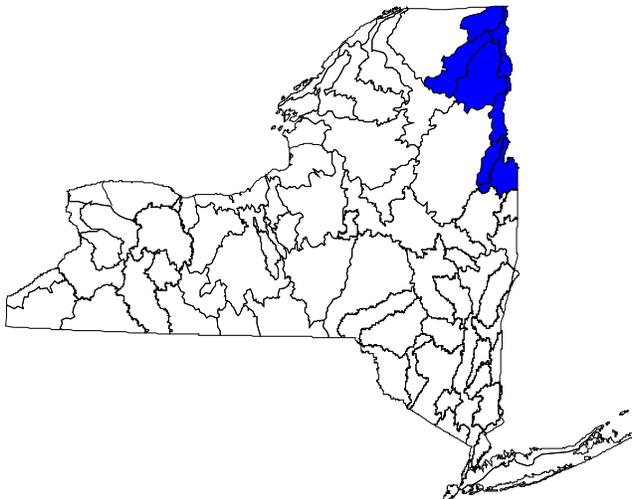


Bureau of Watershed Assessment and Management  
Division of Water  
NYS Department of Environmental Conservation

# **The Lake Champlain Basin Waterbody Inventory and Priority Waterbodies List**

Encompassing all or portions of  
Clinton, Essex, Franklin,  
Warren and Washington Counties



**July 2009**

This page intentionally left blank.

# Table of Contents

The Waterbody Inventory and Priority Waterbodies List . . . . .	1
Comprehensive Assessment Strategy . . . . .	1
Statewide Waters Monitoring Program . . . . .	2
Water Quality Assessments: Updating the WI/PWL . . . . .	2
An Expanded <i>Waterbody Inventory</i> . . . . .	2
The Lake Champlain Basin . . . . .	5
Basin Description . . . . .	5
Water Quality Issues and Problems . . . . .	5
Lake Champlain Basin Water Quality Assessment . . . . .	8
Basin Water Quality Summary . . . . .	9
The Lake Champlain Basin Waterbody Inventory/Priority Waterbodies List . . . . .	11
Waterbody Inventory Data Sheets	
Lake Champlain, Main Lake, Watershed . . . . .	13
Great Chazy-Saranac River Watershed . . . . .	33
Tribes to Lake Champlain North, Canada to King Bay . . . . .	
Great Chazy River Watershed . . . . .	37
Tribes to Lake Champlain Middle, King Bay to Cumberland Bay . . . . .	50
Lower Saranac River Watershed, Plattsburgh to North Branch . . . . .	54
North Branch Saranac River Watershed . . . . .	68
Upper Saranac River Watershed, North Branch to Saranac Lake . . . . .	76
Saranac Lakes Watershed . . . . .	97
Ausable River-Boquet River Watershed . . . . .	123
Tribes to Lake Champlain Middle, Cumberland Bay to Ausable River . . . . .	125
Lower Ausable River Watershed . . . . .	135
West Branch Ausable River Watershed . . . . .	143
East Branch Ausable River Watershed . . . . .	163
Tribes to Lake Champlain Middle, Ausable River to Boquet River . . . . .	176
Boquet River Watershed . . . . .	178
Lake Champlain South-Lake George Watershed . . . . .	201
Tribes to Lake Champlain South, Boquet River to Ticonderoga Creek . . . . .	205
Lake George Watershed . . . . .	229
Tribes to Lake Champlain South, Ticonderoga Creek to Mettawee-Poultney . . . . .	270
Lower Mettawee River Watershed . . . . .	277
Halfway Creek Watershed . . . . .	286
Upper Mettawee River Watershed . . . . .	305
Poultney River Watershed . . . . .	311

Natural Resources/Wetlands Issues . . . . . none listed

Summary Listing of Priority Waterbodies. . . . . 315

**APPENDICES**

- A - Waterbody Inventory/Priority Waterbodies List Assessment Methodology
- B - Waterbody Inventory Data Sheet Background Information
- C - County Index of Data Sheet Segments
- D - Alphabetic Index of Data Sheet Segments

# The Waterbody Inventory and Priority Waterbodies List

In order to fulfill certain requirements of the Federal Clean Water Act, the New York State Department of Environmental Conservation (NYSDEC) must provide regular, periodic assessments of the quality of the water resources in the state and their ability to support specific uses. These assessments reflect monitoring and water quality information drawn from a number of programs and sources, both within and outside NYSDEC. This information has been compiled by NYSDEC Division of Water and merged into an inventory database of all waterbodies in New York State. The database is used to record current water quality information, characterize known and/or suspected water quality problems and issues, and track progress toward their resolution. This inventory of water quality information is the division's Waterbody Inventory/Priority Waterbodies List (WI/PWL).

In addition to providing a baseline assessment of water quality, the Waterbody Inventory/Priority Waterbodies List supports program management within the Division of Water in other ways. For example:

#### *A Focus for Division Program Activities*

Because of limited resources, various division programs (monitoring, compliance, restoration and protection activities, grant funding) need to address those specific water quality issues – both statewide problems (e.g., stormwater, toxic/contaminated sediment) and site/waterbody-specific concerns – where program efforts will have the greatest impact.

#### *A Consistent and Objective Inventory*

WI/PWL assessments of water quality problems and issues are used in the development of program-specific priority ranking/scoring systems and efforts.

#### *A Record of Water Quality History*

Because the WI/PWL provides information for specific waterbodies, staff can easily respond to questions – from both within and outside the division (including the public) – concerning what is known about the water quality of specific rivers, lakes and watersheds.

#### *A Measure of Progress*

The WI/PWL also aids in the tracking of progress by division programs and other efforts toward improving the water resources of the state.

## **Comprehensive Assessment Strategy**

The Waterbody Inventory/Priority Waterbodies List is a key component of the Division of Water's larger *Comprehensive Assessment Strategy*. This strategy is designed to integrate a variety of division activities into a more coordinated and comprehensive water quality program. The specific goals of the *Comprehensive Assessment Strategy* are to provide a:

- thorough (appropriate to available resources) monitoring of state waters;
- complete evaluation and consideration of all available monitoring data;
- comprehensive assessment of the quality of all waters in the state; and
- coordinated approach to improving and protecting these water resources.

Implementation of the *Comprehensive Assessment Strategy* relies on a rotating drainage basin approach. This approach focuses water quality monitoring and assessment activities on a portion of the state for a designated period of time, and then turns attention to other parts of the state. New York State's use of the rotating basin approach enables the updating of the WI/PWL in two or three of its seventeen drainage basins (about 20% of the state) each year. This schedule allows for a comprehensive reassessment of the water quality throughout the entire state over a five-year cycle (see Figure 1).

### **Statewide Waters Monitoring Program**

Prior to the updating of the WI/PWL, the division conducts a two-year monitoring effort in the targeted drainage basins. These basin studies – conducted within the Division of Water's Statewide Waters Monitoring Program – involve a variety of sampling activities conducted by the division, other NYSDEC programs, and water quality partners outside NYSDEC.

The first year of these basin studies focuses on the review of existing water quality information and the incorporation of monitoring efforts being conducted by other basin/watershed partners. Division monitoring activities in the first year are generally limited to *biological screening*. Biological screening relies on the use of resident biological communities as indicators of water quality. The primary biological communities are fish, macroinvertebrates (aquatic insects) and algae. Of these, macroinvertebrates have proven the most appropriate for screening water quality at a large number of sites in a reasonable amount of time.

The second year of the basin studies involves more intensive chemical and biological monitoring. This includes water chemistry sampling at selected sites, sediment chemistry/toxicity sampling, multiple site surveys along specific river reaches, and other site- or problem-specific monitoring investigations.

### **Water Quality Assessments: Updating the WI/PWL**

At the conclusion of the monitoring effort in a basin, the water quality data are evaluated to assess the ability of the waterbodies to support specific water uses (water supply, public bathing, aquatic life, secondary recreation, etc). As was the case with the monitoring effort, the evaluation and assessment of data and subsequent updating of WI/PWL information incorporates input from division/department staff and outside partners as well. WI/PWL assessment workshops are conducted for NYSDEC regional staff and watershed partners within each targeted basin, and participants are encouraged to submit assessment worksheets for waterbodies for which they have information. This information – along with Statewide Waters Monitoring Program assessment information – is compiled and distributed to participants for review and comment before the Final WI/PWL Assessment Report is issued.

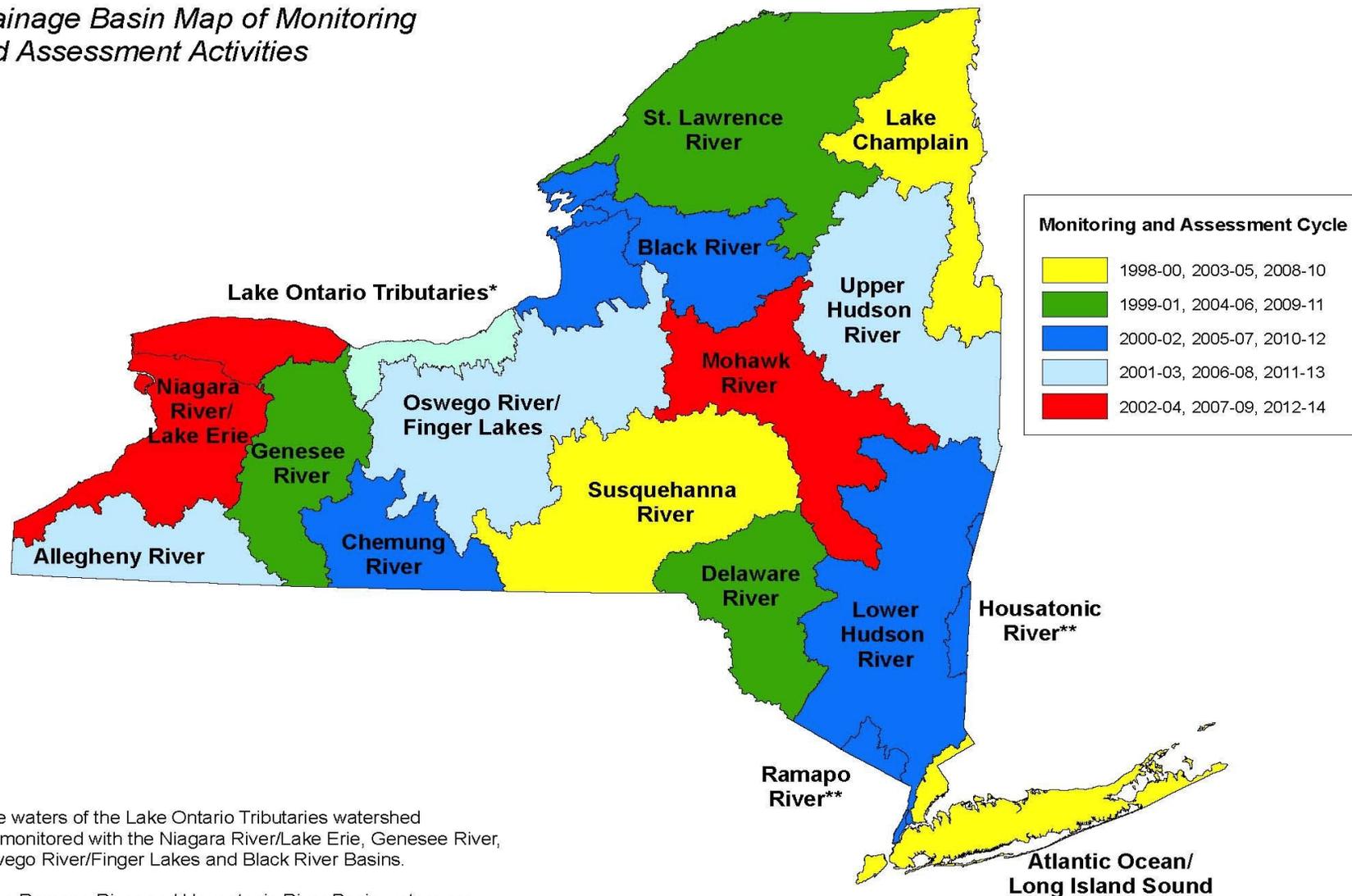
### **An Expanded *Waterbody Inventory***

Upon its inception in 1983 and through the mid-1990s, the Priority Waterbodies List was limited to recording information for only those waters with known or suspected water quality problems. The expansion of the database to include *all* waters in the state, including those with good and unknown water quality, is a fairly recent effort. However, while this expanded waterbodies database provides more complete water quality information, for program management purposes the division must also be able to cull a subset of "*priority*" waterbodies from the inventory of all waters on which the division should spend resources. In other words, there is a need for both a comprehensive *Waterbody Inventory* of water quality information for all waters in the state and a subset of this inventory that is limited to segments with well documented, potentially resolvable, higher priority problems and issues. This subset of the Waterbody Inventory is the *Priority Waterbodies List*.

Figure 1

# Comprehensive Assessment Strategy

*Drainage Basin Map of Monitoring and Assessment Activities*



\*The waters of the Lake Ontario Tributaries watershed are monitored with the Niagara River/Lake Erie, Genesee River, Oswego River/Finger Lakes and Black River Basins.

\*\*The Ramapo River and Housatonic River Basin waters are monitored with the Lower Hudson River basin.

In order to achieve these multiple objectives, segments in the larger comprehensive Waterbody Inventory are segregated into one of six (6) *Water Quality Assessment Categories*. These are outlined below.

## **WI/PWL Waterbody Assessment Categories**

**Impaired Waters:** These are waterbodies with well documented water quality problems that result in *precluded* or *impaired* uses (waters with *stressed* or *threatened* uses are not included in this category). This category includes *High* and *Medium Resolvability* segments where the Division of Water considers the expenditure of additional resources to improve water quality to be worthwhile given public interest and/or the expectation that a measurable improvement can be achieved; and *Low Resolvability* segments with persistent/intractable problems on which the division is not likely to spend any significant resources (e.g., segments affected by atmospheric deposition, etc.).

**Waters with Minor Impacts:** These are waterbodies where less severe water quality impacts are apparent but uses are still considered fully supported. These segments correspond to waters listed as having *stressed* uses.

**Threatened Waterbodies:** These are waterbodies for which uses are not restricted and no water quality problems exist but where specific land use or other changes in the surrounding watershed are known or strongly suspected of threatening water quality. Also included in this category are waterbodies where the support of a specific and/or distinctive use (e.g., unfiltered public water supply) make the waterbody more susceptible to water quality threats.

**Waterbodies with Impacts Needing Verification:** These are segments that are thought to have water quality problems or impacts but for which there is not sufficient or definitive documentation. These segments require additional monitoring to determine whether uses are restricted.

**Waterbodies Having No Known Impacts:** These are segments where monitoring data and information indicate that there are no restrictions to overall uses, although minor impacts to component indicators (such as biological assessments) may be present.

**UnAssessed Waterbodies:** These are segments where there is insufficient water quality information available to assess the support of designated uses.

**Taken together, *Impaired Waters, Waters with Minor Impacts* and *Threatened Waterbodies* comprise the Division of Water Priority Waterbodies List (PWL).** These segments are the focus of remedial/corrective and resource protection activities by the division and its water quality partners.

***Waterbodies with Impacts Needing Verification, Waterbodies Having No Known Impacts* and *UnAssessed Waterbodies* are tracked on the comprehensive Waterbody Inventory, but are not considered to be included among waters on the Priority Waterbodies List.** For these waters, additional monitoring and assessment activities to document possible or potential future impacts, causes and sources are more appropriate than remedial/corrective action or resource protection efforts.

Maintaining a comprehensive Waterbody Inventory allows division staff to easily respond to questions – from both within and outside NYSDEC – concerning the water quality of specific rivers, lakes and watersheds. By segregating the database in the manner described above, the division can also identify specific priorities where the coordination of limited resources can most effectively address water quality problems.

# The Lake Champlain Basin

## Basin Description

The Lake Champlain Basin drains the area between the Adirondack Mountains in northeastern New York State and the Green Mountains in Vermont. The long, narrow Lake Champlain empties into the Richelieu River at its northern end where its waters then flow into Canada and the Saint Lawrence River. The drainage area covers about 8,234 square miles, just over 3000 (37%) of which lies in New York State; 56% of the drainage basin lies in Vermont and 7% in Quebec, Canada. Within New York State the basin drainage area includes most of Clinton County, large parts of Essex County, and portions of Franklin, Warren and Washington Counties.

The Lake Champlain Basin is sparsely populated with considerable forested lands. Within New York State, forests cover over 60% of the Basin. Topography ranges from the wilderness of the High Peaks of the Adirondack Mountains to heavy agricultural areas of the Lake Plain Lowlands. The population of the entire Lake Champlain Basin totals over 600,000 people. The western (New York) portion of the Lake Champlain Basin is home to 175,712 (2000) year-round residents; there is also a significant seasonal population increase due to recreation and tourism during the summer months. The largest and only significant population centers in New York are Glens Falls/Queensbury (39,795) – a portion of which falls outside the basin – and Plattsburgh (30,006). The remaining population is rural or located in smaller villages such as (Saranac lake (5,041), Danamora (4,129), Lake Placid 2,638), and Rouses Point (2,277). Burlington and Rutland are the largest population centers in Vermont.

There are about 4,505 miles of rivers and streams and over 450 lakes and ponds. Many of the ponds are too small to be individually assessed, but 130 significant\* lake, pond and reservoir waterbody segments (covering 151,593 acres) are included in the Lake Champlain Basin Waterbody Inventory. The larger tributary watersheds in the New York State portion of the Basin include the Ausable River Watershed, with 767 miles of streams (or 17% of the basin total), the Saranac River Watershed (662 miles, 15%), Great Chazy River (544 miles, 12%) and the Boquet River Watershed (532 miles, 12%). Lake Champlain itself, with a surface area of 435 square miles (278,480 acres), is the dominant feature of the watershed, covering about 5% of the entire basin. Within New York State, the lake itself covers 90,704 acres and accounts for about 60% of total lake acres in the basin. Lake George (28,523 acres) is the largest basin lake entirely within New York State and accounts for 19% of basin lake acres. The next largest lakes are Upper Saranac Lake (4,844, 3%), Lower Saranac Lake (2,145, 1%), Lake Placid (1,954, 1%) and Chazy Lake (1,828, 1%).

## Water Quality Issues and Problems

With its light population and large tracts of forest wilderness, water quality in the waters of the Lake Champlain Basin is generally good to excellent. The natural resources of the basin draw outdoor enthusiasts from all over the northeast and beyond to the enjoy fishing, swimming, boating, hiking and camping. The most significant water quality problems in the basin impact Lake Champlain itself: fish consumption advisories, excessive nutrient loadings, invasive/exotic plant and animal species and atmospheric deposition. These and other water quality issues in the basin are discussed below.

---

\* *Significant Lakes* are lakes of 6.4 acres (0.01 square miles) or larger and are included the New York State Lakes Gazeteer.

### *Fish Consumption Advisories*

Although Lake Champlain supports a wide variety of uses, fish consumption of some species is restricted by a NYSDOH health advisory due to PCB and mercury contamination. The advisory recommends eating no more than one meal per month of larger lake trout (over 25 inches) or walleye (over 19 inches). One significant source of PCBs has been sediment in Cumberland Bay; ongoing remediation activities in the bay are expected to reduce this source. Other continuing sources of PCBs to the lake have yet to be identified. The mercury contamination is widely thought to be a result of atmospheric deposition. A number of other waterbodies in the basin have also been issued separate advisories limiting fish consumption due to mercury.

### *Phosphorus*

Elevated phosphorus concentrations result in impacts and threats to public bathing, other recreational uses (swimming, fishing, boating) and aesthetics in Lake Champlain. In 1993 a Water Quality Agreement between New York State, Vermont and Quebec established in-lake total phosphorus criteria. The two states also completed a study to measure point and nonpoint source phosphorus loads to the lake, develop a whole-lake phosphorus budget, and develop a load reduction strategy to attain the in-lake criteria. This study, the Lake Champlain Diagnostic-Feasibility Study, found phosphorus to be at or above the criteria (which ranges from 10-25 ug/l throughout the lake) and, therefore, contributing to excessive algal and vegetative growth in the lake. In 1996, the states agreed to a phosphorus reduction strategy that included specific loading targets for various lake watershed. A joint New York-Vermont Total Maximum Daily Load (TMDL) plan to address phosphorus loadings to the Lake was also established in 2002. Resulting phosphorus reductions are to be met using an appropriate mix of point and nonpoint source actions to be implemented in the watersheds.

### *Invasive/Exotic Species*

Exotic and invasive plant and animal species also increase threats to the lake and other waters of the basin. Zebra mussels are widespread and impact water supplies and crowd out native mussels in many areas. Water chestnut and Eurasian milfoil limit various recreational activities and alter riparian cover. Sea lamprey predation appears to be increasing after some decline following a lake-wide control program. Without further controls the Atlantic salmon and lake trout populations are likely to be significantly affected. Additionally, the presence of alewives in neighboring Lake Saint Catherine pose a threat to larger cold water species. The ability to control many of these exotics is limited, expensive and the long-term success is relatively uncertain.

### *Acid Rain/Atmospheric Deposition*

Low pH attributed to atmospheric deposition/acid precipitation has been documented in many small lakes and ponds in the basin. Such conditions are known to have a significant impact on aquatic ecosystems, impairing and often precluding the propagation and survival of fish in some lakes and ponds. Previous assessments and Priority Waterbodies Lists have included large numbers of smaller (less than 10 acres) lakes and ponds impacted by acid rain/atmospheric deposition. However, with the expansion of the WI/PWL database to accommodate all waterbodies, it was necessary to limit the tracking of individual lakes to those 0.01 square miles (6.4 acres) in size or larger. Although these smaller lakes and ponds are no longer tracked individually, and the lake area affected as a percentage of total lake area in the basin is not that large, acid rain/atmospheric deposition remains a significant water quality issue affecting a large number of waterbodies in the basin.

### *Excessive Sand and Sediment Loads*

High gradient streams erode streambanks and wash sand and silt into and along streams. Roadway runoff from road maintenance activities, including road sanding practices, are also thought to be a contributing source. 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. Limited natural reproduction of trout and other cold water species has

been documented in a number of reaches and high levels of stream embeddedness are suspected as contributing to the impacts. Excessive sand and sediment loads also contribute to the formation of significant sedimentation deltas at the mouths of many tributary segments. Such deltas can impede recreational boat navigation, restrict fish migration into tributaries and present opportunities for the establishment of non-native aquatic vegetation. Impacts related to sediment deltas are particularly well-documented in Lake George.

