



Ausable River (0415040403)

C- 25	Ausable River, Lower, and minor tribs(1004-0015)	NoKnownImpct
C- 25	Ausable River, Upper, and minor tribs (1004-0020)	NoKnownImpct
C- 25- 8-P213	Augur Lake (1004-0050)	MinorImpacts
C- 25- 8-P218	Butternut Pond (1004-0053)	NoKnownImpct
C- 25- 8-P218-	Tribes to Butternut Pond (1004-0054)	UnAssessed
C- 25- P212 thru P217(selected)	Minor Lake Tribs to Lower Ausable (1004-0052)	UnAssessed
C- 25-25	Palmer Brook, Upper, and tribs (1004-0055)	NoKnownImpct

Ausable River, Lower, and minor tribs (1004-0015)

NoKnownImpct

Waterbody Location Information

Revised: 04/28/2009

Water Index No: C- 25
Hydro Unit Code: 02010004/070 **Str Class:** C(T)
Waterbody Type: River (Med. Flow) **Reg/County:** 5/Clinton Co. (10) ...
Waterbody Size: 41.1 Miles **Quad Map:** KEESEVILLE (C-27-4)
Seg Description: stream and selected tribs from mouth to Ausable Chasm

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Habitat/Hydrology	Threatened	Possible

Type of Pollutant(s)

Known: - - -
Suspected: - - -
Possible: SILT/SEDIMENT

Source(s) of Pollutant(s)

Known: - - -
Suspected: - - -
Possible: STREAMBANK EROSION

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 Ausable River below Ausable Chasm (at Route 9) was conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated slightly impacted conditions. The community is altered somewhat from natural conditions. Some sensitive species have been lost and the overall abundance of macroinvertebrates is lower. However, the effects on the fauna were determined to be insignificant and water quality is considered to be good. The nutrient biotic index and impact source determination indicates low enrichment in the stream and fauna that is similar to natural conditions. These results are consistent with sampling of the river just above the segment in Keesville in 1998. 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 2009)

NYSDEC Rotating Intensive Basin Studies (RIBS) Intensive Network monitoring of the Ausable River near Ausable Beach (at Route 9) was conducted in 1993-94. Overall water quality was rated as good based on macroinvertebrate sampling, water chemistry, and other indicators. (DEC/DOW, BWAR/RIBS, April 1996)

Habitat Assessment

Fishery habitat in this reach may experience some impact due to sand and sediment deposition from streambank erosion. Roadway runoff may also be a contributing source. High gradient streams erode streambanks and wash sand and silt into and along streams. The sand and sediment fills in gravel spawning beds, decreasing salmonid spawning success, limiting

macroinvertebrate production and increasing winter mortality of fish and invertebrates due to loss of escape cover from the effects of anchor ice. Impacts on natural reproduction of trout and other cold water species have been documented in other reaches in the basin. No such impacts have been documented in this reach, but these impacts are considered a possible threat to fishery habitat. (DEC/DFWMR, Region 5, June 2009)

The Ausable River Association

The Ausable River Association is a non-profit, membership-based organization, created in August of 1998 through a grant from the Lake Champlain Basin Program. The association was originally created to implement recommendations found in the Ausable River Study of 1991. Its current mission is to protect and enhance the natural and cultural resources of the Ausable River watershed. This cooperative organization brings together landowners, town governments, other non-profit organizations, and State and Federal Agencies to accomplish its mission. The Association is managed by an executive director, with guidance from a board of directors made up of representatives from each town within the watershed. Association projects focus on water quality monitoring, stream bank stabilization, invasive species inventory, analysis of stormwater from the watershed, and educational programs. Currently the Association is creating a watershed management plan for the Ausable River. (Ausable River Association, www.ausableriver.org, 2009)

Previous Assessments

Hydrologic and habitat impacts along this portion of the Ausable River were previously cited as a concern due to the fluctuation of flows to facilitate scenic boat passages through the Ausable Chasm. The operator of the Rainbow Falls Hydroelectric Project (NYSEG) had fluctuated flows at the request of the Ausable Chasm Company. However the Ausable Chasm Company has changed procedures to reduce the need for fluctuation in flow, and negotiations between NYSDEC, NYSEG, and the Ausable Chasm Company have reached agreement for run-of-river operation. (DEC/DOW, Region 5, March 2000)

Segment Description

This segment includes the portion of the stream and all tribs from the mouth to Ausable Chasm. The waters of this portion of the stream are Class C(T). Tribs to this reach/segment, including Dry Mill Brook (-3) and Lower Mud Creek (-8), are Class C,C(T) and D. Upper Mud Creek and Upper Ausable River are listed separately.

