates is lower. However, the effects on the fauna appear to be relatively insignificant and water quality is considered to be good. The nutrient biotic index and impact source determination indicate low enrichment in the stream and fauna that is most similar to communities influenced by impoundment effects. Aquatic life support is considered to be fully supported in the stream, and there are no other apparent water quality impacts to designated uses. (DEC/DOW, BWAM/SBU, January 2010)

Segment Description

This segment includes the portion of the stream and all tribs above a point 0.25 miles above trib -2. The waters of this portion of the stream are Class B(T) to the Westfield water supply pumping station and Class A(T) for the remainder of the reach. Tribs to this reach/segment, including trib -2 above Minton Reservoir (P165a) are primarily Class A,A(T); with some trib reaches designated Class C. Minton Reservoir (P165a) is listed separately.

Minton Reservoir (0105-0029) Threatened

Waterbody Location Information

Revised: 05/10/2010

Water Index No: Ont 158..E-68- 2-P165a
Hydro Unit Code: 04120101/120 **Str Class:** A
Waterbody Type: Lake(R)
Waterbody Size: 12.7 Acres
Seg Description: entire reservoir

Drain Basin: Lake Erie-Niagara River
Lake Erie-Chautauqua
Reg/County: 9/Chautauqua Co. (7)
Quad Map: WESTFIELD (L-02-3)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Water Supply	Threatened	Suspected

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

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

Resolution/Management Information

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

Further Details

Overview

Water supply use of Minton Reservoir is thought to experience threats from pathogens due to the level of agricultural pastureland in the watershed. Current information does not indicate any impacts to water supply or other uses, but the use of the resources as a water supply and the activities in the watershed suggest additional protection efforts may be appropriate.

Source (Drinking) Water Assessment

A source water assessment of Minton Reservoir found an elevated susceptibility to contamination for this source of drinking water due to the amount of pasture in the assessment area. This assessment was conducted through the NYSDOH Source Waters Assessment Program (SWAP) which compiles, organizes, and evaluates information regarding possible and actual threats to the quality of public water supply (PWS) sources. The information contained in SWAP assessment reports assists in the oversight and protection of public water systems. It is important to note that SWAP reports estimate the potential for untreated drinking water sources to be impacted by contamination and do not address the quality of treated finished potable tap water. This water supply source provides water to the Village of Westfield. (NYSDOH, Source Water Assessment Program, 2005)