### *Lake Champlain Basin Program*

The Lake Champlain Basin Program (LCBP) is a joint federal, state and local initiative to restore and protect Lake Champlain and its surrounding watershed. The states of New York and Vermont, the Province of Quebec, the U.S. Environmental Protection Agency, other federal and local government agencies, and many local groups, both public and private, are partners of the LCBP. Created by the Lake Champlain Special Designation Act of 1990, the LCBP's goal is to work cooperatively to protect and enhance the environmental integrity and the social and economic benefits of the Lake Champlain Basin. The actions of the LCBP are guided by a pollution prevention, control, and restoration plan entitled *Opportunities for Action - An Evolving Plan for the Future of the Lake Champlain Basin*. The Plan was first endorsed in 1996 and it was most recently updated in 2003. The main goals of the Plan include 1) improving water quality throughout the Lake Champlain Basin, 2) protecting the Basin's living natural resources, and 3) preserving and enhancing the region's rich cultural and recreation resources. (<http://www.lcbp.org>).

### *The Adirondack Park*

The Adirondack Park, which includes portions of the Lake Champlain Basin, was created in 1892 by the State of New York to protect the water and timber resources of the region. Today the Park is the largest publicly protected area in the contiguous United States, greater in size than Yellowstone, Everglades, Glacier, and Grand Canyon National Park combined. The boundary of the Park encompasses approximately 6 million acres, nearly half of which belongs to all the people of New York State and is constitutionally protected to remain "forever wild" forest preserve. The remaining half of the Park is private land which includes settlements, farms, timber lands, businesses, homes, and camps.

### *Agricultural Activity*

Agricultural activity in the Lake Champlain Basin has measurable impacts on aquatic life and recreational uses of some basin waters. Agricultural runoff contributes nutrient and silt/sediment loads to the streams. Poor agricultural management practices, including permitting livestock unrestricted access to streams, improper manure application, intensive cultivated crop lands with little riparian buffer and fertilizer, pesticide application in the absence of approved nutrient/pesticide management plans and a lack of silage leachate control and manure or milkhouse wastewater treatment facilities can have significant impacts on nearby waters. Various state and local agencies are working with the farming community to address these issues.

### *Groundwater Resources*

Although groundwater resources are not specifically tracked through the WI/PWL, they are considered *Priority Waters* nonetheless. Groundwater provides drinking water for about one-third of the population of New York State and is the source of base flow for most rivers and streams in the state. Management and protection of both the quantity and quality of this resource is critical for protecting public health and is also a key element of surface water quality and wetland management efforts. In the Lake Champlain Basin, the more significant threats to groundwater resources include inadequate on-site wastewater treatment systems, animal feeding operations and pesticide application.

## Lake Champlain Basin Water Quality Assessment

The series of charts presented on the following pages provides an overall assessment of water quality conditions in the entire Lake Champlain Basin. For each waterbody type (rivers/streams, lakes/reservoirs and Great Lakes shoreline) the first chart shows the percentage of the miles/acres of waters in the basin that fall into the various water quality assessment categories. The **red** portion of the first pie indicates the percentage of waters characterized as *Not Supporting Uses*. The **purple** portion represents segments with *Minor Impacts/Threats*. Taken together, these categories of waters comprise the *Priority Waterbodies* for that waterbody type. The percentage of miles/acres for the other water quality assessment categories – waterbodies having *No Known Impacts*, *UnAssessed Waters*, and waterbodies with *Impacts Needing Verification* – are shown in **blue**, **light blue**, and **green** respectively.

The second pie chart shows the severity of the most significant use impact or restriction for waters in the two categories that comprise the Priority Waterbodies. The levels of severity are:

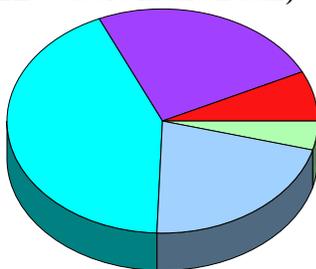
- Precluded:* waters do not support appropriate uses;
- Impaired:* waters frequently do not support appropriate uses;
- Stressed:* waters support appropriate uses, but other water quality impacts are apparent; and
- Threatened:* waters support uses and have no impacts, but activities threaten future use support.

More detailed descriptions of these levels of severity are outlined in *Appendix A - Assessment Methodology*.

The bar charts indicate the pollutant sources that are most frequently cited as major contributors to the water quality impacts for Priority Waterbodies in the Lake Champlain Basin. The charts reflect the percentage of miles/acres of the total waterbody area on the Priority Waterbodies List where a particular source is listed as a major contributor to the water quality impact. For each source, the color shading of the bar indicates the severity level (*Precluded*, *Impaired*, *Stressed*, *Threatened*) of the most significant water use impact to the waterbody.

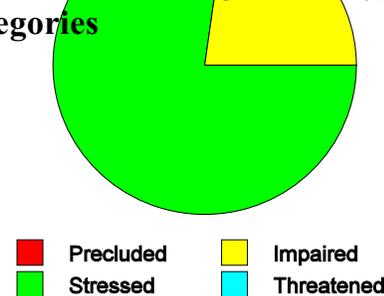
## Rivers/Streams

**Water Quality Assessment Categories**  
(for ALL Waters in the Basin)



- PWL - Not Supporting Uses
- PWL - Other Minor Impacts
- No Known Impacts
- UnAssessed Waters
- Impacts Needing Verification

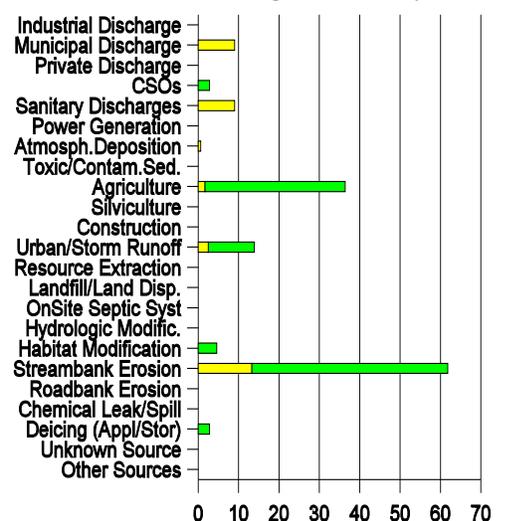
**Severity of Problems**  
(PWL Segments Only)



### Lake Champlain Basin

Total River Miles: 4,502  
Total PWL Miles: 1,427

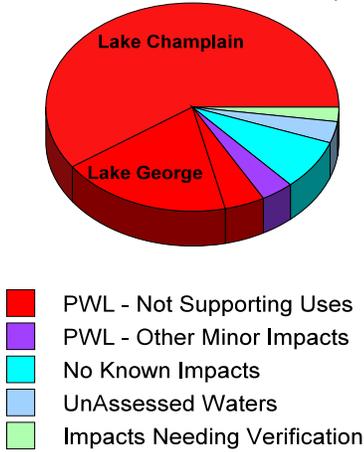
**Major Sources of Impact**  
(PWL Segments Only)



Percent of PWL Waters Affected

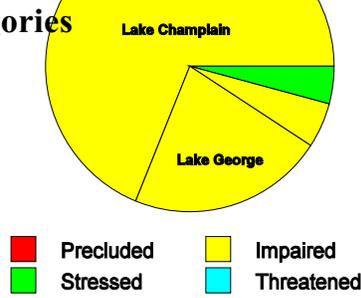
# Lakes/Reservoirs

## Water Quality Assessment Categories (for ALL Waters in the Basin)



## Severity of Problems

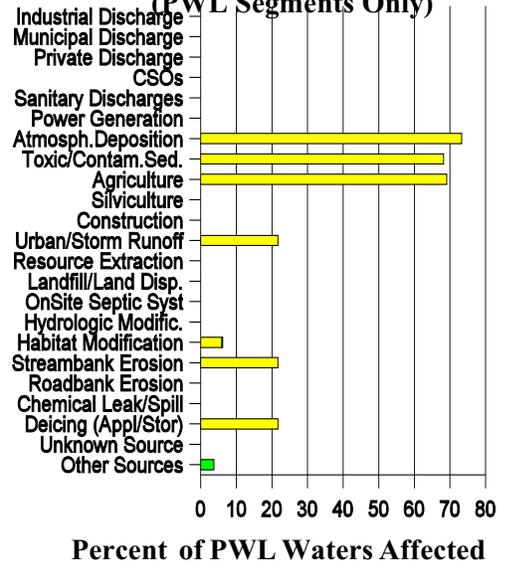
(PWL Segments Only)



**Lake Champlain Basin**  
 Total Lake Acres: 151,347  
 Total PWL Acres: 131,225

## Major Sources of Impact

(PWL Segments Only)



## Basin Water Quality Summary

About thirty percent (30%, or 1,427 miles) of the 4,502 river miles in the Lake Champlain Basin are included on the Priority Waterbodies List as either not supporting uses or having minor impacts or threats to water quality. More than three-quarters (77%) of these Priority Waterbody Listed river miles are considered *Stressed* or *Threatened* waters that fully support appropriate uses but have minor impacts/threats to uses. Only about seven percent (7%) of all basin river miles are *Impaired* and do not fully support appropriate uses.

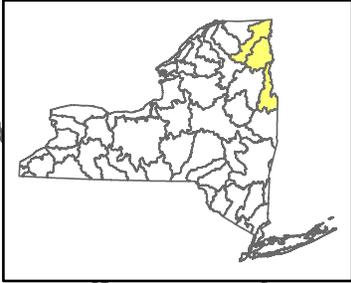
Sixteen (16) of the 130 separate lake segments in the basin are included on the PWL as having either impaired uses or minor impacts/threats to uses. However these 16 impaired/impacted lakes include a number of larger lake segments (including Lake Champlain itself) and represent about eighty-seven percent (87%) of the total lake acres in the basin. For 13 of these lakes (totaling 125,984 acres, or 83% of basin lake acres) the impacts are such that fish consumption, recreational uses and/or aquatic life support are not fully supported. However over 70% of this impairment is due to phosphorus impairment and/or fish consumption advisories (mercury, PCBs) for which TMDL Plans are in place or hazardous waste remediation is underway.

The most frequently cited sources of impacts affecting water quality in the basin are atmospheric deposition, toxic/contaminated sediments and agricultural activities. These three sources are cited as a major source in about 70% of impaired lake acres in the basin. Atmospheric deposition is a source of both mercury which results in fish consumption advisories, and constituents of acid rain. Toxic/contaminated sediments – largely the result of historic legacy pollutant discharges – are responsible for the impairment to the entire Lake Champlain. The occurrence of agricultural sources reflects the rural character of the basin which includes significant farming regions. Agricultural sources are cited as a major source of the phosphorus impairment in Lake Champlain. Streambank erosion is noted as a significant source of impacts to rivers and streams in the basin. However for the most part streambank erosion results in less severe stresses and threats to water quality, rather than more significant use impairment caused by atmospheric deposition, contaminated sediments and agricultural sources.

Figure 2

# Lake Champlain Basin

WI/PWL Water Quality Assessment



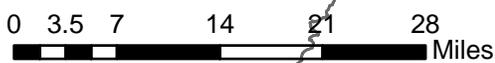
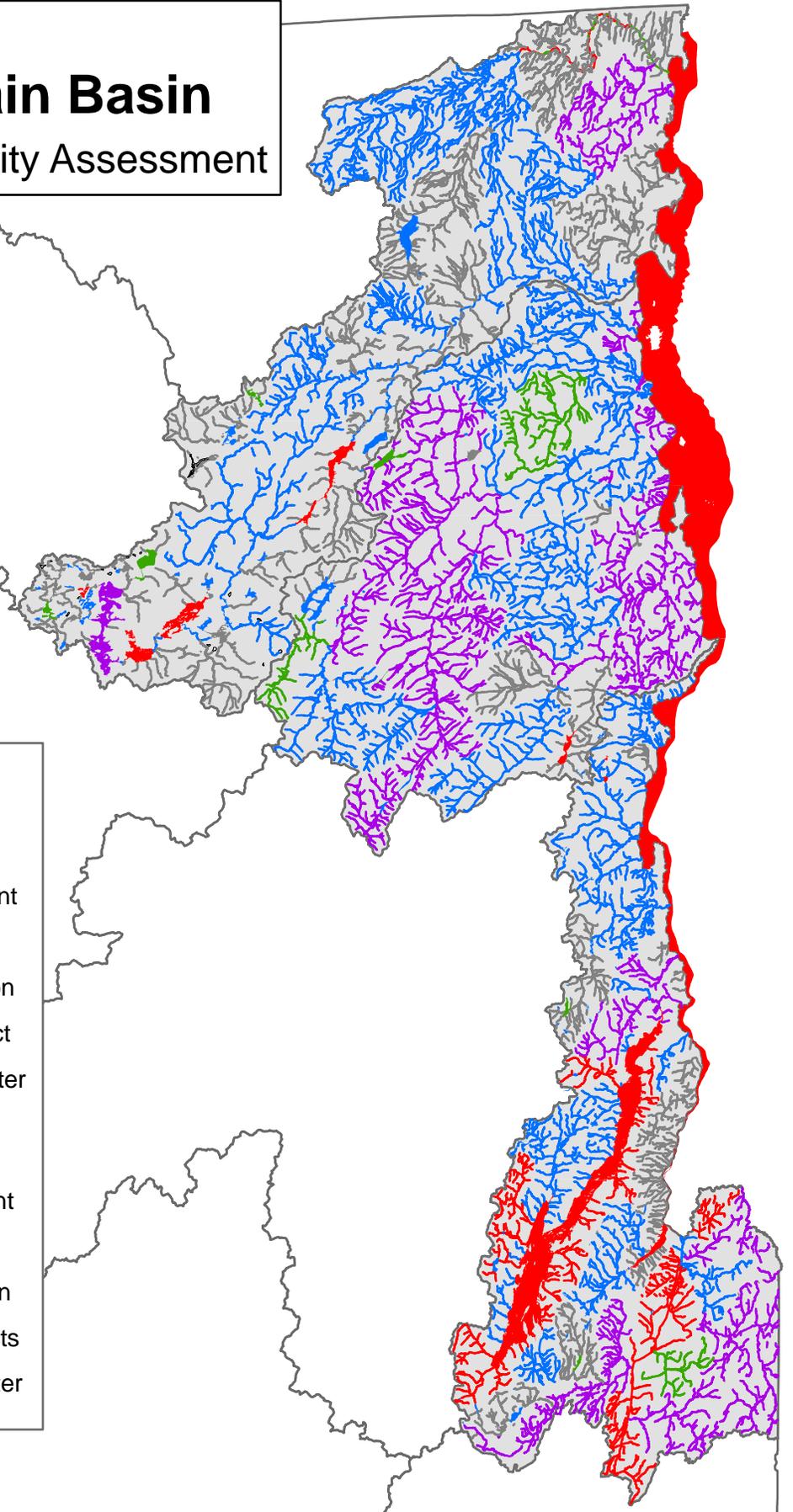
**Assessment**

**Rivers/Streams**

- Impaired Segment
- Minor Impacts
- Needs Verification
- No Known Impact
- UnAssessed Water

**Lakes/Reservoirs**

- Impaired Segment
- Minor Impacts
- Needs Verification
- No Known Impacts
- UnAssessed Water



# The Lake Champlain Basin

## Waterbody Inventory/Priority Waterbodies List

This compilation of water quality information includes individual waterbody *Data Sheets* describing the water quality conditions in the Lake Champlain Basin of New York State. Causes (pollutants) and sources of water quality problems for those waterbodies with known or suspected impacts are also outlined.

The data sheets are presented in hydrologic order, beginning with the most downstream waters and continuing upstream through the basin. Waterbody data sheets are grouped by US Geological Survey Hydrologic Unit Code (HUC) basin and presented as separate sections of this report (see Figure 3). A Waterbody Inventory of the specific waterbody segments in each watershed is included at the beginning of each watershed section.

Data sheets are included for each waterbody that has been assessed; i.e., waterbodies listed as *Impaired Waters* (Not Supporting Uses), Waters with *Minor Impacts*, *Threatened Waters*, waters with water quality impacts *Need Verification*, or waterbodies with *No Known Impact*. *UnAssessed* waterbodies are included in the Waterbody Inventory for each watershed, but because they have not been assessed data sheets for these waters have not been included.

The information outlined on the data sheets includes *Waterbody Location Information*, *Water Quality Problem/Issue Information*, *Resolution/Management Information* and *Further Details*. See *Appendix B – Waterbody Inventory Data Sheet Background Information* for more details about the data sheets.

Note that the assessments in this report reflect the best available water quality information at the time of publication. Water quality information may be added or modified subsequent to the preparation of this edition of the Waterbody Inventory and Priority Waterbodies List. When information is updated, the data sheet for the corresponding waterbody segment is issued with the date of revision. More recently revised data sheets supercede the corresponding waterbody information in this listing.

Following the individual waterbody data sheets in the watershed sections, a *Summary Listing of Priority Waters* provides a brief overview of all *Priority Waterbodies*, i.e., waterbodies listed as *Impaired Waters* (Not Supporting Uses), Waters with *Minor Impacts* and *Threatened Waters*.

Indices of waterbody data sheets by both county and alphabetically by segment name are included as Appendix C and D, respectively.

Figure 3

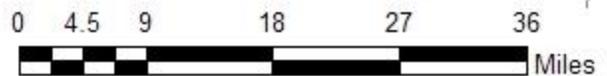
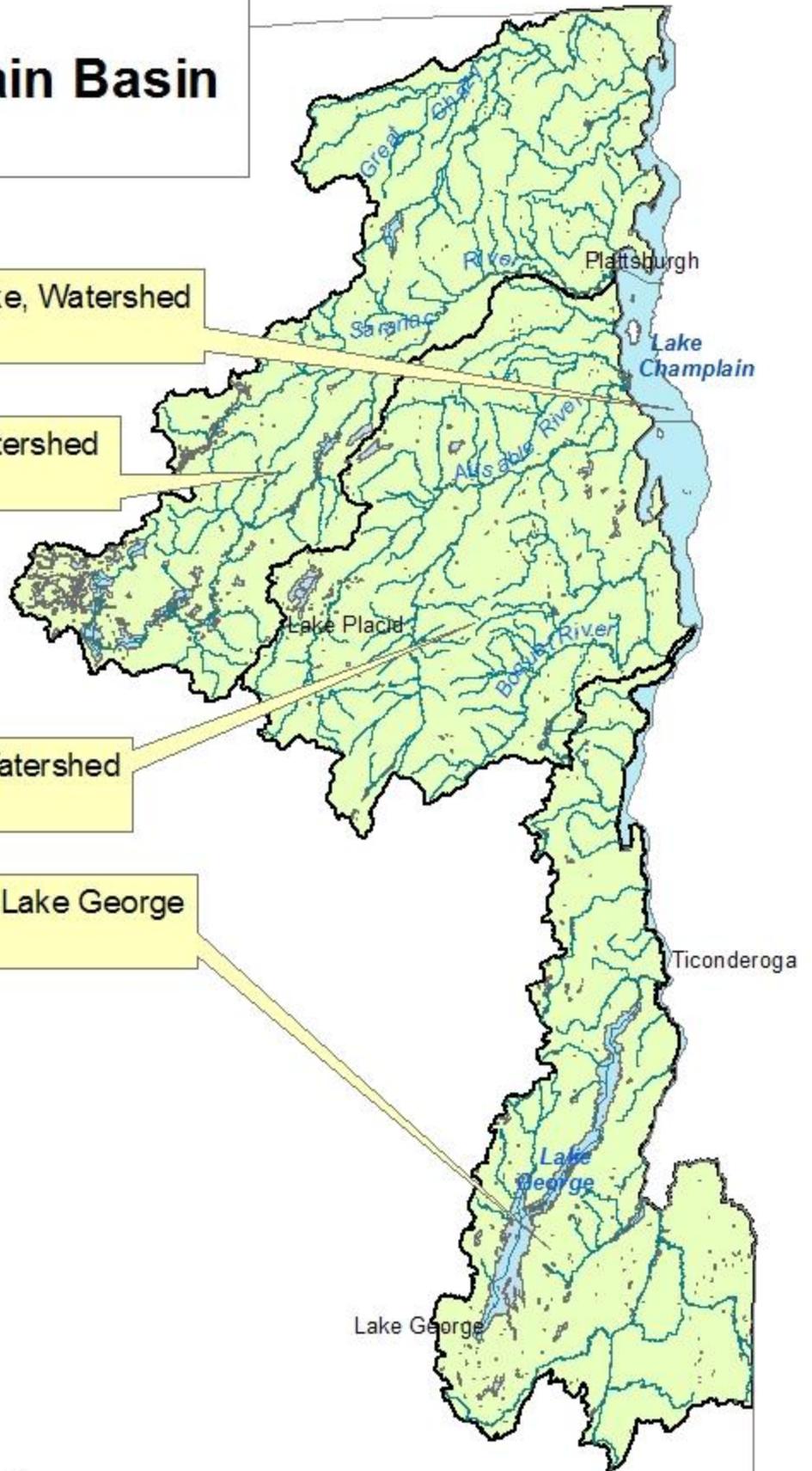
# Lake Champlain Basin Watershed Map

Lake Champlain, Main Lake, Watershed  
Page 13

Great Chazy-Saranac Watershed  
Page 33

Ausable-Boquet Rivers Watershed  
Page 123

Lake Champlain South-Lake George  
Page 201



# Waterbody Inventory for Lake Champlain, Main Lake, Watershed

Water Index Number	Waterbody Segment	Category
<b>Lake Champlain</b>		
C (portion 1)	Lake Champlain, Main Lake, North (1000-0001)	<b>Impaired Seg</b>
C (portion 2)	Lake Champlain, Main Lake, Middle (1000-0002)	<b>Impaired Seg</b>
C (portion 2a)	Cumberland Bay (1001-0001)	<b>Impaired Seg</b>
C (portion 2b)	Willsboro Bay (1001-0015)	<b>Impaired Seg</b>
C (portion 3)	Lake Champlain, Main Lake, South (1000-0003)	<b>Impaired Seg</b>
C (portion 4)	Lake Champlain, South Lake (1000-0004)	<b>Impaired Seg</b>
C (portion 5)	Lake Champlain, South Bay (1005-0014)	<b>Impaired Seg</b>
C (portion 6)	Lake Champlain, East Bay and tribs (1005-0055)	UnAssessed

This page intentionally left blank.