Ausable River, Upper, and minor tribs (1004-0020)

NoKnownImpct

Waterbody Location Information

Revised: 04/21/2009

Water Index No: C- 25
Hydro Unit Code: 02010004/070 **Str Class:** C
Waterbody Type: River (Med. Flow)
Waterbody Size: 74.2 Miles
Seg Description: stream and selected tribs, abv Ausable Chasm to E/W Br

Drain Basin: Lake Champlain
Reg/County: 5/Clinton Co. (10) ...
Quad Map: AUSABLE FORKS (D-26-A) ...

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Habitat/Hydrology	Threatened	Possible

Type of Pollutant(s)

Known: - - -
Suspected: - - -
Possible: SILT/SEDIMENT

Source(s) of Pollutant(s)

Known: - - -
Suspected: - - -
Possible: STREAMBANK EROSION

Resolution/Management Information

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

Resolution Potential: n/a

Further Details

Water Quality Sampling

A biological (macroinvertebrate) assessment of Ausable River in Clintonville (off Lower Road) was conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated slightly impacted conditions. The community is somewhat altered from natural conditions. Some sensitive species have been lost and the overall abundance of macroinvertebrates is lower. However, the effects on the fauna were determined to be relatively insignificant and water quality is considered to be good. The nutrient biotic index and impact source determination indicates low enrichment in the stream and fauna that is most similar to natural communities. 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 2009)

Biological (macroinvertebrate) assessments of Carney Brook in Clintonville and Jackson Brook in Ausable Forks were also conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated non-impacted conditions at both sites. The samples were dominated by clean-water species and was most similar to a natural community with minimal human impacts. Some additional species, including sensitive non-native species, and additional biomass may be present; the sample revealed no, or only incidental, anomalies. Aquatic life community is fully supported. (DEC/DOW, BWAM/SBU, January 2009)

Biological (macroinvertebrate) sampling at two sites along this portion of the Ausable (Keesville and Clintonville) in 1998

also found non-impacted conditions. Mayflies, stoneflies and caddisflies were well-represented in the samples. Minor tribs along the reach which were also assessed as non-impacted at that time include Palmer Brook (-25) and Jackson Brook (-25-1). (DEC/DOW, BWAR/SBU, January 2000)

Habitat Assessment:

Fishery habitat in this reach may experience some impact due to sand and sediment deposition from streambank erosion. Roadway runoff may also be a contributing source. High gradient streams erode streambanks and wash sand and silt into and along streams. The sand and sediment fills in gravel spawning beds, decreasing salmonid spawning success, limiting macroinvertebrate production and increasing winter mortality of fish and invertebrates due to loss of escape cover from the effects of anchor ice. Impacts on natural reproduction of trout and other cold water species have been documented in other reaches in the basin. No such impacts have been documented in this reach, but these impacts are considered a possible threat to fishery habitat. (DEC/DFWMR, Region 5, June 2009)

The Ausable River Association

The Ausable River Association is a non-profit, membership-based organization, created in August of 1998 through a grant from the Lake Champlain Basin Program. The association was originally created to implement recommendations found in the Ausable River Study of 1991. Its current mission is to protect and enhance the natural and cultural resources of the Ausable River watershed. This cooperative organization brings together landowners, town governments, other non-profit organizations, and State and Federal Agencies to accomplish its mission. The Association is managed by an executive director, with guidance from a board of directors made up of representatives from each town within the watershed. Association projects focus on water quality monitoring, stream bank stabilization, invasive species inventory, analysis of stormwater from the watershed, and educational programs. Currently the Association is creating a watershed management plan for the Ausable River. (Ausable River Association, www.ausableriver.org, 2009)

Segment Description

This segment includes the portion of the stream and all tribs from Ausable Chasm the confluence of the East and West Branches at Ausable Forks. The waters of this portion of the stream are Class C. Tribs to this reach/segment, including Gay/Carney Brooks (-22), Green Street Brook (-23), Lower Palmer/Jackson Brook (-25), are Class C(T) and D. Upper Palmer Brook, the East and West Branches and Lower Ausable River are listed separately.

Augur Lake (1004-0050)

MinorImpacts

Waterbody Location Information

Revised: 03/05/2009

Water Index No:	C- 25- 8-P213	Drain Basin:	Lake Champlain
Hydro Unit Code:	02010004/070	Str Class:	A
Waterbody Type:	Lake (Unknown Trophic)		AuSable/Boquet
Waterbody Size:	359.9 Acres	Reg/County:	5/Essex Co. (16)
Seg Description:	entire lake	Quad Map:	WILLSBORO (D-27-0) ...