# Lake Champlain, Main Lake, North ( 1000-0001)

Impaired Seg

## Waterbody Location Information

Revised: 06/10/2009

**Water Index No:** C (portion 1)      **Drain Basin:** Lake Champlain  
**Hydro Unit Code:** 02010404/120      **Str Class:** A  
**Waterbody Type:** Lake      **Reg/County:** 5/Clinton Co. (10)  
**Waterbody Size:** 18334.7 Acres      **Quad Map:** ROUSES POINT (B-27-2) ...  
**Seg Description:** portion of lake, Canadian border to/incl Cumberland Bay

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

Use(s) Impacted	Severity	Problem Documentation
Public Bathing	Threatened	Possible
FISH CONSUMPTION	Impaired	Known
Recreation	Stressed	Known

### Type of Pollutant(s)

Known: METALS (mercury), NUTRIENTS (phosphorus), PRIORITY ORGANICS (PCBs), Problem Species (lamprey, zebra mussels)  
Suspected: - - -  
Possible: Pathogens

### Source(s) of Pollutant(s)

Known: AGRICULTURE, ATMOSPH. DEPOSITION, TOX/CONTAM. SEDIMENT (see Cumberland Bay)  
Suspected: Municipal, Urban/Storm Runoff  
Possible: - - -

## Resolution/Management Information

**Issue Resolvability:** 3 (Strategy Being Implemented)  
**Verification Status:** 5 (Management Strategy has been Developed)  
**Lead Agency/Office:** DEC/LCBP      **Resolution Potential:** High  
**TMDL/303d Status:** 2b,4a (Multiple Segment/Categorical Water, Fish Consumption, more)

## Further Details

### Overview

Fish consumption in Lake Champlain is known to be impaired due to health advisories that recommend restricting the consumption of fish from the lake because of elevated PCB and mercury levels. The PCB source is thought to be lake sediments contaminated by past industrial and other discharges. Atmospheric deposition is the source of the mercury contamination. Public bathing and other recreational uses of the lake are also known to be threatened or stressed by elevated nutrient (phosphorus) levels and invasive aquatic species.

### Fish Consumption Advisories

Fish consumption in this portion of Lake Champlain is impaired by health advisories for the entire lake due to PCB and mercury contamination. The advisory recommends eating no more than one meal per month of larger lake trout (over 25 inches) or walleye (over 19 inches). The Lake Champlain Basin Program and its partners have been working to identify sources of PCBs in the Lake and remedy them. The mercury contamination is widely thought to be a result of atmospheric deposition. The advisories for the lake were first issued prior to 1998-99. (2008-2009 NYS DOH Health Advisories)

Cumberland Bay, at the south end of this segment, was identified as a significant source of PCB to the Lake. In 2000, the NYSDEC completed a three-year, \$35 million restoration of Cumberland Bay that removed contaminated sediment and restored affected wetland and shoreline areas. Over 140,000 tons of PCB-contaminated sludge was removed from the bottom of the Bay. (See also Cumberland Bay segment 1001-0001.) Continued monitoring will characterize the site's influence on water quality lakewide. On-going pollution prevention and monitoring efforts are also continuing at Outer Malletts Bay and Inner Burlington Harbor on the Vermont side of the Lake. (DEC/DER and Lake Champlain Basin Program, January 2009)

#### Recreational Impacts

Impacts on other recreational uses (swimming, fishing, boating) in this portion of Lake Champlain are also of concern. The most notable issue is elevated phosphorus concentrations in excess of in-lake total phosphorus criteria established in a 1993 Water Quality Agreement between New York State, Vermont and Quebec. New York State and Vermont completed a study to measure point and nonpoint source phosphorus loads to the lake, develop a whole-lake phosphorus budget, and develop a load reduction strategy to attain the in-lake criteria. This study, the Lake Champlain Diagnostic-Feasibility Study, found phosphorus to be at or, in portions of the Lake, above the criteria (which ranges from 10-25 ug/l throughout the lake and is set at 14 ug/l in this portion of Lake Champlain) and, therefore, contributing to excessive algal and vegetative growth in the lake. In 1996, the states agreed to a phosphorus reduction strategy that included specific loading targets for various lake watershed. A joint New York-Vermont TMDL to address phosphorus loadings to the Lake was also established in 2002. Resulting phosphorus reductions are to be met using an appropriate mix on point and nonpoint source actions to be implemented in the watersheds. (DEC/DOW, Region 5 and Lake Champlain Basin Program, January 2009)

#### Invasive Species

Exotic and invasive plant and animal species are also an increasing threat to the lake. Zebra mussels are widespread and have impacted water supplies and crowded out native mussels in many areas. Water chestnut and Eurasian milfoil limit various recreational activities and alter riparian cover. Sea lamprey predation appears to be increasing after some decline following a lake-wide control program. Without further controls the Atlantic salmon and lake trout populations are likely to be significantly affected. Additionally, the presence of alewives in neighboring Lake Saint Catherine pose a threat to larger cold water species. The ability to control many of these exotics is limited, and expensive and long-term impact is relatively uncertain. (Lake Champlain Basin Program, Opportunities for Action, 2003)

#### Water Quality Sampling

The Long-Term Water Quality and Biological Monitoring Project for Lake Champlain has been in operation since 1992. The project is conducted by the Vermont Department of Environmental Conservation (DEC) and the New York State Department of Environmental Conservation with funding provided by the Lake Champlain Basin Program and the two states. Chemical and biological data from this effort are available for a number of lake as well as tributary site. Water quality results in this portion of the lake reveal mesotrophic conditions and phosphorus levels that are typically at or below the in-lake criterion of 14 ug/l for this portion of the lake. (DEC/DOW, Region 5 and Lake Champlain Basin Program, January 2009)

NYSDEC Rotating Intensive Basin Studies (RIBS) Routine Network monitoring (water chemistry) of the Richelieu River in Rouses Point, Clinton County, is conducted annually near the Route 2 bridge. In addition, when RIBS Intensive Network monitoring is conducted in a targeted basin every five years, additional sampling methods are employed at Routine Network sites to gain an overall assessment of water quality. The Intensive Network sampling typically includes macroinvertebrate community analysis, sediment assessment, macroinvertebrate tissue analysis and toxicity testing, in addition to water chemistry. The most recent Intensive Network monitoring was conducted during 2003 and 2004. Biological (macroinvertebrate) sampling revealed slightly to non-impacted conditions, indicating good water quality. Water column chemistry indicated no contaminants to be present in concentrations that constitute parameters of concern. Toxicity testing using water from this location detected no significant mortality or reproductive effects on the test organism. Macroinvertebrates collected at this site and chemically analyzed for selected metals and PAHs showed none in concentrations above established guidance values. Sediment screening for acute toxicity indicated possible sediment toxicity, however while sediments were found to contain several contaminants, based on sediment quality guidelines developed for freshwater ecosystems, overall sediment quality is not likely to cause chronic toxicity to sediment-dwelling organisms. Based on the consensus of these established assessment methods, overall water quality at this site shows that aquatic life is considered to be fully supported in the stream, and there are no other apparent water quality impacts to recreational uses.

These results are consistent with previous sampling at this site. (DEC/DOW, BWAM/RIBS, April 2009)

#### Lake Champlain Basin Program

The Lake Champlain Basin Program (LCBP) is a federal, state and local initiative to restore and protect Lake Champlain and its surrounding watershed. The states of New York and Vermont, the Province of Quebec, the U.S. Environmental Protection Agency, other federal and local government agencies, and many local groups, both public and private, are partners of the LCBP. Created by the Lake Champlain Special Designation Act of 1990, the LCBP's goal is to work cooperatively to protect and enhance the environmental integrity and the social and economic benefits of the Lake Champlain Basin. The actions of the LCBP are guided by a pollution prevention, control, and restoration plan entitled "Opportunities for Action - An Evolving Plan for the Future of the Lake Champlain Basin." The Plan was first endorsed in October of 1996 by the governors of New York and Vermont and by the USEPA; it was most recently updated in 2003. The main goals of the Plan include 1) improving water quality throughout the Lake Champlain Basin, 2) protecting the Basin's living natural resources, and 3) preserving and enhancing the region's rich cultural and recreation resources. Considerable information on water quality, natural resources, protection and restoration efforts and other issues in Lake Champlain can be found at the LCBP website (<http://www.lcbp.org>).

#### Water Quality Management/TMDL

As noted above a joint New York-Vermont TMDL to address phosphorus loadings to the Lake was established in 2002. The TMDL outlines a strategy of both point and nonpoint source reductions in the tributary watersheds of the Lake. (DEC/DOW, BWAM, January 2009)

#### Section 303(d) Listing

Lake Champlain is included on the NYS 2008 Section 303(d) List of Impaired Waters. The lake is included on Part 2b of the List as a Fish Consumption Water due to PCB contamination. This waterbody was first listed on the 1998 Section 303(d) List. Lake Champlain was also included in the 2006 Section 303(d) List of Impaired Waters due to mercury contamination, but it is not included on the 2008 List. The waterbody was delisted in 2008 due to the completion of the Northeast Regional Mercury TMDL which was approved in 2007 and provides coverage for this specific waterbody. A previous listing for Lake Champlain for phosphorus was delisted in 2004 due to completion of the Lake Champlain Phosphorus TMDL. (DEC/DOW, BWAM, January 2009)

#### Segment Description

This segment includes the waters of the Lake (within NYS) between the Canadian border and an east-west line at Cumberland Head. The shoreline waters of Lake Champlain, extending one-quarter mile and to a depth of 30 feet, are designated Class A; except for Deep Bay which is Class C. The deeper, open reaches of the lake (beyond the shoreline waters) are Class AA.

# Lake Champlain, Main Lake, Middle ( 1000-0002)

Impaired Seg

## Waterbody Location Information

Revised: 04/23/2009

**Water Index No:** C (portion 2)      **Drain Basin:** Lake Champlain  
**Hydro Unit Code:** 02010004/100      **Str Class:** A      AuSable/Boquet  
**Waterbody Type:** Lake      **Reg/County:** 5/Canton Co. (10) ...  
**Waterbody Size:** 54971.6 Acres      **Quad Map:** PLATTSBURGH (C-27-1) ...  
**Seg Description:** portion of lake, from Cumberland Bay to Split Rock Pt

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Public Bathing	Threatened	Possible
FISH CONSUMPTION	Impaired	Known
Recreation	Stressed	Known

### Type of Pollutant(s)

Known: METALS (mercury), NUTRIENTS (phosphorus), PRIORITY ORGANICS (PCBs), Problem Species (lamprey, zebra mussels)

Suspected: - - -

Possible: Pathogens

### Source(s) of Pollutant(s)

Known: AGRICULTURE, ATMOSPHERIC DEPOSITION, TOX/CONTAM. SEDIMENT (see Cumberland Bay), Municipal

Suspected: Urban/Storm Runoff

Possible: - - -

## Resolution/Management Information

**Issue Resolvability:** 3 (Strategy Being Implemented)

**Verification Status:** 5 (Management Strategy has been Developed)

**Lead Agency/Office:** DEC/LCBP

**Resolution Potential:** High

**TMDL/303d Status:** 2b,4a (Multiple Segment/Categorical Water, Fish Consumption, more)

## Further Details

### Overview

Fish consumption in Lake Champlain is known to be impaired due to health advisories that recommend restricting the consumption of fish from the lake because of elevated PCB and mercury levels. The PCB source is thought to be lake sediments contaminated by past industrial and other discharges. Atmospheric deposition is the source of the mercury contamination. Public bathing and other recreational uses of the lake are also known to be threatened or stressed by elevated nutrient (phosphorus) levels and invasive aquatic species.

### Fish Consumption Advisories

Fish consumption in this portion of Lake Champlain is impaired by health advisories for the entire lake due to PCB and mercury contamination. The advisory recommends eating no more than one meal per month of larger lake trout (over 25 inches) or walleye (over 19 inches). The Lake Champlain Basin Program and its partners have been working to identify sources of PCBs in the Lake and remedy them. The mercury contamination is widely thought to be a result of atmospheric

deposition. The advisories for the lake were first issued prior to 1998-99. (2008-2009 NYS DOH Health Advisories)

Cumberland Bay, adjacent to this segment, was identified as a significant source of PCB to the Lake. In 2000, the NYSDEC completed a three-year, \$35 million restoration of Cumberland Bay that removed contaminated sediment and restored affected wetland and shoreline areas. Over 140,000 tons of PCB-contaminated sludge was removed from the bottom of the Bay. (See also Cumberland Bay segment 1001-0001.) Continued monitoring will characterize the site's influence on water quality lakewide. On-going pollution prevention and monitoring efforts are also continuing at Outer Malletts Bay and Inner Burlington Harbor on the Vermont side of the Lake. (DEC/DER and Lake Champlain Basin Program, January 2009)

#### Recreational Impacts

Impacts on other recreational uses (swimming, fishing, boating) in this portion of Lake Champlain are also of concern. The most notable issue is elevated phosphorus concentrations in excess of in-lake total phosphorus criteria established in a 1993 Water Quality Agreement between New York State, Vermont and Quebec. New York State and Vermont completed a study to measure point and nonpoint source phosphorus loads to the lake, develop a whole-lake phosphorus budget, and develop a load reduction strategy to attain the in-lake criteria. This study, the Lake Champlain Diagnostic-Feasibility Study, found phosphorus to be at or, in portions of the Lake, above the criteria (which ranges from 10-25 ug/l throughout the lake and is set at 10 ug/l in this portion of Lake Champlain) and, therefore, contributing to excessive algal and vegetative growth in the lake. In 1996, the states agreed to a phosphorus reduction strategy that included specific loading targets for various lake watershed. A joint New York-Vermont TMDL to address phosphorus loadings to the Lake was also established in 2002. Resulting phosphorus reductions are to be met using an appropriate mix on point and nonpoint source actions to be implemented in the watersheds. (DEC/DOW, Region 5 and Lake Champlain Basin Program, January 2009)

#### Invasive Species

Exotic and invasive plant and animal species are also an increasing threat to the lake. Zebra mussels are widespread and have impacted water supplies and crowded out native mussels in many areas. Water chestnut and Eurasian milfoil limit various recreational activities and alter riparian cover. Sea lamprey predation appears to be increasing after some decline following a lake-wide control program. Without further controls the Atlantic salmon and lake trout populations are likely to be significantly affected. Additionally, the presence of alewives in neighboring Lake Saint Catherine pose a threat to larger cold water species. The ability to control many of these exotics is limited, and expensive and long-term impact is relatively uncertain. (Lake Champlain Basin Program, Opportunities for Action, 2003)

#### Lake Champlain Basin Program

The Lake Champlain Basin Program (LCBP) is a federal, state and local initiative to restore and protect Lake Champlain and its surrounding watershed. The states of New York and Vermont, the Province of Quebec, the U.S. Environmental Protection Agency, other federal and local government agencies, and many local groups, both public and private, are partners of the LCBP. Created by the Lake Champlain Special Designation Act of 1990, the LCBP's goal is to work cooperatively to protect and enhance the environmental integrity and the social and economic benefits of the Lake Champlain Basin. The actions of the LCBP are guided by a pollution prevention, control, and restoration plan entitled "Opportunities for Action - An Evolving Plan for the Future of the Lake Champlain Basin." The Plan was first endorsed in October of 1996 by the governors of New York and Vermont and by the USEPA; it was most recently updated in 2003. The main goals of the Plan include 1) improving water quality throughout the Lake Champlain Basin, 2) protecting the Basin's living natural resources, and 3) preserving and enhancing the region's rich cultural and recreation resources. Considerable information on water quality, natural resources, protection and restoration efforts and other issues in Lake Champlain can be found at the LCBP website (<http://www.lcbp.org>).

#### Water Quality Sampling

The Long-Term Water Quality and Biological Monitoring Project for Lake Champlain has been in operation since 1992. The project is conducted by the Vermont Department of Environmental Conservation (DEC) and the New York State Department of Environmental Conservation with funding provided by the Lake Champlain Basin Program and the two states. Chemical and biological data from this effort are available for a number of lake as well as tributary site. Water quality results in this portion of the lake reveal mesotrophic conditions and phosphorus levels that are typically at the in-lake criterion of 10 ug/l for this portion of the lake. (DEC/DOW, Region 5 and Lake Champlain Basin Program, January 2009)

#### Water Quality Management/TMDL

As noted above a joint New York-Vermont TMDL to address phosphorus loadings to the Lake was established in 2002. The TMDL outlines a strategy of both point and nonpoint source reductions in the tributary watersheds of the Lake. (DEC/DOW, BWAM, January 2009)

#### Section 303(d) Listing

Lake Champlain is included on the NYS 2008 Section 303(d) List of Impaired Waters. The lake is included on Part 2b of the List as a Fish Consumption Water due to PCB contamination. This waterbody was first listed on the 1998 Section 303(d) List. Lake Champlain was also included in the 2006 Section 303(d) List of Impaired Waters due to mercury contamination, but it is not included on the 2008 List. The waterbody was delisted in 2008 due to the completion of the Northeast Regional Mercury TMDL which was approved in 2007 and provides coverage for this specific waterbody. A previous listing for Lake Champlain for phosphorus was delisted in 2004 due to completion of the Lake Champlain Phosphorus TMDL. (DEC/DOW, BWAM, January 2009)

#### Segment Description

This segment includes the waters of the Lake (within NYS) between an east-west line at Cumberland Head and an east-west line at Split Rock Point, Except for Cumberland Bay and Willsboro Bay, which are listed separately. The shoreline waters of Lake Champlain, extending one-quarter mile and to a depth of 30 feet, are designated Class A; except for a few specific bays which are classified separately. The deeper, open reaches of the lake (beyond the shoreline waters) are Class AA.

# Cumberland Bay ( 1001-0001)

Impaired Seg

## Waterbody Location Information

Revised: 06/11/2001

<b>Water Index No:</b>	C (portion 2a)	<b>Drain Basin:</b>	Lake Champlain
<b>Hydro Unit Code:</b>	02010004/100	<b>Str Class:</b>	B
<b>Waterbody Type:</b>	Bay	<b>Reg/County:</b>	5/Canton Co. (10)
<b>Waterbody Size:</b>	2658.4 Acres	<b>Quad Map:</b>	PLATTSBURGH (C-27-1)
<b>Seg Description:</b>	entire bay, as described below		

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Public Bathing	Stressed	Known
FISH CONSUMPTION	Impaired	Known
AQUATIC LIFE	Impaired	Known
Recreation	Stressed	Known
Aesthetics	Stressed	Known

### Type of Pollutant(s)

Known: METALS (mercury), PRIORITY ORGANICS (PCBs)  
 Suspected: D.O./OXYGEN DEMAND, Aesthetics (paper sludge)  
 Possible: - - -

### Source(s) of Pollutant(s)

Known: TOX/CONTAM. SEDIMENT, Municipal (Plattsburgh WWTP)  
 Suspected: ATMOSPHERIC DEPOSITION, INDUSTRIAL (historic/legacy)  
 Possible: Unknown Source

## Resolution/Management Information

<b>Issue Resolvability:</b>	3 (Strategy Being Implemented)	
<b>Verification Status:</b>	5 (Management Strategy has been Developed)	
<b>Lead Agency/Office:</b>	DEC/Reg5	<b>Resolution Potential:</b> High
<b>TMDL/303d Status:</b>	1,2b,4a (Individual Waterbody Impairment Requiring a TMDL, more)	

## Further Details

### Overview

Fish consumption in Cumberland Bay is known to be impaired due to health advisories that recommend restricting the consumption of fish from the lake because of elevated PCB and mercury levels. The PCB source is thought to be lake sediments contaminated by past industrial and other discharges. Atmospheric deposition is the source of the mercury contamination. Aquatic life support, recreation and aesthetics in the bay are also affected by municipal discharges, urban/storm runoff and other sources. Public bathing and other recreational uses of Lake Champlain, including the Bay, are also known to be threatened or stressed by elevated nutrient (phosphorus) levels and invasive aquatic species.

### Fish Consumption Advisories

Fish consumption in the Cumberland Bay portion of Lake Champlain is impaired by health advisories for the entire lake due to PCB contamination. The advisory recommends eating no brown bullhead and no more than one meal per month of American eel and yellow perch. This advisory is due to contamination from past discharges to the waters of Cumberland Bay

and resulting bay contaminated sediments. Additionally, an advisory for the entire lake due to PCB and mercury contamination also applies to the bay. The lake-wide advisory recommends eating no more than one meal per month of larger lake trout (over 25 inches) or walleye (over 19 inches). Cumberland Bay was identified as a significant source of PCBs to the entire lake. The source of the mercury contamination is believed to be atmospheric deposition. The advisories for the bay and lake were first issued prior to 1998-99. (2008-2009 NYS DOH Health Advisories)

#### Remediation Efforts

In 2000, the NYSDEC completed a three-year, \$35 million restoration of Cumberland Bay that removed contaminated sediment and restored affected wetland and shoreline areas. Over 140,000 tons of PCB-contaminated sludge containing 20,000 pounds of PCBs was removed from the bottom of the Bay. Continued monitoring will characterize the site's influence on water quality lakewide. (DEC/DER and Lake Champlain Basin Program, January 2009)

#### Water Quality Sampling

A biological (macroinvertebrate) survey of the bay in 1986 had documented a zone of severe organic impact in the vicinity of the plant's effluent discharge. A 1993 survey found significant improvement in water quality as evidenced by species richness, water clarity and a decrease in midge deformities. However, the 1993 site assessments still ranged from slightly to moderately impacted. A site opposite the mouth of the Saranac River appeared to be affected by the effluent discharge from the WWTP, as the effluent plume was visible at this site and the bottom fauna was composed primarily of sewage-tolerant worms. DEC/DOW Regional staff have indicated that dissolved oxygen and aesthetics issues appear to have been reduced with the discontinuation of the Georgia Pacific pulping operations in early 1990s. (Biological Assessment of Cumberland Bay, Bode et al, DEC/DOW, BWAR/SBU, February 1994)

Sediment samples collected from the bay in 1994 found PCB concentrations that exceeded the Lowest Effects Level (LEL) at most sites; PCB Arochlor was found to exceed the Severe Effects Level (SEL) at some sites. Concentrations of hexachlorobenzene and mirex exceeded the LEL at two sites, and the SEL at one of these. Dioxins were also found at elevated levels. NOTE: This assessment was conducted prior to the remediation effort (see above). (DEC/DOW, BWAR/Sed Asmt, January 2001)

#### Section 303(d) Listing

Cumberland Bay is included on the NYS 2008 Section 303(d) List of Impaired Waters. The bay is included on Part 2b of the List as a Fish Consumption Water due to PCB contamination. This waterbody was first listed on the 1998 Section 303(d) List. Cumberland Bay was also included in the 2006 Section 303(d) List of Impaired Waters due to mercury contamination, but it is not included on the 2008 List. The waterbody was delisted in 2008 due to the completion of the Northeast Regional Mercury TMDL which was approved in 2007 and provides coverage for this specific waterbody. (DEC/DOW, BWAM, January 2009)

#### Segment Description

This segment includes the bay waters west of line from point along western shore of Cumberland Head near Champlain Park to the shore as the southern boundary of City of Plattsburgh. These waters are also included in the Lake Champlain, Main Lake, Middle segment.

# Willsboro Bay ( 1001-0015)

Impaired Seg

## Waterbody Location Information

Revised: 04/23/2009

**Water Index No:** C (portion 2b)  
**Hydro Unit Code:** 02010004/100      **Str Class:** A  
**Waterbody Type:** Bay  
**Waterbody Size:** 2376.7 Acres  
**Seg Description:** entire bay, as described below

**Drain Basin:** Lake Champlain  
AuSable/Boquet  
**Reg/County:** 5/Essex Co. (16)  
**Quad Map:** WILLSBORO (D-27-0)

## 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: METALS (mercury), NUTRIENTS (phosphorus), PRIORITY ORGANICS (PCBs), Problem Species (lamprey, zebra mussels)  
Suspected: ---  
Possible: Pathogens

### Source(s) of Pollutant(s)

Known: AGRICULTURE, ATMOSPHERIC DEPOSITION, TOX/CONTAM. SEDIMENT (see Cumberland Bay)  
Suspected: ON-SITE/SEPTIC SYST, Municipal, Urban/Storm Runoff  
Possible: ---

## Resolution/Management Information

**Issue Resolvability:** 3 (Strategy Being Implemented)  
**Verification Status:** 5 (Management Strategy has been Developed)  
**Lead Agency/Office:** DEC/LCBP      **Resolution Potential:** High  
**TMDL/303d Status:** 2b,4a (Multiple Segment/Categorical Water, Fish Consumption, more)

## Further Details

### Overview

Fish consumption in Lake Champlain, including Willsboro Bay, is known to be impaired due to health advisories that recommend restricting the consumption of fish from the lake because of elevated PCB and mercury levels. The PCB source is thought to be lake sediments contaminated by past industrial and other discharges that for the most part lie outside the Willsboro Bay shoreline watershed. Atmospheric deposition is the source of the mercury contamination. Public bathing and other recreational uses of the lake are also known to be threatened or stressed by elevated nutrient (phosphorus) levels and invasive aquatic species. (See also Lake Champlain, Main Lake, Middle 1000-0002)

### Fish Consumption Advisories

Fish consumption in Lake Champlain including Willsboro Bay is impaired by health advisories for the entire lake due to PCB and mercury contamination. The advisory recommends eating no more than one meal per month of larger lake trout (over 25 inches) or walleye (over 19 inches). The Lake Champlain Basin Program and its partners have been working to identify sources of PCBs in the Lake and remedy them. The mercury contamination is widely thought to be a result of atmospheric deposition. The advisories for the lake were first issued prior to 1998-99. (2008-2009 NYS DOH Health Advisories)

### Recreational Impacts

Impacts on other recreational uses (swimming, fishing, boating) in Lake Champlain including Willsboro Bay are of concern. The most notable issue is elevated phosphorus concentrations and resulting algal and vegetative growth in the lake. Exotic and invasive plant and animal species are also an increasing threat to the lake. These issues are outlined in detail in Lake Champlain, Main Lake, Middle segment (1000-0002).

### Section 303(d) Listing

Although the Willsboro Bay segment is not included on the on the NYS 2008 Section 303(d) List of Impaired Waters, the List does include the portion of Lake Champlain that includes the Bay. The lake is included on Part 2b of the List as a Fish Consumption Water due to PCB contamination. This waterbody was first listed on the 1998 Section 303(d) List. Lake Champlain was also included in the 2006 Section 303(d) List of Impaired Waters due to mercury contamination, but it is not included on the 2008 List. The waterbody was delisted in 2008 due to the completion of the Northeast Regional Mercury TMDL which was approved in 2007 and provides coverage for this specific waterbody. A previous listing for Lake Champlain for phosphorus was delisted in 2004 due to completion of the Lake Champlain Phosphorus TMDL. (DEC/DOW, BWAM, January 2009)

### Segment Description

This segment includes the bay waters south of line from the northern end of Willsboro Point to the mouth of unnamed trib (-40). These waters are also included in the Lake Champlain, Main Lake, Middle segment.

# Lake Champlain, Main Lake, South ( 1000-0003)

Impaired Seg

## Waterbody Location Information

Revised: 04/23/2009

**Water Index No:** C (portion 3)  
**Hydro Unit Code:** 02010001/270      **Str Class:** A  
**Waterbody Type:** Lake  
**Waterbody Size:** 10454.9 Acres  
**Seg Description:** portion of lake, from Split Rock Pt to Crown Point Br

**Drain Basin:** Lake Champlain  
Champlain-Lk.George  
**Reg/County:** 5/Essex Co. (16)  
**Quad Map:** PORT HENRY (E-27-0) ...

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

### Type of Pollutant(s)

Known: METALS (mercury), NUTRIENTS (phosphorus), PRIORITY ORGANICS (PCBs), Problem Species (water chestnut, other)  
Suspected: - - -  
Possible: Pathogens

### Source(s) of Pollutant(s)

Known: AGRICULTURE, ATMOSPH. DEPOSITION, TOX/CONTAM. SEDIMENT  
Suspected: Municipal, Urban/Storm Runoff  
Possible: - - -

## Resolution/Management Information

**Issue Resolvability:** 3 (Strategy Being Implemented)  
**Verification Status:** 5 (Management Strategy has been Developed)  
**Lead Agency/Office:** DEC/LCBP  
**TMDL/303d Status:** 2b,4a (Multiple Segment/Categorical Water, Fish Consumption, more)

**Resolution Potential:** High

## Further Details

### Overview

Fish consumption in Lake Champlain is known to be impaired due to health advisories that recommend restricting the consumption of fish from the lake because of elevated PCB and mercury levels. The PCB source is thought to be lake sediments contaminated by past industrial and other discharges. Atmospheric deposition is the source of the mercury contamination. Public bathing and other recreational uses of the lake are also known to be threatened or stressed by elevated nutrient (phosphorus) levels and invasive aquatic species.

### Fish Consumption Advisories

Fish consumption in this portion of Lake Champlain is impaired by health advisories for the entire lake due to PCB and mercury contamination. The advisory recommends eating no more than one meal per month of larger lake trout (over 25 inches) or walleye (over 19 inches). The Lake Champlain Basin Program and its partners have been working to identify sources of PCBs in the Lake and remedy them. The mercury contamination is widely thought to be a result of atmospheric deposition. The advisories for the lake were first issued prior to 1998-99. (2008-2009 NYS DOH Health Advisories)

### Recreational Impacts

Impacts on other recreational uses (swimming, fishing, boating) in this portion of Lake Champlain are also of concern. The most notable issue is elevated phosphorus concentrations in excess of in-lake total phosphorus criteria established in a 1993 Water Quality Agreement between New York State, Vermont and Quebec. New York State and Vermont completed a study to measure point and nonpoint source phosphorus loads to the lake, develop a whole-lake phosphorus budget, and develop a load reduction strategy to attain the in-lake criteria. This study, the Lake Champlain Diagnostic-Feasibility Study, found phosphorus to be at or, in portions of the Lake, above the criteria (which ranges from 10-25 ug/l throughout the lake and is set at 14 ug/l in this portion of Lake Champlain) and, therefore, contributing to excessive algal and vegetative growth in the lake. In 1996, the states agreed to a phosphorus reduction strategy that included specific loading targets for various lake watershed. A joint New York-Vermont TMDL to address phosphorus loadings to the Lake was also established in 2002. Resulting phosphorus reductions are to be met using an appropriate mix on point and nonpoint source actions to be implemented in the watersheds. (DEC/DOW, Region 5 and Lake Champlain Basin Program, January 2009)

### Invasive Species

Exotic and invasive plant and animal species are also an increasing threat to the lake. Zebra mussels are widespread and have impacted water supplies and crowded out native mussels in many areas. Water chestnut and Eurasian milfoil limit various recreational activities and alter riparian cover. Sea lamprey predation appears to be increasing after some decline following a lake-wide control program. Without further controls the Atlantic salmon and lake trout populations are likely to be significantly affected. Additionally, the presence of alewives in neighboring Lake Saint Catherine pose a threat to larger cold water species. The ability to control many of these exotics is limited, and expensive and long-term impact is relatively uncertain. (Lake Champlain Basin Program, Opportunities for Action, 2003)

### Lake Champlain Basin Program

The Lake Champlain Basin Program (LCBP) is a federal, state and local initiative to restore and protect Lake Champlain and its surrounding watershed. The states of New York and Vermont, the Province of Quebec, the U.S. Environmental Protection Agency, other federal and local government agencies, and many local groups, both public and private, are partners of the LCBP. Created by the Lake Champlain Special Designation Act of 1990, the LCBP's goal is to work cooperatively to protect and enhance the environmental integrity and the social and economic benefits of the Lake Champlain Basin. The actions of the LCBP are guided by a pollution prevention, control, and restoration plan entitled "Opportunities for Action - An Evolving Plan for the Future of the Lake Champlain Basin." The Plan was first endorsed in October of 1996 by the governors of New York and Vermont and by the USEPA; it was most recently updated in 2003. The main goals of the Plan include 1) improving water quality throughout the Lake Champlain Basin, 2) protecting the Basin's living natural resources, and 3) preserving and enhancing the region's rich cultural and recreation resources. Considerable information on water quality, natural resources, protection and restoration efforts and other issues in Lake Champlain can be found at the LCBP website (<http://www.lcbp.org>).

### Water Quality Sampling

The Long-Term Water Quality and Biological Monitoring Project for Lake Champlain has been in operation since 1992. The project is conducted by the Vermont Department of Environmental Conservation (DEC) and the New York State Department of Environmental Conservation with funding provided by the Lake Champlain Basin Program and the two states. Chemical and biological data from this effort are available for a number of lake as well as tributary site. Water quality results in this portion of the lake reveal mesotrophic conditions and phosphorus levels that are typically at the in-lake criterion of 14 ug/l for this portion of the lake. (DEC/DOW, Region 5 and Lake Champlain Basin Program, January 2009)

### Water Quality Management/TMDL

As noted above a joint New York-Vermont TMDL to address phosphorus loadings to the Lake was established in 2002. The TMDL outlines a strategy of both point and nonpoint source reductions in the tributary watersheds of the Lake. (DEC/DOW, BWAM, January 2009)

### Section 303(d) Listing

Lake Champlain is included on the NYS 2008 Section 303(d) List of Impaired Waters. The lake is included on Part 2b of the List as a Fish Consumption Water due to PCB contamination. This waterbody was first listed on the 1998 Section 303(d)

List. Lake Champlain was also included in the 2006 Section 303(d) List of Impaired Waters due to mercury contamination, but it is not included on the 2008 List. The waterbody was delisted in 2008 due to the completion of the Northeast Regional Mercury TMDL which was approved in 2007 and provides coverage for this specific waterbody. A previous listing for Lake Champlain for phosphorus was delisted in 2004 due to completion of the Lake Champlain Phosphorus TMDL. (DEC/DOW, BWAM, January 2009)

#### Segment Description

This segment includes the waters of the Lake (within NYS) between an east-west line at Split Rock Point and the Crown Point Bridge. The shoreline waters of Lake Champlain, extending one-quarter mile and to a depth of 30 feet, are designated Class A; except for Bullwagaa Bay which is Class B. The deeper, open reaches of the lake (beyond the shoreline waters) are Class AA.



sources of PCBs in the Lake and remedy them. The mercury contamination is widely thought to be a result of atmospheric deposition. The advisories for the lake were first issued prior to 1998-99. (2008-2009 NYS DOH Health Advisories)

#### Recreational Impacts

Impacts on other recreational uses (swimming, fishing, boating) in this portion of Lake Champlain are also of concern. The most notable issue is elevated phosphorus concentrations in excess of in-lake total phosphorus criteria established in a 1993 Water Quality Agreement between New York State, Vermont and Quebec. New York State and Vermont completed a study to measure point and nonpoint source phosphorus loads to the lake, develop a whole-lake phosphorus budget, and develop a load reduction strategy to attain the in-lake criteria. This study, the Lake Champlain Diagnostic-Feasibility Study, found phosphorus to be at or, in portions of the Lake, above the criteria (which ranges from 10-25 ug/l throughout the lake and is set at 25 ug/l in this portion of Lake Champlain) and, therefore, contributing to excessive algal and vegetative growth in the lake. In 1996, the states agreed to a phosphorus reduction strategy that included specific loading targets for various lake watershed. A joint New York-Vermont TMDL to address phosphorus loadings to the Lake was also established in 2002. Resulting phosphorus reductions are to be met using an appropriate mix on point and nonpoint source actions to be implemented in the watersheds. (DEC/DOW, Region 5 and Lake Champlain Basin Program, January 2009)

#### Invasive Species

Exotic and invasive plant and animal species are also an increasing threat to the lake. Water chestnut, in particular, is an issue in this portion of the lake. Water chestnut is a plant that forms dense surface mats, crowding out other plant species, disrupting habitat, and severely limiting recreational enjoyment and commercial use of the Lake in some areas. Its spread throughout the southern end of the Lake includes this entire segment. Eurasian milfoil limit also impacts uses in some Lake bays. Zebra mussels are widespread and have impacted water supplies and crowded out native mussels in many areas. Sea lamprey predation appears to be increasing after some decline following a lake-wide control program. Without further controls the Atlantic salmon and lake trout populations are likely to be significantly affected. Additionally, the presence of alewives in neighboring Lake Saint Catherine pose a threat to larger cold water species. The ability to control many of these exotics is limited, and expensive and long-term impact is relatively uncertain. (Lake Champlain Basin Program, Opportunities for Action, 2003)

#### Lake Champlain Basin Program

The Lake Champlain Basin Program (LCBP) is a federal, state and local initiative to restore and protect Lake Champlain and its surrounding watershed. The states of New York and Vermont, the Province of Quebec, the U.S. Environmental Protection Agency, other federal and local government agencies, and many local groups, both public and private, are partners of the LCBP. Created by the Lake Champlain Special Designation Act of 1990, the LCBP's goal is to work cooperatively to protect and enhance the environmental integrity and the social and economic benefits of the Lake Champlain Basin. The actions of the LCBP are guided by a pollution prevention, control, and restoration plan entitled "Opportunities for Action - An Evolving Plan for the Future of the Lake Champlain Basin." The Plan was first endorsed in October of 1996 by the governors of New York and Vermont and by the USEPA; it was most recently updated in 2003. The main goals of the Plan include 1) improving water quality throughout the Lake Champlain Basin, 2) protecting the Basin's living natural resources, and 3) preserving and enhancing the region's rich cultural and recreation resources. Considerable information on water quality, natural resources, protection and restoration efforts and other issues in Lake Champlain can be found at the LCBP website (<http://www.lcbp.org>).

#### Water Quality Sampling

The Long-Term Water Quality and Biological Monitoring Project for Lake Champlain has been in operation since 1992. The project is conducted by the Vermont Department of Environmental Conservation (DEC) and the New York State Department of Environmental Conservation with funding provided by the Lake Champlain Basin Program and the two states. Chemical and biological data from this effort are available for a number of lake as well as tributary site. Water quality results in this portion of the lake reveal eutrophic conditions and phosphorus levels that are typically above the in-lake criterion of 25 ug/l for this portion of the lake. (DEC/DOW, Region 5 and Lake Champlain Basin Program, January 2009)

#### Water Quality Management/TMDL

As noted above a joint New York-Vermont TMDL to address phosphorus loadings to the Lake was established in 2002. The

TMDL outlines a strategy of both point and nonpoint source reductions in the tributary watersheds of the Lake. (DEC/DOW, BWAM, January 2009)

#### Section 303(d) Listing

Lake Champlain is included on the NYS 2008 Section 303(d) List of Impaired Waters. The lake is included on Part 2b of the List as a Fish Consumption Water due to PCB contamination. This waterbody was first listed on the 1998 Section 303(d) List. Lake Champlain was also included in the 2006 Section 303(d) List of Impaired Waters due to mercury contamination, but it is not included on the 2008 List. The waterbody was delisted in 2008 due to the completion of the Northeast Regional Mercury TMDL which was approved in 2007 and provides coverage for this specific waterbody. A previous listing for Lake Champlain for phosphorus was delisted in 2004 due to completion of the Lake Champlain Phosphorus TMDL. (DEC/DOW, BWAM, January 2009)

#### Segment Description

This segment includes the waters of the Lake (within NYS) between the Crown Point Bridge and the Champlain Canal. The waters of this portion of Lake Champlain are Class B.

# Lake Champlain, South Bay ( 1005-0014)

Impaired Seg

## Waterbody Location Information

Revised: 04/23/2009

**Water Index No:** C (portion 5)  
**Hydro Unit Code:** 02010001/150      **Str Class:** B  
**Waterbody Type:** Lake  
**Waterbody Size:** 1188.6 Acres  
**Seg Description:** entire bay, as described below

**Drain Basin:** Lake Champlain  
Champlain-Lk.George  
**Reg/County:** 5/Washington Co. (58)  
**Quad Map:** WHITEHALL (G-27-4)

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Public Bathing	Stressed	Known
RECREATION	Impaired	Known
Aesthetics	Stressed	Known

### Type of Pollutant(s)

Known: ALGAL/WEED GROWTH, NUTRIENTS (phosphorus), PROBLEM SPECIES (water chestnut, other)  
Suspected: - - -  
Possible: Pathogens

### Source(s) of Pollutant(s)

Known: AGRICULTURE, HABITAT MODIFICATION  
Suspected: Municipal, Urban/Storm Runoff  
Possible: - - -

## Resolution/Management Information

**Issue Resolvability:** 3 (Strategy Being Implemented)  
**Verification Status:** 5 (Management Strategy has been Developed)  
**Lead Agency/Office:** DEC/LCBP      **Resolution Potential:** High  
**TMDL/303d Status:** 4a,4c? (TMDL Complete, Being Implemented, Not Listed, more)

## Further Details

### Overview

Recreational use (swimming, fishing, boating) in South Bay is known to be impaired due to nutrient loadings and aquatic invasive week growth. Elevated levels of phosphorus are known to occur in the bay. Extensive water chestnut growth has also been documented.

### Recreational Impacts

Impacts on other recreational uses (swimming, fishing, boating) in this portion of Lake Champlain are of concern. The most notable issue is elevated phosphorus concentrations in excess of in-lake total phosphorus criteria established in a 1993 Water Quality Agreement between New York State, Vermont and Quebec. New York State and Vermont completed a study to measure point and nonpoint source phosphorus loads to the lake, develop a whole-lake phosphorus budget, and develop a load reduction strategy to attain the in-lake criteria. This study, the Lake Champlain Diagnostic-Feasibility Study, found phosphorus to be at or, in portions of the Lake, above the criteria (which ranges from 10-25 ug/l throughout the lake and is set at 25 ug/l in this portion of Lake Champlain) and, therefore, contributing to excessive algal and vegetative growth in the lake. In 1996, the states agreed to a phosphorus reduction strategy that included specific loading targets for various lake

watershed. A joint New York-Vermont TMDL to address phosphorus loadings to the Lake was also established in 2002. Resulting phosphorus reductions are to be met using an appropriate mix on point and nonpoint source actions to be implemented in the watersheds. (DEC/DOW, Region 5 and Lake Champlain Basin Program, January 2009)

#### Invasive Species

Exotic and invasive plant and animal species are also an increasing threat to the lake. Water chestnut, in particular, is an issue in this portion of the lake. Water chestnut is a plant that forms dense surface mats, crowding out other plant species, disrupting habitat, and severely limiting recreational enjoyment and commercial use of the Lake in some areas. Its spread throughout the southern end of the Lake includes the entire South Bay segment. Eurasian milfoil limit also impacts uses in some Lake bays. Zebra mussels are widespread and have impacted water supplies and crowded out native mussels in many areas. Sea lamprey predation appears to be increasing after some decline following a lake-wide control program. Without further controls the Atlantic salmon and lake trout populations are likely to be significantly affected. Additionally, the presence of alewives in neighboring Lake Saint Catherine pose a threat to larger cold water species. The ability to control many of these exotics is limited, and expensive and long-term impact is relatively uncertain. (Lake Champlain Basin Program, Opportunities for Action, 2003)

#### Lake Champlain Basin Program

The Lake Champlain Basin Program (LCBP) is a federal, state and local initiative to restore and protect Lake Champlain and its surrounding watershed. The states of New York and Vermont, the Province of Quebec, the U.S. Environmental Protection Agency, other federal and local government agencies, and many local groups, both public and private, are partners of the LCBP. Created by the Lake Champlain Special Designation Act of 1990, the LCBP's goal is to work cooperatively to protect and enhance the environmental integrity and the social and economic benefits of the Lake Champlain Basin. The actions of the LCBP are guided by a pollution prevention, control, and restoration plan entitled "Opportunities for Action - An Evolving Plan for the Future of the Lake Champlain Basin." The Plan was first endorsed in October of 1996 by the governors of New York and Vermont and by the USEPA; it was most recently updated in 2003. The main goals of the Plan include 1) improving water quality throughout the Lake Champlain Basin, 2) protecting the Basin's living natural resources, and 3) preserving and enhancing the region's rich cultural and recreation resources. Considerable information on water quality, natural resources, protection and restoration efforts and other issues in Lake Champlain can be found at the LCBP website (<http://www.lcbp.org>).