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Recreation	Stressed	Known

Type of Pollutant(s)

Known: ALGAL/WEED GROWTH, PROBLEM SPECIES (Eurasian milfoil)
Suspected: - - -
Possible: Nutrients

Source(s) of Pollutant(s)

Known: HABITAT MODIFICATION
Suspected: - - -
Possible: - - -

Resolution/Management Information

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

Resolution Potential: Medium

Further Details

Overview

Public bathing and other recreational uses (swimming, fishing, boating) in Augur Lake are thought to be stressed by excessive weed growth in the lake, primarily invasive species (Eurasian milfoil). These conditions were reported by the Essex County WQCC and also verified by the Darrin Freshwater Institute, as noted in recent CSLAP Reports.

Water Quality Sampling

Augur Lake has been sampled as part of the NYSDEC Citizen Statewide Lake Assessment Program (CSLAP) beginning in 1997 and continuing through the present. An Interpretive Summary report of the findings of this sampling was published in 2007. These data indicate that the lake continues to be best characterized as mesotrophic, or moderately productive. Indicators have been more favorable in recent years, but these changes may be within the natural variability of the lake. Phosphorus levels in the lake occasionally exceed the state guidance values indicating impacted/stressed recreational uses. However, corresponding transparency measurements consistently exceed the recommended minimum for swimming beaches. Measurements of pH typically fall within the state water quality standard range of 6.5 to 8.5. The lake water is slightly to moderately colored, but this appears to be reflective of natural conditions in the watershed. (DEC/DOW, BWAM/CSLAP, February 2007)

Recreational Assessment

Public perception of the lake and its uses is also evaluated as part of the CSLAP program. This assessment indicates

recreational suitability of the lake is generally favorable, and more so in recent years. The recreational suitability of the lake is described most frequently as "excellent" or only "slightly" impacted. The lake itself is most often described as "not quite crystal clear" or as "having a definite algal greenness." Assessments have noted that aquatic plants consistently grow to the lake surface and often the growth is dense, impacting recreational uses. Aquatic plants include invasives; Eurasian milfoil has been verified by the Darrin Freshwater Institute. (DEC/DOW, BWAM/CSLAP, February 2007)

Lake Uses

This lake waterbody is designated class A, suitable for use as a water supply, public bathing beach, general recreation and aquatic life support. Water quality monitoring by NYSDEC focuses primarily on support of general recreation and aquatic life. Samples to evaluate the bacteriological condition and bathing use of the lake or to evaluate contamination from organic compounds, metals or other inorganic pollutants have not been collected as part of the CSLAP monitoring program. Monitoring to assess potable water supply and public bathing use is generally the responsibility of state and/or local health departments.

Segment Description

This segment includes the entire area of Augur Lake (P213).

Butternut Pond (1004-0053)

NoKnownImpct

Waterbody Location Information

Revised: 06/01/2009

Water Index No:	C- 25- 8-P218	Drain Basin:	Lake Champlain
Hydro Unit Code:	02010004/070	Str Class:	AA
Waterbody Type:	Lake		AuSable/Boquet
Waterbody Size:	160.6 Acres	Reg/County:	5/Essex Co. (16)
Seg Description:	entire lake	Quad Map:	WILLSBORO (D-27-0) ...

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

Source (Drinking) Water Assessment

A source water assessment of Butternut Pond found a moderate susceptibility to contamination for this source of drinking water. This level of susceptibility is typical of many water supplies that experience no impacts to water supply use and reflects the need to protect the resource. 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 Keesville. (NYSDOH, Source Water Assessment Program, 2005)

Segment Description

This segment includes the total area of Butternut Pond (P218).

Palmer Brook, Upper, and tribs (1004-0055)

NoKnownImpct

Waterbody Location Information

Revised: 06/01/2009

Water Index No: C- 25-25
Hydro Unit Code: 02010004/070 **Str Class:** A(T)
Waterbody Type: River
Waterbody Size: 15.3 Miles
Seg Description: stream and tribs above Ausable Forks water supply dam

Drain Basin: Lake Champlain
Reg/County: 5/Clinton Co. (10)
Quad Map: AUSABLE FORKS (D-26-A)

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
TMDL/303d Status: n/a

Resolution Potential: n/a

Further Details

Water Quality Sampling

A biological (macroinvertebrate) assessment of Palmer Brook in Ausable Forks (at Palmer Hill Road) was conducted in 1998. Sampling results indicated non-impacted water quality conditions. The fauna was dominated by intolerant species of mayflies and caddisflies, with stoneflies and hellgrammites also present. The fauna was diverse and all screening criteria for waters having no known impacts were met. Though this sampling point is just below the described segment, it is considered representative of water quality in the upper reach. Because the data was collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored (DEC/DOW, BWAR/SBU, January 2000)

Segment Description

This segment includes the portion of the stream and all tribs above the Ausable Forks water supply dam. The waters of this portion of the stream are Class A(T). Tribs to this reach/segment are also Class A(T).