#### Water Quality Sampling

The Long-Term Water Quality and Biological Monitoring Project for Lake Champlain has been in operation since 1992. The project is conducted by the Vermont Department of Environmental Conservation (DEC) and the New York State Department of Environmental Conservation with funding provided by the Lake Champlain Basin Program and the two states. Chemical and biological data from this effort are available for a number of lake as well as tributary site. Water quality results in this portion of the lake reveal eutrophic conditions and phosphorus levels that are typically above the in-lake criterion of 25 ug/l for this portion of the lake. (DEC/DOW, Region 5 and Lake Champlain Basin Program, January 2009)

#### Water Quality Management/TMDL

As noted above a joint New York-Vermont TMDL to address phosphorus loadings to the Lake was established in 2002. The TMDL outlines a strategy of both point and nonpoint source reductions in the tributary watersheds of the Lake. (DEC/DOW, BWAM, January 2009)

#### Section 303(d) Listing

A previous listing for Lake Champlain for phosphorus was delisted in 2004 due to completion of the Lake Champlain Phosphorus TMDL. (DEC/DOW, BWAM, January 2009)

#### Segment Description

This segment includes the entire South Bay.

# Waterbody Inventory for Great Chazy-Saranac Rivers Watershed

Water Index Number	Waterbody Segment	Category
<b>Tribs to Lake Champlain North, Canada to King Bay</b>		
C- 1 thru 2 (selected)	Minor Tribs to Lake Champlain (1002-0023)	UnAssessed
<b>Great Chazy River Watershed</b>		
C- 3 (portion 1)	Great Chazy River, Lower, Main Stem (1002-0010)	Need Verific
C- 3 (portion 2)	Great Chazy River, Lower, Main Stem (1002-0001)	Impaired Seg
C- 3 (portion 3)	Great Chazy River, Middle, and tribs (1002-0017)	NoKnownImpct
C- 3 (portion 4)/P10b	Miner Lake (1002-0019)	UnAssessed
C- 3 (portion 5)	Great Chazy River, Upper, and tribs (1002-0018)	UnAssessed
C- 3 (portion 6)/P20	Chazy Lake (1002-0009)	NoKnownImpct
C- 3- 1 thru 22 (selected)	Minor Tribs to Great Chazy River, Lower (1002-0011)	UnAssessed
C- 3- 2	Corbeau Creek and tribs (1002-0012)	MinorImpacts
C- 3-25	North Branch, Lower, and minor tribs (1002-0013)	NoKnownImpct
C- 3-25	North Branch, Upper, and tribs (1002-0014)	NoKnownImpct
C- 3-25- 5	Graves Brook and tribs (1002-0016)	NoKnownImpct
C- 3-25- P6a	Lake Roxanne (1002-0024)	NoKnownImpct
C- 3-35	Stillwater Brook and tribs (1002-0020)	NoKnownImpct
C- 3-P20-	Tribs to Chazy Lake (1002-0021)	UnAssessed
<b>Tribs to Lake Champlain Middle, King Bay to Cumberland Bay</b>		
C- 4	Little Chazy River, Lower, and tribs (1002-0003)	MinorImpacts
C- 4	Little Chazy River, Upper, and tribs (1002-0008)	NoKnownImpct
C- 4- 4-P22	Lake Alice (1002-0022)	UnAssessed
C- 5 thru 13	Riley Brook and tribs (1001-0018)	UnAssessed
C- 14	Dead Creek and minor tribs (1001-0019)	UnAssessed
<b>Lower Saranac River Watershed, Plattsburgh to North Branch</b>		
C- 15 (portion 1)	Saranac River, Lower, Main Stem (1003-0049)	NoKnownImpct
C- 15 (portion 2)	Saranac River, Lower, Main Stem (1003-0001)	NoKnownImpct
C- 15 (portion 3)	Saranac River, Middle, Main Stem (1003-0021)	NoKnownImpct
C- 15- 1 thru 10	Minor Tribs to Saranac River, Lower (1003-0052)	NoKnownImpct
C- 15- 5, 5-3	Mead/Sandburn Brooks, Upper, and tribs (1003-0051)	NoKnownImpct
C- 15- 5..P27,P30	Mead/Patterson Reservoirs (1003-0114)	NoKnownImpct
C- 15-11 thru 30 (selected)	Minor Tribs to Middle Saranac River (1003-0053)	UnAssessed
C- 15-12-3	Behan Brook, Upper, and tribs (1003-0116)	NoKnownImpct
C- 15-18	True Brook and tribs (1003-0055)	NoKnownImpct
C- 15-18,19..P 35 thru P 40	Minor Lake Tribs to Middle Saranac River (1003-0113)	NoKnownImpct
C- 15-19	Mud Pond Brook, Upper, and tribs (1003-0117)	UnAssessed

# ...Great Chazy-Saranac Rivers Watershed

Water Index Number	Waterbody Segment	Category
<b>North Branch Saranac River Watershed</b>		
C- 15-22	North Branch Saranac, Lower, minor tribs (1003-0038)	NoKnownImpct
C- 15-22	North Branch Saranac, Upper, and tribs (1003-0041)	UnAssessed
C- 15-22- 2-P42	Mud Pond (1003-0115)	NoKnownImpct
C- 15-22- 3	Cold Brook and tribs (1003-0056)	UnAssessed
C- 15-22-24-P48	Loon Lake (1003-0060)	Need Verific
C- 15-22..P52	Mud Lake (1003-0061)	NoKnownImpct
C- 15-22..P55	Lake Kushaqua (1003-0062)	NoKnownImpct
C- 15-22..P57,P58	Mountain Lake, Little Hope Lake (1003-0064)	UnAssessed
C- 15-22..P61	Buck Pond (1003-0063)	NoKnownImpct
C- 15-22..P64	Oregon Pond (1003-0120)	UnAssessed
C- 15-22..P65,P66,P70	Rainbow Lake and Inlet, Clear Pond (1003-0065)	UnAssessed
<b>Upper Saranac River Watershed, North Branch to Saranac Lake</b>		
C- 15 (portion 3a)/P74a	Saranac River, Main Stem/Teft Pond (1003-0112)	NoKnownImpct
C- 15 (portion 4)/P74	Saranac River, Union Falls Reservoir (1003-0040)	Impaired Seg
C- 15 (portion 5)/P76	Saranac River, Franklin Falls Pond (1003-0045)	Impaired Seg
C- 15 (portion 6)	Saranac River, Upper, Main Stem (1003-0044)	NoKnownImpct
C- 15-28-P 73	Silver Lake (1003-0068)	NoKnownImpct
C- 15-31 thru 47 (selected)	Minor Tribs to Saranac River, Upper (1003-0071)	UnAssessed
C- 15-35-P 75	Cranberry Pond (1003-0110)	NoKnownImpct
C- 15-51	Towbridge Brook and tribs (1003-0070)	NoKnownImpct
C- 15-54	Moose Creek and tribs (1003-0118)	UnAssessed
C- 15-54-P 83,P 84	Moose Pond, Grass Pond (1003-0069)	NoKnownImpct
C- 15-P 86	Lake Flower (1003-0046)	NoKnownImpct
C- 15-P 86-59-P 88	McKenzie Pond (1003-0072)	NoKnownImpct
C- 15-P 86-P 90	Oseetah Lake (1003-0073)	UnAssessed
C- 15-P 86-P 90-60	Ray Brook and tribs (1003-0074)	NoKnownImpct
C- 15-P 86-P 90-60-	Ray Brook Tribs (1004-0097)	NoKnownImpct
C- 15-P 86-P 90-64-P100	Kiwassa Lake (1003-0076)	NoKnownImpct
C- 15-P 86-P 90-65	Cold Brook and tribs (1003-0077)	UnAssessed
C- 15-P 86/P 90-57 thru 64 (select)	Minor Tribs to Lake Flower/Oseetah Lake (1003-0075)	UnAssessed
C- 15-P102/P103	First/Second Ponds (1003-0078)	NoKnownImpct
<b>Saranac Lakes Watershed</b>		
C- 15-P104	Lower Saranac Lake (1003-0080)	Impaired Seg
C- 15-P104-66 thru 74	Tribs to Lower Saranac Lake (1003-0082)	UnAssessed
C- 15-P104-66-P106	Lake Colby (1003-0079)	NoKnownImpct
C- 15-P104-67-P107	McCauley Pond (1003-0081)	NoKnownImpct
C- 15-P104/P110..P108 thru 113	Minor Lakes Trib to Low/Mid Saranac Lak (1003-0085)	UnAssessed
C- 15-P110, P207 thru P209	Middle Saranac Lake (incl Weller Pond) (1003-0083)	Impaired Seg
C- 15-P110- 1 thru 8	Tribs to Middle Saranac Lake (1003-0121)	UnAssessed
C- 15-P114	Upper Saranac Lake (1003-0048)	MinorImpacts
C- 15-P114- 1 thru 15	Tribs to Upper Saranac Lake (1003-0087)	UnAssessed

# Great Chazy-Saranac Rivers Watershed

Water Index Number	Waterbody Segment	Category
<b>Saranac Lakes Watershed (con't)</b>		
C- 15-P114..P116	Follensby Clear Pond (1003-0088)	NoKnownImpct
C- 15-P114..P118	Horseshoe Pond (1003-0089)	NoKnownImpct
C- 15-P114..P120	Polliwog Pond (1003-0090)	Impaired Seg
C- 15-P114..P123	Fish Creek Pond, East (1003-0091)	NoKnownImpct
C- 15-P114..P124	Fish Creek Pond, West (1003-0092)	NoKnownImpct
C- 15-P114..P125	Square Pond (1003-0093)	UnAssessed
C- 15-P114..P140	Little Square Pond (1003-0094)	UnAssessed
C- 15-P114..P142	Floodwood Pond (1003-0095)	UnAssessed
C- 15-P114..P143	Middle Pond (1003-0111)	NoKnownImpct
C- 15-P114..P147	East Pine Pond (1003-0096)	UnAssessed
C- 15-P114..P149	Long Pond (1003-0097)	UnAssessed
C- 15-P114..P159, P160	Slang Pond,Turtle Pond (1003-0098)	NoKnownImpct
C- 15-P114..P161	Hoel Pond (1003-0099)	UnAssessed
C- 15-P114..P168	Rollins Pond (1003-0100)	Need Verific
C- 15-P114..P170	Rock Pond (1003-0101)	UnAssessed
C- 15-P114..P173	West Pine Pond (1003-0102)	NoKnownImpct
C- 15-P114..P178	Deer Pond (Altamont) (1003-0103)	NoKnownImpct
C- 15-P114..P180	Whey Pond (1003-0104)	NoKnownImpct
C- 15-P114..P181	Deer Pond (Santa Clara) (1003-0105)	NoKnownImpct
C- 15-P114..P183	Green Pond (1003-0106)	UnAssessed
C- 15-P114..P186	Rat Pond (1003-0122)	UnAssessed
C- 15-P114..P191	Little Clear Pond (1003-0107)	UnAssessed
C- 15-P114..P192	Little Green Pond (1003-0108)	NoKnownImpct
C- 15-P114..P199	Lake Clear (1003-0109)	Need Verific

This page intentionally left blank.

# Great Chazy River, Lower, Main Stem ( 1002-0010)

Need Verific

## Waterbody Location Information

Revised: 08/10/2009

**Water Index No:** C- 3 (portion 1)      **Drain Basin:** Lake Champlain  
**Hydro Unit Code:** 02010006/090      **Str Class:** C      Great Chazy/Saranac  
**Waterbody Type:** River (Med. Flow)      **Reg/County:** 5/Clinton Co. (10)  
**Waterbody Size:** 8.5 Miles      **Quad Map:** CHAMPLAIN (B-27-1)  
**Seg Description:** river from mouth to Champlain waterworks dam

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

### Type of Pollutant(s)

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

### Source(s) of Pollutant(s)

Known: ---  
Suspected: AGRICULTURE, Streambank Erosion  
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

Fishery habitat in the Lower Great Chazy River may experience minor impacts/threats due to excessive silt/sedimentation which fills in spawning beds. Reductions in walleye populations in nearby areas of Lake Champlain may be related to the loss of spawning beds in Great Chazy River. Muskellunge are also thought to be affected by the siltation problem. (DEC/DFWMR, Region 5, April 2000).

### Water Quality Sampling

NYSDEC Rotating Integrated Basin Studies (RIBS) Intensive Network monitoring of Great Chazy River in Champlain, Clinton County, (at Route 9) was conducted in 2003 and 2004. Intensive Network sampling typically includes macroinvertebrate community analysis, water column chemistry, sediment and invertebrate tissues analysis and toxicity evaluation. Biological (macroinvertebrate) sampling results revealed slightly to non-impacted conditions, indicating good water quality. Water column sampling found lead to be a parameter of concern, exceeding its assessment criteria in 2 of 10 samples. However, the median lead concentration was less than one-tenth of the criteria. Macroinvertebrates collected at this site and chemically analyzed for selected metals and PAHs found chromium to be present at a concentration above the established guidance value. Sediment screening for acute toxicity indicated possible toxicity, but analysis of sediments found no contaminants above the threshold effects concentration. Based on sediment quality guidelines developed for freshwater

ecosystems, overall sediment quality is not likely to result in toxicity to sediment-dwelling organisms. Toxicity testing of the water column also showed no significant mortality or reproductive impacts. Based on the consensus of these established assessment methods, overall water quality at this site shows that in spite of some concerns that should continue to be monitored, aquatic life is considered to be fully supported in the stream, and there are no other apparent water quality impacts to recreational uses. (DEC/DOW, BWAM/RIBS, May 2009).

Previous biological (macroinvertebrate) sampling of the Great Chazy River in Champlain and upstream in Mooers indicated non-impacted water quality. Though primarily bedrock, smaller areas of rubble revealed diverse populations of mayflies, stoneflies and caddisflies. (DEC/DOW, BWAR/SBU, April 1999)

NYSDEC Rotating Intensive Basin Studies (RIBS) Intensive Network monitoring of the Great Chazy River in Champlain was also conducted in 1993-94. Primary water quality indicators (macroinvertebrates, water chemistry) at the site found generally favorable conditions. Secondary indicators found elevated levels of mercury in macroinvertebrate tissue. (DEC/DOW, BWAR/RIBS, April 1996)

#### Source Assessment

The watershed includes one of the most intensive agricultural areas of the state and includes a number of medium to large CAFOs. Cropland erosion results in increased silt/sediment loads to the stream. Extensive manure spreading on cropland increases nutrient loads and is also a source of bacterial contamination. Failing and/or inadequate septic systems serving homes along the stream and throughout the watershed may also be a source of nutrients and pathogens. (DEC/DOW, Region 5 and Clinton County WQCC, 2009)

#### Water Quality Management

The DEC regional staff is working with CAFOs to eliminate impacts from agricultural nonpoint source runoff. Local agencies have also been working to address the nonpoint source impacts in the watershed through the use of vegetated stream buffers and efforts to keep cattle out of the streams. Buffers of 35 feet or more have been planted along 3 miles of the river between Mooers and Champlain. Implementation of a flood plain easement program to further manage nonpoint sources has also been proposed, and is awaiting funding. (Clinton County SWCD, August 2009)

#### Segment Description

This segment includes the portion of the stream from the mouth to the waterworks dam in Champlain. The waters of this portion of the stream are Class C. Tribs to this reach/segment are listed separately.

# Great Chazy River, Lower, Main Stem ( 1002-0001)

Impaired Seg

## Waterbody Location Information

Revised: 04/11/2001

**Water Index No:** C- 3 (portion 2)      **Drain Basin:** Lake Champlain  
**Hydro Unit Code:** 02010006/090      **Str Class:** A      Great Chazy/Saranac  
**Waterbody Type:** River (Low Flow)      **Reg/County:** 5/Clinton Co. (10)  
**Waterbody Size:** 24.5 Miles      **Quad Map:** MOOERS (B-26-2) ...  
**Seg Description:** river from Champlain waterworks dam to North Branch

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
WATER SUPPLY	Impaired	Known
Habitat/Hydrology	Stressed	Possible

### Type of Pollutant(s)

Known: SILT/SEDIMENT, Aesthetics (color)  
Suspected: Nutrients  
Possible: Pathogens

### Source(s) of Pollutant(s)

Known: - - -  
Suspected: AGRICULTURE, STREAMBANK EROSION, Deicing (stor/appl)  
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:** DOW/Reg5      **Resolution Potential:** Medium  
**TMDL/303d Status:** 1 (Individual Waterbody Impairment Requiring a TMDL)

## Further Details

### Overview

The drinking water supply use of this portion of the Great Chazy is impaired by excessive silt and sedimentation. The Village of Champlain abandoned this surface water source in 1989 due to poor aesthetics (color) and the need to heavily chlorinate the finished surface water. Wells are now supplying water to the village.

### Water Quality Sampling

NYSDEC Rotating Integrated Basin Studies (RIBS) Intensive Network monitoring of Great Chazy River in Champlain, Clinton County, (at Route 9) was conducted in 2003 and 2004. Intensive Network sampling typically includes macroinvertebrate community analysis, water column chemistry, sediment and invertebrate tissues analysis and toxicity evaluation. Biological (macroinvertebrate) sampling results revealed slightly to non-impacted conditions, indicating good water quality. Water column sampling found lead to be a parameter of concern, exceeding its assessment criteria in 2 of 10 samples. However, the median lead concentration was less than one-tenth of the criteria. Macroinvertebrates collected at this site and chemically analyzed for selected metals and PAHs found chromium to be present at a concentration above the established guidance value. Sediment screening for acute toxicity indicated possible toxicity, but analysis of sediments found no contaminants above the threshold effects concentration. Based on sediment quality guidelines developed for freshwater

ecosystems, overall sediment quality is not likely to result in toxicity to sediment-dwelling organisms. Toxicity testing of the water column also showed no significant mortality or reproductive impacts. Based on the consensus of these established assessment methods, overall water quality at this site shows that in spite of some concerns that should continue to be monitored, aquatic life is considered to be fully supported in the stream, and there are no other apparent water quality impacts to recreational uses. (DEC/DOW, BWAM/RIBS, May 2009).

Previous biological (macroinvertebrate) sampling of the Great Chazy River in Champlain and in Mooers indicated non-impacted water quality. Though primarily bedrock, smaller areas of rubble revealed diverse populations of mayflies, stoneflies and caddisflies. (DEC/DOW, BWAR/SBU, April 1999)

NYSDEC Rotating Intensive Basin Studies (RIBS) Intensive Network monitoring of the Great Chazy River in Champlain was also conducted in 1993-94. Primary water quality indicators (macroinvertebrates, water chemistry) at the site found generally favorable conditions. Secondary indicators found elevated levels of mercury in macroinvertebrate tissue. (DEC/DOW, BWAR/RIBS, April 1996)

#### Water Supply Assessment

The use of the river as a water supply pre-dates its Class A designation. Though previously used as a water supply, high sediment bed load and stream turbidity - the result of agricultural land use and, to some degree, natural geology and hydrology - suggest the use of the stream as a public water supply might never have been more than marginal. (DEC/DOW, BWAM/WQAS and Village of Champlain Water Supply, August 2009)

#### Source Assessment

The watershed includes one of the most intensive agricultural areas of the state and includes a number of medium to large CAFOs. Cropland erosion results in increased silt/sediment loads to the stream. Extensive manure spreading on cropland increases nutrient loads and is also a source of bacterial contamination. The regional staff is working with these operators to eliminate impacts from nonpoint source runoff. Failing and/or inadequate septic systems serving homes along the stream and throughout the watershed may also be a source of nutrients and pathogens. (DEC/DOW, Region 5 and Clinton County WQCC, 2009)

#### Water Quality Management

Local agencies have been working to address the nonpoint source impacts in the watershed through the use of vegetated stream buffers and efforts to keep cattle out of the streams. Buffers of 35 feet or more have been planted along 3 miles of the river between Mooers and Champlain. Implementation of a flood plain easement program to further manage nonpoint sources has also been proposed, and is awaiting funding. (Clinton County SWCD, August 2009)

#### Segment Description

This segment includes the portion of the stream from the waterworks dam in Champlain to North Branch Great Chazy River (-25) in Mooers Forks. The waters of this portion of the stream are Class A. Tribes to this reach/segment are listed separately.

# Great Chazy River, Middle, and tribs ( 1002-0017)

NoKnownImpct

## Waterbody Location Information

Revised: 12/01/2000

**Water Index No:** C- 3 (portion 3)      **Drain Basin:** Lake Champlain  
**Hydro Unit Code:** 02010006/080      **Str Class:** C\*      **Great Chazy/Saranac**  
**Waterbody Type:** River      **Reg/County:** 5/Clinton Co. (10)  
**Waterbody Size:** 59.3 Miles      **Quad Map:** ALTONA (B-26-1)  
**Seg Description:** stream and tribs from North Branch to Miner Lake

## 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/survey of Great Chazy River in Altona (at Route 191) was conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated non-impacted conditions. The sample was 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. These results are consistent with previous sampling in Altona which also indicated non-impacted water quality. Though primarily bedrock, smaller areas of rubble revealed diverse populations of mayflies, stoneflies and caddisflies. Aquatic life community is fully supported. (DEC/DOW, BWAR/SBU, January 2009)

### Segment Description

This segment includes the portion of the stream and all tribs from North Fork Great Chazy River (-25) in Mooers Forks to Miner Lake. The waters of this portion of the stream are Class C from the North Fork to Bradford Brook (-29) and Class D for the remainder of the reach. Tribs to this reach/segment, including Witherspoon Brook (-27), Sample Brook (-27-1), and Bradford Brook (-29) are Class C and D. North Branch (-25) is listed separately.

# Chazy Lake ( 1002-0009)

NoKnownImpct

## Waterbody Location Information

Revised: 04/28/2009

**Water Index No:** C- 3 (portion 6)/P20  
**Hydro Unit Code:** 02010006/080      **Str Class:** AA(T)  
**Waterbody Type:** Lake (Unknown Trophic)      **Reg/County:** 5/Canton Co. (10)  
**Waterbody Size:** 1827.8 Acres      **Quad Map:** ELLENBURG MTN. (B-25-3)  
**Seg Description:** entire lake

## 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

Regional DEC staff reports the lake to have excellent water clarity and a productive cold water fishery. Lake sampling during a 1999 Lake Classification and Inventory (LCI) evaluation found some low dissolved oxygen in deeper waters, however these conditions do not impact the fishery and are thought to represent natural lake conditions. (DEC/DOW, Region 5 and BWM/Lake Services, December 2000).

### Previous Assessment

Although there are no known water quality impacts in Chazy Lake, this segment was previously characterized as Threatened due to its drinking water supply classification. The stream had been, but is no longer used as drinking water supply for Dannamora. Because the water has been discontinued as a public water supply, it is no longer considered to be threatened and is now assessed as having no known impacts. (DEC/DOW, BWAM, April 2009)

# Corbeau Creek and tribs ( 1002-0012)

# MinorImpacts

## Waterbody Location Information

Revised: 12/01/2000

**Water Index No:** C- 3- 2  
**Hydro Unit Code:** 02010006/090      **Str Class:** D  
**Waterbody Type:** River  
**Waterbody Size:** 62.2 Miles  
**Seg Description:** entire stream and tribs

**Drain Basin:** Lake Champlain  
Great Chazy/Saranac  
**Reg/County:** 5/Clinton Co. (10)  
**Quad Map:** ROUSES POINT (B-27-2) ...

## 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: SILT/SEDIMENT, Thermal Changes

### Source(s) of Pollutant(s)

Known: - - -  
Suspected: AGRICULTURE  
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

### Overview

Aquatic life support in Corbeau Creek is known to experience minor impacts/threats, likely the result of nutrient enrichment from agricultural and other nonpoint sources. Silt/sediment loads may also contribute to impacts in the stream. There is considerable agricultural activity in the watershed.

### Water Quality Sampling

NYSDEC Rotating Integrated Basin Studies (RIBS) Intensive Network monitoring of Corbeau Creek in Coopersville, Clinton County, (at Stetson Road) was conducted in 2003 and 2004. Intensive Network sampling typically includes macroinvertebrate community analysis, water column chemistry, sediment and invertebrate tissues analysis and toxicity evaluation. Biological (macroinvertebrate) sampling results revealed slightly impacted conditions, indicating satisfactory to good water quality. Nutrient biotic index and impact source determination indicates some enrichment in the stream and fauna that suggests nonpoint source impacts. Water column sampling found no parameters of concern. Macroinvertebrates collected at this site and chemically analyzed for selected metals and PAHs found chromium to be present at a concentration above the established guidance value. Sediment screening for acute toxicity indicated possible toxicity, but analysis of sediments found no contaminants above the threshold effects concentration. Based on sediment quality guidelines developed for freshwater ecosystems, overall sediment quality is not likely to result in toxicity to sediment-dwelling organisms. Chronic toxicity testing

using water from this location showed no significant mortality or reproductive effects on the test organism. Based on the consensus of these established assessment methods, overall water quality at this site shows that in spite of some concerns that should continue to be monitored, aquatic life is considered to be fully supported in the stream, and there are no other apparent water quality impacts to recreational uses. (DEC/DOW, BWAM/RIBS, May 2009).

Biological (macroinvertebrate) sampling of the Corbeau Creek in Coopersville also indicated slightly impacted water quality in 1998. The fauna was dominated by filter-feeding caddisflies, and nutrient enrichment was indicated. Possible contributors to the impact include extensive agricultural activities in the watershed. An upstream wetland may impact the community as well. (DEC/DOW, BWAR/SBU, April 1999)

#### Segment Description

This segment includes the entire stream and all tribs. The waters of the stream are Class D. Tribs to this reach/segment are also Class D.

# North Branch, Lower, and minor tribs ( 1002-0013)

NoKnownImpct

## Waterbody Location Information

Revised: 04/21/2009

**Water Index No:** C- 3-25  
**Hydro Unit Code:** 02060001/080      **Str Class:** C(T)  
**Waterbody Type:** River  
**Waterbody Size:** 76.1 Miles  
**Seg Description:** stream and selected tribs from mouth to Ellenburg Depot

**Drain Basin:** Lake Champlain  
**Reg/County:** 5/Clinton Co. (10)  
**Quad Map:** ALTONA (B-26-1) ...

## 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 North Branch Great Chazy River in Moers Forks was conducted as part of the RIBS biological screening effort in 1998. Sampling results indicated non-impacted conditions. The samples were dominated by mayflies and caddisflies and met field screening criteria. Aquatic life community is fully supported. More recent sampling has not been conducted, and conditions in the stream should be verified. (DEC/DOW, BWAM/SBU, January 2009)

A biological (macroinvertebrate) assessment of Park Creek in Irona (at Palmer Hill Road) was conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated non-impacted conditions. The sample was dominated by clean-water species and conditions reflected a natural community with minimal, if any, human impacts. Aquatic life community is clearly fully supported. (DEC/DOW, BWAM/SBU, January 2009)

### Segment Description

This segment includes the portion of the stream and selected/smaller tribs from the mouth to Lake Roxanne (P6a). The waters of this portion of the stream are Class C(T). Tribs to this reach/segment, including Park Brook (-1), Deer Pond Brook (-4) and Brandy Brook (-8) are Class C(T) and D. Graves Brook (-5) and Upper North Branch are listed as separate segments.

# North Branch, Upper, and tribs ( 1002-0014)

NoKnownImpct

## Waterbody Location Information

Revised: 12/01/2000

**Water Index No:** C- 3-25  
**Hydro Unit Code:** 02010006/080      **Str Class:** C(T)  
**Waterbody Type:** River  
**Waterbody Size:** 93.7 Miles  
**Seg Description:** stream and tribs above Ellenburg Depot

**Drain Basin:** Lake Champlain  
Great Chazy/Saranac  
**Reg/County:** 5/Canton Co. (10)  
**Quad Map:** ELLENBURG DEPOT (B-25-2) ...

## 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 North Branch Great Chazy River in Ellenburg (at Route 54) was conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated slightly impacted conditions. The community is 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. These results are consistent with a field assessment conducted at this site 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)

### Segment Description

This segment includes the portion of the stream and all tribs above Lake Roxanne (P6a). The waters of this portion of the stream are Class C(T). Tribs to this reach/segment are Class C(T) and D. Lower North Branch is listed separately.

# Graves Brook and tribs ( 1002-0016)

NoKnownImpct

## Waterbody Location Information

Revised: 04/21/2009

**Water Index No:** C- 3-25- 5  
**Hydro Unit Code:** 02010006/080      **Str Class:** C(T)  
**Waterbody Type:** River  
**Waterbody Size:** 43.3 Miles  
**Seg Description:** entire stream and tribs

**Drain Basin:** Lake Champlain  
Great Chazy/Saranac  
**Reg/County:** 5/Clinton Co. (10)  
**Quad Map:** ELLENBURG CENTER (B-25-4) ...

## 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 Graves Brook in Forest (at Route 190) was conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated slightly impacted conditions. The community is 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 very little enrichment in the stream and fauna that is most similar to natural communities, though some nonpoint sources were also indicated. 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)

### Segment Description

This segment includes the entire stream and all tribs. The waters of the stream are Class D from the mouth to a point 0.5 miles below unnamed trib (-2) and Class C(T) for the remainder of the reach. Tribs to this reach/segment are also Class C(T) and D.

# Lake Roxanne ( 1002-0024)

NoKnownImpct

## Waterbody Location Information

Revised: 02/06/2009

<b>Water Index No:</b> C- 3-25- P6a	<b>Drain Basin:</b> Lake Champlain	
<b>Hydro Unit Code:</b> 02010006/080	<b>Str Class:</b> C	Great Chazy/Saranac
<b>Waterbody Type:</b> Lake	<b>Reg/County:</b> 5/Clinton Co. (10)	
<b>Waterbody Size:</b> 198.7 Acres	<b>Quad Map:</b> ELLENBURG DEPOT (B-25-2)	
<b>Seg Description:</b> entire lake		

## 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

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

## Further Details

### Water Quality Sampling

Monitoring of Lake Roxanne was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Segment Description

This segment includes the total area of Lake Roxanne (P6a).

# Stillwater Brook and tribs ( 1002-0020)

NoKnownImpct

## Waterbody Location Information

Revised: 04/21/2009

**Water Index No:** C- 3-35  
**Hydro Unit Code:** 02010006/080      **Str Class:** C(T)  
**Waterbody Type:** River  
**Waterbody Size:** 33.9 Miles  
**Seg Description:** entire stream and tribs

**Drain Basin:** Lake Champlain  
Great Chazy/Saranac  
**Reg/County:** 5/Clinton Co. (10)  
**Quad Map:** JERICO (B-26-4)

## 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 Stillwater Brook in Purdy Mills (at Rand Hill Road) was conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated non-impacted conditions. The sample was 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)

### Segment Description

This segment includes the entire stream and all tribs. The waters of the stream are Class C(T). Tribs to this reach/segment are also Class C(T).

# Little Chazy River, Lower, and tribs ( 1002-0003)

MinorImpacts

## Waterbody Location Information

Revised: 04/21/2009

**Water Index No:** C- 4  
**Hydro Unit Code:** 02010006/070      **Str Class:** C  
**Waterbody Type:** River (Low Flow)      **Reg/County:** 5/Clinton Co. (10)  
**Waterbody Size:** 55.3 Miles      **Quad Map:** CHAMPLAIN (B-27-1)  
**Seg Description:** stream and tribs from mouth to West Chazy

## 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: NUTRIENTS (phosphorus)  
Suspected: Silt/Sediment  
Possible: Pathogens, Thermal Changes

### Source(s) of Pollutant(s)

Known: AGRICULTURE  
Suspected: Streambank Erosion  
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/WQCC

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

**Resolution Potential:** Medium

## Further Details

### Overview

Aquatic life support in this portion of Little Chazy River are known to experience minor impacts/threats due to nutrient enrichment from agricultural and other nonpoint sources. Silt/sediment loads may also contribute to impacts in the stream. Streambank erosion is also a concern. There is considerable agricultural activity in the watershed.

### Water Quality Sampling

A biological (macroinvertebrate) assessment of Little Chazy River in Chazy (at Stetson Road) was conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated slightly impacted conditions. Some replacement of sensitive ubiquitous species by more tolerant species was noted although the sample included a balanced distribution of all expected species. Aquatic life is considered 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 some stress to aquatic life. Impact source determination found fauna that is most similar to nonpoint source influenced communities. Similar results were found during sampling in 1998. (DEC/DOW, BWAM/SBU, January 2009)

### Previous Sampling

The stream was sampled at Stetson Road in the hamlet of Chazy during 1993-1994 RIBS program in Lake Champlain Basin.

Water quality at that time was revealed to be better than is indicated by the more recent sampling. (DEC/DOW, BWAR/RIBS, April 1996)

#### Segment Description

Segment includes the portion of the river (which is Class C) and tribs to this portion of the river, including Tracey Brook (-4). All tribs are Class D (December 2000). This segment includes the portion of the stream and all tribs from the mouth to/including unnamed trib (-6) near West Chazy. The waters of this portion of the stream are Class C. Tribs to this reach/segment, including Tracey Brook (-4), are Class D. Upper Little Chazy River is listed separately.

# Little Chazy River, Upper, and tribs ( 1002-0008)

NoKnownImpct

## Waterbody Location Information

Revised: 06/10/2009

**Water Index No:** C- 4  
**Hydro Unit Code:** 02010006/070      **Str Class:** C(T)  
**Waterbody Type:** River (Low Flow)  
**Waterbody Size:** 63.2 Miles  
**Seg Description:** stream and tribs above West Chazy

**Drain Basin:** Lake Champlain  
Great Chazy/Saranac  
**Reg/County:** 5/Clinton Co. (10)  
**Quad Map:** WEST CHAZY (B-26-3)

## 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

NYSDEC Rotating Integrated Basin Studies (RIBS) Intensive Network monitoring of Little Chazy River in Chazy, Clinton County, (at West Church Street) was conducted in 2003 and 2004. Intensive Network sampling typically includes macroinvertebrate community analysis, water column chemistry, sediment and invertebrate tissues analysis and toxicity evaluation. Biological (macroinvertebrate) sampling results revealed slightly to non-impacted conditions, indicating good water quality. Water column sampling found no parameters of concern. Macroinvertebrates collected at this site and chemically analyzed for selected metals and PAHs found chromium and titanium to be present at a concentration above the established guidance value. Sediment screening for acute toxicity indicated possible toxicity, and analysis of sediments found elevated concentrations of several PAHs. Based on sediment quality guidelines developed for freshwater ecosystems, overall sediment quality is not likely to result in toxicity to sediment-dwelling organisms. Chronic toxicity testing using water from this location showed some reproductive effects on the test organism, but not reaching the level of biological significance. Based on the consensus of these established assessment methods, overall water quality at this site shows that in spite of some concerns that should continue to be monitored, aquatic life is considered to be fully supported in the stream, and there are no other apparent water quality impacts to recreational uses. (DEC/DOW, BWAM/RIBS, May 2009).

A biological (macroinvertebrate) assessment of Farrell Brook, a trib of the Little Chazy River, in West Chazy (at O'Neil Road)

was conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated slightly impacted conditions. The community is 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, but with some indication of nonpoint sources as well. 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)

#### Segment Description

This segment includes the portion of the stream and all tribs above unnamed trib (-6) near West Chazy. The waters of this portion of the stream are Class C(T). Tribs to this reach/segment, including Farrell Brook (-7), Robinson Brook (-13) and Cold Brook (-14), are Class D. Lower Little Chazy River is listed separately.

# Saranac River, Lower, Main Stem ( 1003-0049)

NoKnownImpct

## Waterbody Location Information

Revised: 12/05/2000

**Water Index No:** C- 15 (portion 1)  
**Hydro Unit Code:** 02010006/040      **Str Class:** C(T)  
**Waterbody Type:** River  
**Waterbody Size:** 15.2 Miles  
**Seg Description:** river from mouth the Woods Mills

**Drain Basin:** Lake Champlain  
Great Chazy/Saranac  
**Reg/County:** 5/Clinton Co. (10)  
**Quad Map:** PLATTSBURGH (C-27-1) ...

## 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

NYSDEC Rotating Integrated Basin Studies (RIBS) Intensive Network monitoring of Saranac River in Plattsburgh, Clinton County, (at Saranac Street) was conducted in 2003 and 2004. Intensive Network sampling typically includes macroinvertebrate community analysis, water column chemistry, sediment and invertebrate tissues analysis and toxicity evaluation. Biological (macroinvertebrate) sampling results revealed slightly to non-impacted conditions, indicating good water quality. Water column sampling found lead to be a parameter of concern, exceeding its assessment criteria in 3 of 9 samples. However, the median lead concentration was significantly below criteria. One of 6 pH results also exceeded the upper limit for a parameter of concern. Macroinvertebrates collected at this site and chemically analyzed for selected metals and PAHs found no contaminants to be present at a concentration above the established guidance value. Sediment screening for acute toxicity indicated possible toxicity, but analysis of sediments found no contaminants above the threshold effects concentration. Based on sediment quality guidelines developed for freshwater ecosystems, overall sediment quality is not likely to result in toxicity to sediment-dwelling organisms. Toxicity testing of the water column also showed no significant mortality or reproductive impacts. Based on the consensus of these established assessment methods, overall water quality at this site shows that in spite of some concerns that should continue to be monitored, aquatic life is considered to be fully supported in the stream, and there are no other apparent water quality impacts to recreational uses. (DEC/DOW, BWAM/RIBS, May 2009).

Biological (macroinvertebrate) sampling conducted in 1998 and 1999 in Plattsburgh (and other locations along the river) resulted in an assessment of non-impacted water quality. The 1999 sampling yielded an assessment of slightly impacted, although Impact Source Determination showed closest affinities to natural communities. (DEC/DOW, BWAR/SBU, January 2000)

A biological (macroinvertebrate) survey of the Saranac River at multiple sites between Plattsburgh and Saranac Lake was conducted in 1993. Sampling results indicated non-impacted invertebrate fauna and excellent water quality conditions between Plattsburgh and Bloomingdale. The upstream sites appeared to be impacted by lake effects and sluggish currents, but water quality problems were not indicated. (Saranac River Bioassessment Report, Bode et al, DEC/DOW, BWAR/SBU, January 1994)

#### Segment Description

This segment includes the portion of the stream from the mouth to the Mill C Pond dam in Woods Mills. The waters of this portion of the stream are Class C,C(T). Tribs to this reach/segment and other portions of Saranac River are listed separately.

# Saranac River, Lower, Main Stem ( 1003-0001)

NoKnownImpct

## Waterbody Location Information

Revised: 04/21/2009

**Water Index No:** C- 15 (portion 2)      **Drain Basin:** Lake Champlain  
**Hydro Unit Code:** 02010006/030      **Str Class:** A      **Great Chazy/Saranac**  
**Waterbody Type:** River (High Flow)      **Reg/County:** 5/Canton Co. (10)  
**Waterbody Size:** 5.1 Miles      **Quad Map:** DANNEMORA (C-26-1)  
**Seg Description:** river from Woods Mills to Plattsburgh Town Line

## 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 Saranac River Just above this reach in Saranac (at Hardscrabble Road) was conducted in 2003 as part of the RIBS biological screening effort. Sampling results indicated non-impacted conditions. The sample was dominated by clean-water species and conditions reflected a natural community with minimal, if any, human impacts. These results are consistent with sampling conducted in 1998 at multiple sites along the Saranac River that also revealed non-impacted conditions. NYSDEC Rotating Intensive Basin Studies (RIBS) Intensive Network monitoring of the river at the Saranac site was also conducted in 1993-94. The sites were assessed as having good water quality at that time. Aquatic life community is clearly fully supported. Though this sampling point is just above the described segment, it is considered representative of water quality in the upper reach. This segment is listed as being evaluated rather than monitored. (DEC/DOW, BWAM/SBU, January 2009)

### Previous Assessments

An impairment to the drinking water supply (the Town of Plattsburgh uses the river as an emergency source) and other uses of this waterbody had been previously listed due to failing/inadequate on-site septic systems and direct discharge of an unpermitted collection system in Cadyville. However the new Cadyville WWTP is now on-line and there is no further evidence of contamination. (DEC/DOW, Region 5, March 2000)

### Segment Description

Segment includes the entire Class A reach of the river dam and Mill C Pond to trib -10. This segment includes the portion of the stream from the Mill C Pond dam in Woods Mills to unnamed trib (-10) near Dannamora. The waters of this portion of the stream are Class A. Tribs to this reach/segment and other portions of Saranac River are listed separately.

# Saranac River, Middle, Main Stem ( 1003-0021)

NoKnownImpct

## Waterbody Location Information

Revised: 07/21/2009

**Water Index No:** C- 15 (portion 3)      **Drain Basin:** Lake Champlain  
**Hydro Unit Code:** 02010006/030      **Str Class:** C(T)      **Great Chazy/Saranac**  
**Waterbody Type:** River (Med. Flow)      **Reg/County:** 5/Clinton Co. (10)  
**Waterbody Size:** 16.0 Miles      **Quad Map:** REDFORD (C-25-3) ...  
**Seg Description:** river from near Plattsburgh Town Line to Clayburg

## 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 Saranac River in Saranac (at Hardscrabble Road) was conducted in 2003 as part of the RIBS biological screening effort. Sampling results indicated non-impacted conditions. The sample was dominated by clean-water species and conditions reflected a natural community with minimal, if any, human impacts. These results are consistent with sampling conducted in 1998 at multiple sites along the Saranac River that also revealed non-impacted conditions. NYSDEC Rotating Intensive Basin Studies (RIBS) Intensive Network monitoring of the river at the Saranac site was also conducted in 1993-94. The sites were assessed as having good water quality at that time. Aquatic life community is clearly fully supported. (DEC/DOW, BWAM/SBU, January 2009)

### 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)

Concerns were also raised in previous (2000) assessment efforts regarding the impact on aquatic habitat in a very short portion of this segment of the river where the natural channel is dewatered throughout most of the year. The High Falls Hydroelectric project had been bypassing water around this stretch of the river. The situation has since been resolved through the hydro relicensing procedures. The hydro facility operates on run-of-river mode and includes minimum flow bypass. (DEC/DOW, BWAM/WQAS, June 2009)

#### Segment Description

This segment includes the portion of the stream from unnamed trib (-10) near Dannamora (halfway between Elsinore and Picketts Corners) to North Branch Saranac River (-22) in Clayburg. The waters of this portion of the stream are Class C,C(T). Tribs to this reach/segment and other portions of Saranac River are listed separately.

# Minor Tribs to Saranac River, Lower ( 1003-0052)

NoKnownImpct

## Waterbody Location Information

Revised: 04/21/2009

<b>Water Index No:</b>	C- 15- 1 thru 10	<b>Drain Basin:</b>	Lake Champlain
<b>Hydro Unit Code:</b>	02010006/	<b>Str Class:</b>	D
<b>Waterbody Type:</b>	River	<b>Reg/County:</b>	5/Canton Co. (10)
<b>Waterbody Size:</b>	25.3 Miles	<b>Quad Map:</b>	PLATTSBURGH (C-27-1)
<b>Seg Description:</b>	total length of selected tribs, fr mouth to Woods Mills		

## 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

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

## Further Details

### Water Quality Sampling

A biological (macroinvertebrate) assessment of Sandburn Brook in Lawless Corners (at Dirt Road off Akey Road) was conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated non-impacted conditions. The sample was 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. Though this sampling point is just above the portion of the stream within this segment and the trib 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. This segment is listed as being evaluated rather than monitored. (DEC/DOW, BWAM/SBU, January 2009)

### Segment Description

This segment includes the total length of selected/smaller tribs to the Lower Saranac River from its mouth to/including unnamed trib (-10) near Dannamora. Tribs within this segment, including Lower Mead/Sandburn Brook (-5), Kelly Brook (-7) and Canfield Brook (-8), are Class D. Upper Meads/Sandburn Brook (-5) and other portions of Saranac River are listed separately.

# Mead/Sandburn Brooks, Upper, and tribs ( 1003-0051)

NoKnownImpct

## Waterbody Location Information

Revised: 04/21/2009

**Water Index No:** C- 15- 5, 5-3  
**Hydro Unit Code:** 02010006/040      **Str Class:** A  
**Waterbody Type:** River  
**Waterbody Size:** 32.8 Miles  
**Seg Description:** stream and tribs above Mead/Patterson Reservoirs

**Drain Basin:** Lake Champlain  
Great Chazy/Saranac  
**Reg/County:** 5/Clinton Co. (10)  
**Quad Map:** MORRISONVILLE (C-26-2)

## 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 Sandburn Brook in Lawless Corners (at Dirt Road off Akey Road) was conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated non-impacted conditions. The sample was 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)

### Segment Description

This segment includes the portion of both streams and all tribs above the City of Plattsburgh water supply dams. The waters of this portion of the stream are Class A. Tribs to this reach/segment are also Class A. Lower Mead/Sandburn Brooks are listed separately, with Minor Tribs to the Lower Saranac River.

# Mead/Patterson Reservoirs ( 1003-0114)

NoKnownImpct

## Waterbody Location Information

Revised: 06/01/2009

**Water Index No:** C- 15- 5..P27,P30  
**Hydro Unit Code:** 02010006/040      **Str Class:** A  
**Waterbody Type:** Lake(R)  
**Waterbody Size:** 110.4 Acres  
**Seg Description:** total area of both lakes

**Drain Basin:** Lake Champlain  
Great Chazy/Saranac  
**Reg/County:** 5/Canton Co. (10)  
**Quad Map:** MORRISONVILLE (C-26-2) ...

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

### Type of Pollutant(s)

Known: ---  
Suspected: ---  
Possible: OTHER POLLUTANTS

### Source(s) of Pollutant(s)

Known: ---  
Suspected: ---  
Possible: OTHER SOURCE

## Resolution/Management Information

**Issue Resolvability:** 3 (Strategy Being Implemented)  
**Verification Status:** 5 (Management Strategy has been Developed)  
**Lead Agency/Office:** DEC/Reg5  
**TMDL/303d Status:** n/a

**Resolution Potential:** High

## Further Details

### Source (Drinking) Water Assessment

A source water assessment of Mead Reservoir found an elevated 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 City of Plattsburgh. (NYSDOH, Source Water Assessment Program, 2005)

Although there are no specific water quality impacts, the segment is considered a highly valued water resource due to its drinking water supply classification and the need to provide additional protection, which may result in an assessment of threatened (possible) for drinking water use. In spite of this possible threat, it is appropriate to consider the waterbody to have No Known Impacts. (DEC/DOW, BWAM/WQAS, May 2009)

### Segment Description

This segment includes the total area of both Mead Reservoir (P27) and Patterson Reservoir (P30).

# Behan Brook, Upper, and tribs ( 1003-0116)

NoKnownImpct

## Waterbody Location Information

Revised: 04/21/2009

**Water Index No:** C- 15-12-3  
**Hydro Unit Code:** 02010006/030      **Str Class:** AA  
**Waterbody Type:** River  
**Waterbody Size:** 12.8 Miles  
**Seg Description:** stream and tribs above Dannemora Water Supply dam

**Drain Basin:** Lake Champlain  
Great Chazy/Saranac  
**Reg/County:** 5/Clinton Co. (10)  
**Quad Map:** DANNEMORA (C-26-1)

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

**Resolution Potential:** n/a

## Further Details

### Water Quality Sampling

A biological (macroinvertebrate) assessment of Behan Brook in Saranac (at Picketts Corner Road) was conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated slightly impacted conditions. The community is slightly altered from natural conditions. Some sensitive species have been lost and the overall abundance of macroinvertebrates is slightly 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 very 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)

### Segment Description

This segment includes the portion of the stream and all tribs above the Village of Dannamora water supply dam. The waters of this portion of the stream are Class AA. Tribs to this reach/segment are also Class AA.

# True Brook and tribs ( 1003-0055)

NoKnownImpct

## Waterbody Location Information

Revised: 04/21/2009

**Water Index No:** C- 15-18  
**Hydro Unit Code:** 02010006/030      **Str Class:** C(T)  
**Waterbody Type:** River  
**Waterbody Size:** 55.4 Miles  
**Seg Description:** entire stream and tribs

**Drain Basin:** Lake Champlain  
Great Chazy/Saranac  
**Reg/County:** 5/Clinton Co. (10)  
**Quad Map:** DANNEMORA (C-26-1) ...

## 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

### Overview

Aquatic life support in True Brook is considered to be fully supporting. may be limited due to low pH, a result of atmospheric deposition (acid rain). Data indicating low pH due to atmospheric deposition (acid rain) for smaller ponds within this segment and is available but is more than 20 years old. More recent data on the actual stream suggests there is no impacts to aquatic life support. Previous assessments have noted that the Lake Champlain Chapter of Trout Unlimited also indicated no impairment to the fishery.

### Water Quality Sampling

A biological (macroinvertebrate) assessment of True Brook in Moffitsville (at True Brook Road) was conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated slightly impacted conditions. The community is slightly altered from natural conditions. Some sensitive species have been lost and a the overall abundance of macroinvertebrates is slightly 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 very 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)

Monitoring of small ponds in this segment by the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. Monitoring by ALSC revealed very low pH in Dow Pond (P34) and unnamed ponds (P36). (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

#### Water Quality Management

Efforts are underway on a national level to address problems caused by acid rain by reducing pollutant emissions, as required by the Clean Air Act. New York State (and other northeastern states) have taken legal action against USEPA to accelerate implementation of controls. Monitoring of these waters will continue, in order to assess changes in water quality resulting from implementation of the Clean Air Act. However, these changes are expected to occur only slowly over time.

#### Section 303(d) Listing

Dow Pond (P34) and unnamed pond (P36) are included on the NYS 2008 Section 303(d) List of Impaired Waters in Appendix A as a Smaller Lakes Impaired by Acid Rain. (DEC/DOW, BWAM, 2008)

#### Segment Description

This segment includes the entire stream and all tribs. The waters of the stream are Class C(T). Tribs to this reach/segment, including Smithkill Brook (-6) and Fall Brook (-7), are Class C(T) and D. The segment also includes smaller Dow Pond (P35) and unnamed ponds (P34, P36).

# Minor Lake Tribs to Middle Saranac River ( 1003-0113) NoKnownImpct

## Waterbody Location Information

Revised: 04/21/2009

**Water Index No:** C- 15-18,19..P 35 thru P 40  
**Hydro Unit Code:** 02010006/030      **Str Class:** C(T)  
**Waterbody Type:** Lake  
**Waterbody Size:** 65.5 Acres  
**Seg Description:** total area of selected lakes

**Drain Basin:** Lake Champlain  
Great Chazy/Saranac  
**Reg/County:** 5/Clinton Co. (10)  
**Quad Map:** REDFORD (C-25-3) ...

## 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

Monitoring of these lakes was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of significant impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Segment Description

This segment includes the total area of all selected/smaller lakes/ponds within the Middle Saranac watershed. Lakes within this segment, including Barnes Pond (P35), Mud Pond (P37), Ore Pond (P38), Whistle Pond (P39) and Mud Pond (P40) are primarily Class C(T).

# North Branch Saranac, Lower, minor tribs ( 1003-0038) NoKnownImpct

## Waterbody Location Information

Revised: 04/21/2009

**Water Index No:** C- 15-22  
**Hydro Unit Code:** 02010006/020      **Str Class:** C(T)  
**Waterbody Type:** River (Med. Flow)      **Reg/County:** 5/Franklin Co. (17)  
**Waterbody Size:** 61.1 Miles      **Quad Map:** ALDER BROOK (C-25-4) ...  
**Seg Description:** stream and selected tribs from mouth to Mud Lake

## 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 North Branch Saranac River in Clayburg (off Amell Road) was conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated non-impacted conditions. The sample was 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. Biological (macroinvertebrate) sampling of the North Branch in Riverview in 1998 also indicated non-impacted water quality. The sample passed the field screening criteria, and was not retained. This site was previously assessed as non-impacted in 1993 with a highly diverse community of intolerant macroinvertebrates. (DEC/DOW, BWAM/SBU, January 2009)

A biological assessment of Alder Brook, a trib to the North Branch, in Two Brooks (at Route 3) was also conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated non-impacted conditions. The sample was 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)

#### 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)

#### Segment Description

This segment includes the portion of the stream and selected/smaller tribs from the mouth to Lake Kushaqua. The waters of this portion of the stream are Class C(T). Tribs to this reach/segment, including Mud Pond Brook (-2), Alder Brook (-5), East Branch (-8), West Branch (-9), Lost Channel (-15) and Oregon Brook (-23) are also Class C(T). Cold Brook (-3) is listed separately.

# Mud Pond ( 1003-0115)

NoKnownImpct

## Waterbody Location Information

Revised: 10/05/2000

<b>Water Index No:</b>	C- 15-22- 2-P42	<b>Drain Basin:</b>	Lake Champlain
<b>Hydro Unit Code:</b>	02010006/020	<b>Str Class:</b>	C(T)
<b>Waterbody Type:</b>	Lake	<b>Reg/County:</b>	5/Clinton Co. (10)
<b>Waterbody Size:</b>	110.3 Acres	<b>Quad Map:</b>	ALDER BROOK (C-25-4)
<b>Seg Description:</b>	total area of both lakes		

## 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

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

## Further Details

### Water Quality Sampling

Monitoring of Mud Pond was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

# Loon Lake ( 1003-0060)

Need Verific

## Waterbody Location Information

Revised: 02/06/2009

**Water Index No:** C- 15-22-24-P48  
**Hydro Unit Code:** 02010006/020      **Str Class:** B(T)  
**Waterbody Type:** Lake (Unknown Trophic)  
**Waterbody Size:** 355.4 Acres  
**Seg Description:** entire lake

**Drain Basin:** Lake Champlain  
Great Chazy/Saranac  
**Reg/County:** 5/Franklin Co. (17)  
**Quad Map:** LOON LAKE (C-24-3)

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

### Type of Pollutant(s)

Known: - - -  
Suspected: ALGAL/WEED GROWTH (algal blooms), Acid/Base (pH)  
Possible: Nutrients

### Source(s) of Pollutant(s)

Known: - - -  
Suspected: Atmosph. Deposition  
Possible: UNKNOWN SOURCE

## Resolution/Management Information

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

**Resolution Potential:** Medium

## Further Details

### Overview

Recreational uses in Loon Lake may experience minor impacts due to nutrient loading and algal blooms due to nonpoint sources. Prolonged algae blooms have been noted in the lake and tributary ponds (Drew/Inman Ponds) during the summer months. Aquatic life support in this segment may also be limited due to low pH, a result of atmospheric deposition (acid rain). However available data indicating such impacts is limited to a small pond within this segment and is more than 20 years old. Until more recent data on the larger waterbodies is available, this segment will be categorized as needing verification of impacts.

### Water Quality Sampling

Clear Pond was included in the 1991 USEPA Environmental Monitoring and Assessment Program (EMAP) effort; results of this study found no evidence of water quality impairment. (DEC/DOW, BWM/Lake Services, December 2000)

Monitoring of Loon Lake and many smaller ponds within this segment was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed

no indication of impacts to aquatic life support or recreational use in Loon Lake at the time. These historical surveys of small ponds within this segment indicate that low pH due to acid deposition is limiting the fishery. Monitoring by ALSC (1985) revealed very low pH in Mountain Pond (P46) and Line Pond (P46a). (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

#### Water Quality Management

Efforts are underway on a national level to address problems caused by acid rain by reducing pollutant emissions, as required by the Clean Air Act. New York State (and other northeastern states) have taken legal action against USEPA to accelerate implementation of controls. Monitoring of these waters will continue, in order to assess changes in water quality resulting from implementation of the Clean Air Act. However, these changes are expected to occur only slowly over time.

#### Section 303(d) Listing

Mountain Pond (P46), Line Pond (P46a) and Bass Lake (P51) are included on the NYS 2008 Section 303(d) List of Impaired Waters in Appendix A as a Smaller Lakes Impaired by Acid Rain. (DEC/DOW, BWAM, 2008)

#### Segment Description

This segment includes the total area of Loon Lake (P48), as well as the smaller Mountain Pond (P46), Line Pond (P46a), Drew/Inman Ponds (P49, P50) and Bass Lake (P51). Loon Lake is Class B(T), while these smaller lakes/ponds are Class C(T).

# Mud Lake ( 1003-0061)

NoKnownImpct

## Waterbody Location Information

Revised: 09/26/2000

**Water Index No:** C- 15-22..P52  
**Hydro Unit Code:** 02010006/020      **Str Class:** C(T)  
**Waterbody Type:** Lake (Unknown Trophic)  
**Waterbody Size:** 14.9 Acres  
**Seg Description:** entire lake

**Drain Basin:** Lake Champlain  
Great Chazy/Saranac  
**Reg/County:** 5/Franklin Co. (17)  
**Quad Map:** LOON LAKE (C-24-3)

## 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

Monitoring of Mud Lake was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Segment Description

This segment includes the total area of Mud Lake (P52), as well as the smaller unnamed ponds (P53, P54). All the waters of this segment are Class C(T).

# Lake Kushaqua ( 1003-0062)

NoKnownImpct

## Waterbody Location Information

Revised: 01/09/2001

<b>Water Index No:</b>	C- 15-22..P55	<b>Drain Basin:</b>	Lake Champlain
<b>Hydro Unit Code:</b>	02010006/020	<b>Str Class:</b>	C(T)
<b>Waterbody Type:</b>	Lake (Mesotrophic)	<b>Reg/County:</b>	5/Franklin Co. (17)
<b>Waterbody Size:</b>	379.5 Acres	<b>Quad Map:</b>	LOON LAKE (C-24-3)
<b>Seg Description:</b>	entire lake		

## 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

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

## Further Details

### Water Quality Sampling

Lake Kushaqua was included in the 1991 USEPA Environmental Monitoring and Assessment Program (EMAP) effort; results of this study found no evidence of water quality impairment. (DEC/DOW, BWM/Lake Services, December 2000)

Monitoring of Lake Kushaqua and the smaller Chubb Pond was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Segment Description

This segment includes the total area of Lake Kushaqua (P55), as well as the smaller Chub Pond (P56). All the waters of this segment are Class C(T).

# Buck Pond ( 1003-0063)

NoKnownImpct

## Waterbody Location Information

Revised: 02/06/2009

<b>Water Index No:</b>	C- 15-22..P61	<b>Drain Basin:</b>	Lake Champlain
<b>Hydro Unit Code:</b>	02010006/020	<b>Str Class:</b>	C(T)
<b>Waterbody Type:</b>	Lake (Unknown Trophic)	<b>Reg/County:</b>	5/Franklin Co. (17)
<b>Waterbody Size:</b>	129.4 Acres	<b>Quad Map:</b>	LOON LAKE (C-24-3)
<b>Seg Description:</b>	entire lake		

## 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

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

## Further Details

### Water Quality Sampling

Monitoring of Buck Pond was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Segment Description

This segment includes the total area of Buck Pond (P61). Buck Lake is Class C(T).

# Saranac River, Main Stem, Tefft Pond ( 1003-0112)

NoKnownImpct

## Waterbody Location Information

Revised: 07/20/2009

**Water Index No:** C- 15 (portion 3a)/P74a  
**Hydro Unit Code:** 02010006/030      **Str Class:** C(T)  
**Waterbody Type:** River (Med. Flow)      **Reg/County:** 5/Clinton Co. (10)  
**Waterbody Size:** 10.0 Miles      **Quad Map:** REDFORD (C-25-3)  
**Seg Description:** river from Clayburg to Union Falls Reservoir

## 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 Saranac River below this site in Saranac (at Hardscrabble Road) was conducted in 2003 as part of the RIBS biological screening effort. Sampling results indicated non-impacted conditions. The sample was dominated by clean-water species and conditions reflected a natural community with minimal, if any, human impacts. These results are consistent with sampling conducted in 1998 at multiple sites along the Saranac River that also revealed non-impacted conditions. NYSDEC Rotating Intensive Basin Studies (RIBS) Intensive Network monitoring of the river at the Saranac site was also conducted in 1993-94. The sites were assessed as having good water quality at that time. Aquatic life community is clearly fully supported. Though this sampling point is just below the described segment, it is considered representative of water quality in the upper reach. This segment is listed as being evaluated rather than monitored. (DEC/DOW, BWAM/SBU, January 2009)

### 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)

#### Segment Description

This segment includes the portion of the stream from North Branch Saranac River (-22) in Clayburg to Union Falls Reservoir. The waters of this portion of the stream are Class C(T). Tribes to this reach/segment and other portions of Saranac River are listed separately.

# Saranac River, Union Falls Reservoir ( 1003-0040)

Impaired Seg

## Waterbody Location Information

Revised: 04/22/2009

**Water Index No:** C- 15 (portion 4)/P74  
**Hydro Unit Code:** 02010006/030      **Str Class:** C(T)  
**Waterbody Type:** Lake(R) (Unknown Trophic)  
**Waterbody Size:** 1570.7 Acres  
**Seg Description:** entire reservoir

**Drain Basin:** Lake Champlain  
Great Chazy/Saranac  
**Reg/County:** 5/Canton Co. (10)  
**Quad Map:** WILMINGTON (D-25-A)

## 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: METALS (mercury)  
Suspected: ---  
Possible: ---

### Source(s) of Pollutant(s)

Known: ATMOSPHERIC DEPOSITION  
Suspected: ---  
Possible: ---

## Resolution/Management Information

**Issue Resolvability:** 3 (Strategy Being Implemented)  
**Verification Status:** 5 (Management Strategy has been Developed)  
**Lead Agency/Office:** ext/EPA  
**TMDL/303d Status:** 2b->4a?

**Resolution Potential:** Medium

## Further Details

### Overview

Fish consumption in Union Falls Reservoir is known to be impaired by health advisories that recommend restricting the consumption of fish from the lake. Mercury contamination from atmospheric deposition is the suspected source of the impairment.

### Fish Consumption

Fish consumption in Union Falls Flow/Reservoir is impaired due to a NYS DOH health advisory that recommends eating no more than one meal per month of northern pike and smallmouth bass because of elevated mercury levels. The source of mercury is considered to be atmospheric deposition, as there are not other apparent sources in the lake watershed. The advisory for this lake was first issued in 2006-07. (2008-09 NYS DOH Health Advisories and DEC/DFWMR, Habitat, January 2009).

### Water Quality Sampling

A biological (macroinvertebrate) assessment of Saranac River in Saranac (at Hardscrabble Road) just downstream of this segment was conducted in 2003 as part of the RIBS biological screening effort. Sampling results indicated non-impacted conditions. The sample was dominated by clean-water species and conditions reflected a natural community with minimal,

if any, human impacts. These results are consistent with sampling conducted in 1998 at multiple sites along the Saranac River that also revealed non-impacted conditions. NYSDEC Rotating Intensive Basin Studies (RIBS) Intensive Network monitoring of the river at the Saranac site was also conducted in 1993-94. The sites were assessed as having good water quality at that time. Aquatic life community is clearly fully supported. (DEC/DOW, BWAM/SBU, January 2009)

#### Section 303(d) Listing

Due to the recently issued fish consumption advisory Union Falls Reservoir was included in the 2008 Section 303(d) List. However the Northeast Regional Mercury TMDL which was approved in 2007 provides coverage for a number of specific waters as well as waters that are subsequently identified as being impaired by mercury from atmospheric deposition. NYSDEC is currently considering delisting this waterbody because of coverage under this TMDL. (DEC/DOW, BWAM, January 2009)

#### Segment Description

This segment includes the entire area of Union Falls Reservoir (P74).

# Saranac River, Franklin Falls Pond ( 1003-0045)

Impaired Seg

## Waterbody Location Information

Revised: 04/22/2009

**Water Index No:** C- 15 (portion 5)/P76  
**Hydro Unit Code:** 02010006/010      **Str Class:** C  
**Waterbody Type:** Lake(R) (Eutrophic)  
**Waterbody Size:** 447.7 Acres  
**Seg Description:** entire reservoir

**Drain Basin:** Lake Champlain  
Great Chazy/Saranac  
**Reg/County:** 5/Essex Co. (16)  
**Quad Map:** WILMINGTON (D-25-A) ...

## 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: METALS (mercury)  
Suspected: ---  
Possible: ---

### Source(s) of Pollutant(s)

Known: ATMOSPHERIC DEPOSITION  
Suspected: ---  
Possible: ---

## Resolution/Management Information

**Issue Resolvability:** 3 (Strategy Being Implemented)  
**Verification Status:** 5 (Management Strategy has been Developed)  
**Lead Agency/Office:** ext/EPA  
**TMDL/303d Status:** 4a (TMDL Complete, Being Implemented, Not Listed)

**Resolution Potential:** Medium

## Further Details

### Overview

Fish consumption in Franklin Falls Flow/Pond is known to be impaired by health advisories that recommend restricting the consumption of fish from the pond. Mercury contamination from atmospheric deposition is the suspected source of the impairment. Aquatic life support in these lakes may also be limited due to low pH, a result of atmospheric deposition (acid rain). However available data indicating such impacts is limited to small ponds within this segment and is more than 20 years old. Until more recent data on the larger waterbodies is available, this segment will be considered to be unassessed regarding these impacts.

### Fish Consumption

Fish consumption in Franklin Falls Pond is impaired due to a NYS DOH health advisory that recommends eating no walleye because of elevated mercury levels. The source of mercury is considered to be atmospheric deposition, as there are not other apparent sources in the lake watershed. The advisory for this lake was first issued in 2005-06. (2008-09 NYS DOH Health Advisories and DEC/DFWMR, Habitat, January 2009).

### Water Quality Sampling

Monitoring of Franklin Falls Pond was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and

assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

#### Section 303(d) Listing

Due to the fish consumption advisory Franklin Falls Pond was included in the 2006 Section 303(d) List of Impaired Waters, but it is not included on the 2008 List. The waterbody was delisted in 2008 due to the completion of the Northeast Regional Mercury TMDL which was approved in 2007 and provides coverage for this specific waterbody. (DEC/DOW, BWAM, January 2009)

#### Segment Description

This segment includes the entire area of Franklin Falls Pond (P76).

# Saranac River, Upper, Main Stem ( 1003-0044)

NoKnownImpct

## Waterbody Location Information

Revised: 04/21/2009

**Water Index No:** C- 15 (portion 6)      **Drain Basin:** Lake Champlain  
**Hydro Unit Code:** 02010006/010      **Str Class:** C      Great Chazy/Saranac  
**Waterbody Type:** River (Med. Flow)      **Reg/County:** 5/Essex Co. (16)  
**Waterbody Size:** 14.8 Miles      **Quad Map:** BLOOMINGDALE (D-24-A) ...  
**Seg Description:** river from Franklin Falls Pond to Saranac Lake

## 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 Saranac River in Saranac Lake (at Pine Street) was conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated moderately impacted conditions. Sensitive species are markedly reduced or missing and the distribution of major groups is significantly unbalanced relative to what would be expected. Sample is dominated by more tolerant species. The nutrient biotic index indicates some enrichment. However impact source determination revealed a fauna that is most similar to communities experiencing impoundment effects. These effects are known to skew biological sampling results and are not a true reflection of water quality. NYSDEC Rotating Intensive Basin Studies (RIBS) Intensive Network monitoring of the Saranac River in Bloomingdale/St. Armond (at Moose Pond Road) at the downstream end of this reach was conducted in 1998-99. Biological (macroinvertebrate) sampling of the river indicated non-impacted water quality. This assessment represents an improvement over results collected in 1993, which indicated a slight impact. Other indicators (water chemistry) indicate good water quality as well. (DEC/DOW, BWAM/SBU, January 2009)

A biological (macroinvertebrate) survey of the Saranac River at multiple sites between Plattsburgh and Saranac Lake was conducted in 1993. Sampling results indicated non-impacted invertebrate fauna and excellent water quality conditions between Plattsburgh and Bloomingdale. The upstream sites appeared to be impacted by lake effects and sluggish currents,

but water quality problems were not indicated. (Saranac River Bioassessment Report, Bode et al, DEC/DOW, BWAR/SBU, January 1994)

#### 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)

#### Segment Description

This segment includes the portion of the stream from Franklin Falls Pond to Lake Flower Dam in Saranac Lake. The waters of this portion of the stream are Class C. Tribs to this reach, including Cold Brook (-50), are primarily Class C(T) and D. This segment also includes small ponds Moody Pond (P85) and Heart Pond (P87) in Saranac Lake. Towbridge Brook (-51) and Moose Creek (-54) are listed separately.

# Silver Lake ( 1003-0068)

NoKnownImpct

## Waterbody Location Information

Revised: 03/04/2009

**Water Index No:** C- 15-28-P 73  
**Hydro Unit Code:** 02010006/010      **Str Class:** A  
**Waterbody Type:** Lake  
**Waterbody Size:** 801.2 Acres  
**Seg Description:** entire lake  
**Drain Basin:** Lake Champlain  
Great Chazy/Saranac  
**Reg/County:** 5/Canton Co. (10)  
**Quad Map:** REDFORD (C-25-3) ...

## 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

Silver Lake was included 1993 NYSDEC Citizen Statewide Lake Assessment Program (CSLAP). CSLAP relies on volunteer monitors to collect samples for evaluating lake trophic status and perception surveys for evaluating recreational suitability. Results of this study found no evidence of water quality impacts at the time. Because this data was collected more than 10 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC/DOW, BWAM/Lake Services, December 2000)

Monitoring of Silver Lake was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Segment Description

This segment includes the total area of Silver Lake (P73).

# Cranberry Pond ( 1003-0110)

NoKnownImpct

## Waterbody Location Information

Revised: 10/02/2000

<b>Water Index No:</b>	C- 15-35-P 75	<b>Drain Basin:</b>	Lake Champlain
<b>Hydro Unit Code:</b>	02010006/010	<b>Str Class:</b>	C(T)
<b>Waterbody Type:</b>	Lake	<b>Reg/County:</b>	5/Clinton Co. (10)
<b>Waterbody Size:</b>	31.6 Acres	<b>Quad Map:</b>	WILMINGTON (D-25-A)
<b>Seg Description:</b>	entire lake		

## 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

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

## Further Details

### Water Quality Sampling

Monitoring of Cranberry Pond was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

# Towbridge Brook and tribs ( 1003-0070)

NoKnownImpct

## Waterbody Location Information

Revised: 06/09/2009

**Water Index No:** C-15-51  
**Hydro Unit Code:** 02010006/010      **Str Class:** C(T)  
**Waterbody Type:** River  
**Waterbody Size:** 61.8 Miles  
**Seg Description:** entire stream and tribs

**Drain Basin:** Lake Champlain  
Great Chazy/Saranac  
**Reg/County:** 5/Essex Co. (16)  
**Quad Map:** BLOOMINGDALE (D-24-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      **Resolution Potential:** n/a  
**TMDL/303d Status:** n/a

## Further Details

### Water Quality Sampling

A biological (macroinvertebrate) assessment of Towbridge Brook in Bloomingdale (at Route 55) was conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated slightly impacted conditions. Some replacement of sensitive ubiquitous species by more tolerant species was noted although the sample included a balanced distribution of all expected species. Even these limited impacts are thought to be influenced by less than ideal sampling habitat. Slow-moving water and an upstream wetland (a beaver dam was also noted) likely skew the results toward suggesting greater level of impact than actually occurs. No significant enrichment was noted and specific conductance was fairly low. Aquatic life is considered to be fully supported in the stream. (DEC/DOW, BWAM/SBU, January 2009)

Monitoring of small ponds in this segment by the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. Monitoring by ALSC revealed very low pH in unnamed ponds (P79, P80) and Marsh Pond (P81). (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Water Quality Management

Efforts are underway on a national level to address problems caused by acid rain by reducing pollutant emissions, as required

by the Clean Air Act. New York State (and other northeastern states) have taken legal action against USEPA to accelerate implementation of controls. Monitoring of these waters will continue, in order to assess changes in water quality resulting from implementation of the Clean Air Act. However, these changes are expected to occur only slowly over time.

#### Section 303(d) Listing

Marsh Pond (P81) and unnamed ponds (P79, P80) are included on the NYS 2008 Section 303(d) List of Impaired Waters in Appendix A as a Smaller Lakes Impaired by Acid Rain. (DEC/DOW, BWAM, 2008)

#### Segment Description

This segment includes the entire stream and all tribs. The waters of the stream are Class C(T). Tribs to this reach/segment, including Lyons Brook (-1) and Negro Brook (-2), are also Class C(T). The segment also includes smaller Marsh Pond (P81) and unnamed ponds (P79, P80).

# Moose Pond, Grass Pond ( 1003-0069)

NoKnownImpct

## Waterbody Location Information

Revised: 09/27/2000

<b>Water Index No:</b>	C- 15-54-P 83,P 84	<b>Drain Basin:</b>	Lake Champlain
<b>Hydro Unit Code:</b>	02010006/010	<b>Str Class:</b>	A(T)
<b>Waterbody Type:</b>	Lake	<b>Reg/County:</b>	5/Essex Co. (16)
<b>Waterbody Size:</b>	172.5 Acres	<b>Quad Map:</b>	SARANAC LAKE (D-24-B)
<b>Seg Description:</b>	entire lake		

## 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

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

## Further Details

### Water Quality Sampling

Monitoring of Moose Pond and Grass Pond was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

# Lake Flower ( 1003-0046)

NoKnownImpct

## Waterbody Location Information

Revised: 03/04/2009

<b>Water Index No:</b>	C- 15-P 86	<b>Drain Basin:</b>	Lake Champlain
<b>Hydro Unit Code:</b>	02010006/010	<b>Str Class:</b>	AA
<b>Waterbody Type:</b>	Lake	<b>Reg/County:</b>	5/Essex Co. (16)
<b>Waterbody Size:</b>	312.8 Acres	<b>Quad Map:</b>	SARANAC LAKE (D-24-B)
<b>Seg Description:</b>	entire lake		

## 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

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

## Further Details

### Water Quality Sampling

Lake Flower was included 1987 NYSDEC Lake Classification and Inventory (LCI) monitoring effort. The LCI program collects samples for evaluating lake trophic status and evaluates recreational suitability. Results of this study found no evidence of water quality impacts at the time. Because this data was collected more than 10 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC/DOW, BWAM/Lake Services, December 2000)

Monitoring of Lake Flower was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Previous Assessment

Concerns regarding possible impacts from reported growths of Eurasian milfoil in the lake were reported in a previous assessment of the lake. These conditions should be verified. (Essex County WQCC, June 2000)

**Segment Description**

This segment includes the total area of Silver Lake (P73).

# McKenzie Pond ( 1003-0072)

NoKnownImpct

## Waterbody Location Information

Revised: 09/27/2000

**Water Index No:** C- 15-P 86-59-P 88  
**Hydro Unit Code:** 02010006/010      **Str Class:** AA(T)  
**Waterbody Type:** Lake  
**Waterbody Size:** 239.9 Acres  
**Seg Description:** entire lake  
**Drain Basin:** Lake Champlain  
**Reg/County:** 5/Essex Co. (16)  
**Quad Map:** SARANAC LAKE (D-24-B)

## 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

Monitoring of McKenzie Pond was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

# Ray Brook and tribs ( 1003-0074)

NoKnownImpct

## Waterbody Location Information

Revised: 02/06/2009

**Water Index No:** C- 15-P 86-P 90-60  
**Hydro Unit Code:** 02010006/010      **Str Class:** C(T)  
**Waterbody Type:** River  
**Waterbody Size:** 20.8 Miles  
**Seg Description:** entire stream and tribs

**Drain Basin:** Lake Champlain  
Great Chazy/Saranac  
**Reg/County:** 5/Essex Co. (16)  
**Quad Map:** SARANAC LAKE (D-24-B)

## 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 Ray Brook in Ray Brook (at Route 86) was conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated slightly impacted conditions. The community is slightly 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 similarity 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)

Monitoring of smaller ponds in the Ray Brook watershed was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Segment Description

This segment includes the stream and tribs from the mouth to the water supply dams on Upper Little Ray Brook (-1) and unnamed trib (-6). The waters of the stream are Class C,C(T). Tribs to this reach/segment, including Lower Little Ray Brook (-1), are also Class C,C(T). This segment also includes smaller ponds Ray Brook Pond (P91), Wolf Pond (P94), Otter Pond (P95) and unnamed ponds (P92, P93). Upper Little Ray Brook and other unnamed water supply tribs are listed separately.

# Ray Brook Tribs ( 1004-0097)

NoKnownImpct

## Waterbody Location Information

Revised: 06/01/2009

**Water Index No:** C- 15-P 86-P 90-60-  
**Hydro Unit Code:** **Str Class:** A(T)  
**Waterbody Type:** River (Low Flow) **Reg/County:** 5/Essex Co. (16)  
**Waterbody Size:** 0.0 Miles **Quad Map:** ()  
**Seg Description:**

## 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

Source water assessments of a few impoundments in Ray Brook watershed 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 area correctional facilities. (NYSDOH, Source Water Assessment Program, 2005)

### Segment Description

This segment includes the total length of selected/smaller tribs to Ray Brook. Tribs within this segment, including Upper Little Ray Brook (above the water supply dam) and portions of unnamed tribs (-6), are designated Class AA(T). This segment also include Alford Pond (P96). The remainder of Ray Brook is listed separately.

# Kiawassa Lake ( 1003-0076)

NoKnownImpct

## Waterbody Location Information

Revised: 03/04/2009

**Water Index No:** C- 15-P 86-P 90-64-P100  
**Hydro Unit Code:** 02010006/010      **Str Class:** AA  
**Waterbody Type:** Lake (Unknown Trophic)  
**Waterbody Size:** 281.4 Acres  
**Seg Description:** entire lake

**Drain Basin:** Lake Champlain  
Great Chazy/Saranac  
**Reg/County:** 5/Franklin Co. (17)  
**Quad Map:** SARANAC LAKE (D-24-B)

## 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

Kiawassa Lake was included 1994 NYSDEC Citizen Statewide Lake Assessment Program (CSLAP). CSLAP relies on volunteer monitors to collect samples for evaluating lake trophic status and perception surveys for evaluating recreational suitability. Results of this study found no evidence of water quality impacts at the time. Because this data was collected more than 10 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC/DOW, BWAM/Lake Services, December 2000)

### Segment Description

This segment includes the total area of Kiawassa Lake (P100).

# First/Second Ponds ( 1003-0078)

NoKnownImpct

## Waterbody Location Information

Revised: 02/06/2009

**Water Index No:** C- 15-P102/P103  
**Hydro Unit Code:** 02010006/010      **Str Class:** C  
**Waterbody Type:** Lake  
**Waterbody Size:** 153.8 Acres  
**Seg Description:** total area of both lakes

**Drain Basin:** Lake Champlain  
Great Chazy/Saranac  
**Reg/County:** 5/Franklin Co. (17)  
**Quad Map:** SARANAC LAKE (D-24-B)

## 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

Monitoring of First and Second Ponds was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Segment Description

This segment includes the total area of both lakes from the lock/dam above Oseetah Lake to Lower Saranac Lake.

# Lower Saranac Lake ( 1003-0080)

Impaired Seg

## Waterbody Location Information

Revised: 04/22/2009

<b>Water Index No:</b>	C- 15-P104	<b>Drain Basin:</b>	Lake Champlain
<b>Hydro Unit Code:</b>	02010006/010	<b>Str Class:</b>	AA
<b>Waterbody Type:</b>	Lake (Mesotrophic)	<b>Reg/County:</b>	5/Franklin Co. (17)
<b>Waterbody Size:</b>	2145.1 Acres	<b>Quad Map:</b>	SARANAC LAKE (D-24-B)
<b>Seg Description:</b>	entire lake		

## 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: METALS (mercury)  
Suspected: ---  
Possible: ---

### Source(s) of Pollutant(s)

Known: ATMOSPH. DEPOSITION  
Suspected: ---  
Possible: ---

## Resolution/Management Information

**Issue Resolvability:** 3 (Strategy Being Implemented)  
**Verification Status:** 5 (Management Strategy has been Developed)  
**Lead Agency/Office:** ext/EPA  
**TMDL/303d Status:** 2b->4a?

**Resolution Potential:** Medium

## Further Details

### Overview

Fish consumption in Lower Saranac Lake is known to be impaired by health advisories that recommend restricting the consumption of fish from the lake. Mercury contamination from atmospheric deposition is the suspected source of the impairment.

### Fish Consumption

Fish consumption in Lower Saranac Lake is impaired due to a NYS DOH health advisory that recommends eating no more than one meal per month of larger smallmouth bass (over 15 inches) because of elevated mercury levels. The source of mercury is considered to be atmospheric deposition, as there are not other apparent sources in the lake watershed. The advisory for this lake was first issued in 2006-07. (2006-07 NYS DOH Health Advisories and DEC/DFWMR, Habitat, January 2008).

### Section 303(d) Listing

Due to the recently issued fish consumption advisory Lower Saranac Lake was included in the 2008 Section 303(d) List. However the Northeast Regional Mercury TMDL which was approved in 2007 provides coverage for a number of specific waters as well as waters that are subsequently identified as being impaired by mercury from atmospheric deposition.

NYSDEC is currently considering delisting this waterbody because of coverage under this TMDL. (DEC/DOW, BWAM, January 2008)

# Lake Colby ( 1003-0079)

NoKnownImpct

## Waterbody Location Information

Revised: 03/09/2009

**Water Index No:** C- 15-P104-66-P106  
**Hydro Unit Code:** 02010006/010      **Str Class:** A(T)  
**Waterbody Type:** Lake (Mesotrophic)  
**Waterbody Size:** 295.1 Acres  
**Seg Description:** entire lake

**Drain Basin:** Lake Champlain  
Great Chazy/Saranac  
**Reg/County:** 5/Franklin Co. (17)  
**Quad Map:** SARANAC LAKE (D-24-B)

## 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

Lake Colby has been sampled as part of the NYSDEC Citizen Statewide Lake Assessment Program (CSLAP) beginning in 1999 and continuing through 2001. An Interpretive Summary report of the findings of this sampling was published in 2002. These data indicate that the lake continues to be best characterized as mesotrophic, or moderately productive. Phosphorus levels in the lake rarely exceed the state guidance values indicating impacted/stressed recreational uses. Corresponding transparency measurements meet the recommended minimum for swimming beaches. Measurements of pH typically fall within the state water quality range of 6.5 to 8.5. The lake water is moderately colored, reflecting natural conditions of the watershed. But color does not limit water transparency. (DEC/DOW, BWAM/CSLAP, November 2002)

Monitoring of Lake Colby and Little Colby Pond was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### 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 to be very favorable. 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," an assessment that is consistent measured water quality characteristics. Assessments have noted that aquatic plants occasionally grow to the lake surface. Aquatic plants are dominated by a mix of native and non-native species and have not been cited as impacting recreational uses. (DEC/DOW, BWAM/CSLAP, November 2002)

#### Lake Uses

This lake waterbody is designated class A(T), 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 total area of Lake Colby, and smaller Little Colby Pond (P105).

# McCauley Pond ( 1003-0081)

NoKnownImpct

## Waterbody Location Information

Revised: 09/27/2000

**Water Index No:** C- 15-P104-67-P107  
**Hydro Unit Code:** 02010006/010      **Str Class:** AA(T)  
**Waterbody Type:** Lake (Unknown Trophic)      **Reg/County:** 5/Franklin Co. (17)  
**Waterbody Size:** 76.0 Acres      **Quad Map:** SARANAC LAKE (D-24-B)  
**Seg Description:** entire lake

## 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

Monitoring of McCauley Pond was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

# Middle Saranac Lake (incl Weller Pond) ( 1003-0083)

Impaired Seg

## Waterbody Location Information

Revised: 04/22/2009

**Water Index No:** C- 15-P110, P207 thru P209  
**Hydro Unit Code:** 02010006/010      **Str Class:** AA  
**Waterbody Type:** Lake  
**Waterbody Size:** 1587.7 Acres  
**Seg Description:** entire lake

**Drain Basin:** Lake Champlain  
Great Chazy/Saranac  
**Reg/County:** 5/Franklin Co. (17)  
**Quad Map:** UPPER SARANAC LAKE (D-23-B)

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
FISH CONSUMPTION	Impaired	Known
Aquatic Life	Threatened	Suspected

### Type of Pollutant(s)

Known: METALS (mercury)  
Suspected: ---  
Possible: Acid/Base (pH)

### Source(s) of Pollutant(s)

Known: ATMOSPH. DEPOSITION  
Suspected: ---  
Possible: ---

## Resolution/Management Information

**Issue Resolvability:** 3 (Strategy Being Implemented)  
**Verification Status:** 5 (Management Strategy has been Developed)  
**Lead Agency/Office:** ext/EPA  
**TMDL/303d Status:** 4a (TMDL Complete, Being Implemented, Not Listed)

**Resolution Potential:** Medium

## Further Details

### Overview

Fish consumption in Middle Saranac Lake (including Weller Pond) is known to be impaired by health advisories that recommend restricting the consumption of fish from Weller Pond. The impairment is considered to extend to Middle Saranac Lake as well. Mercury contamination from atmospheric deposition is the suspected source of the impairment. Aquatic life support in these lakes may also be limited due to low pH, a result of atmospheric deposition (acid rain). However available data indicating such impacts is limited to small ponds within this segment and is more than 20 years old. Until more recent data on the larger waterbodies is available, this segment will be considered to be unassessed regarding these impacts.

### Fish Consumption

Fish consumption in Weller Pond is impaired due to a NYS DOH health advisory that recommends eating no more than one meal per month of northern pike because of elevated mercury levels. The source of mercury is considered to be atmospheric deposition, as there are not other apparent sources in the lake watershed. Although the advisory is specific to Weller Pond, movement of pike thru the Middle Saranac Lake system suggests that the contamination has implications for all waters of this segment. The advisory for this lake was first issued in 2005-06. (2008-09 NYS DOH Health Advisories and DEC/DFWMR, Habitat, January 2009).

### Water Quality Sampling

Monitoring of small ponds in this segment by the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. Monitoring by ALSC revealed somewhat low pH in Tamarack Pond (P207). This sampling revealed no indication of impacts to aquatic life support or recreational use in Little Weller Pond (P208) or Weller Pond (P209). (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Water Quality Management

Efforts are underway on a national level to address problems caused by acid rain by reducing pollutant emissions, as required by the Clean Air Act. New York State (and other northeastern states) have taken legal action against USEPA to accelerate implementation of controls. Monitoring of these waters will continue, in order to assess changes in water quality resulting from implementation of the Clean Air Act. However, these changes are expected to occur only slowly over time.

### Section 303(d) Listing

Due to the fish consumption advisory Middle Saranac Lake/Weller Pond was included in the 2006 Section 303(d) List of Impaired Waters, but it is not included on the 2008 List. The waterbody was delisted in 2008 due to the completion of the Northeast Regional Mercury TMDL which was approved in 2007 and provides coverage for this specific waterbody. (DEC/DOW, BWAM, January 2009)

### Segment Description

This segment includes the total area of Middle Saranac Lake, as well as Tamarack Pond (P207), Little Weller Pond (P208), Weller Pond (P209).

# Upper Saranac Lake ( 1003-0048)

# MinorImpacts

## Waterbody Location Information

Revised: 03/09/2009

**Water Index No:** C- 15-P114  
**Hydro Unit Code:** 02010006/010      **Str Class:** AA  
**Waterbody Type:** Lake (Mesotrophic)  
**Waterbody Size:** 4844.1 Acres  
**Seg Description:** entire lake

**Drain Basin:** Lake Champlain  
Great Chazy/Saranac  
**Reg/County:** 5/Franklin Co. (17)  
**Quad Map:** UPPER SARANAC LAKE (D-23-B)

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

### Type of Pollutant(s)

Known: D.O./OXYGEN DEMAND, Problem Species (Eurasian milfoil)  
Suspected: Nutrients  
Possible: - - -

### Source(s) of Pollutant(s)

Known: OTHER SOURCE (natural morphology), Habitat Modification  
Suspected: On-Site/Septic Syst  
Possible: - - -

## Resolution/Management Information

**Issue Resolvability:** 2 (Strategy Exists, Needs Funding/Resources)  
**Verification Status:** 5 (Management Strategy has been Developed)  
**Lead Agency/Office:** DEC/FWMR  
**TMDL/303d Status:** n/a

**Resolution Potential:** Medium

## Further Details

### Overview

Aquatic life support and recreation are thought to experience minor impacts/threats due to low dissolved oxygen and invasive aquatic plant growth. Low dissolved oxygen occurs at the lake bottom during summer months impacting coldwater fish species that reside in the lake, although the lake is not classified as a coldwater fishery. A significant Eurasian watermilfoil control program is conducted annually on the lake.

### Water Quality Sampling

Upper Saranac Lake has been sampled as part of the NYSDEC Citizen Statewide Lake Assessment Program (CSLAP) in 2006. 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. Phosphorus levels in the lake rarely exceed the state guidance values indicating impacted/stressed recreational uses. Corresponding transparency measurements consistently exceed the recommended minimum for swimming beaches. Measurements of pH typically fall within the state water quality range of 6.5 to 8.5. The lake water is weakly to moderately colored, but color does not appear limit water transparency. (DEC/DOW, BWAM/CSLAP, March 2007)

The coldwater/trout fishery, in Upper Saranac Lake is stressed by low summer hypolimnetic dissolved oxygen levels. During warmer months, low D.O. forces lake trout to leave preferred cold water habitat for less desirable warmer water. This narrower range of habitat places stress on the fishery. (DEC/DOW, Region 5, March 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 to be favorable. The recreational suitability of the lake is described most frequently as "excellent" or most uses. The lake itself is most often described as "not quite crystal clear" or as having "definite algal greenness," an assessment that is consistent measured water quality characteristics. Assessments have noted that aquatic plants only rarely grows to the lake surface, thought this may be a result of the active milfoil management program. Aquatic plant surveys have not been conducted through CSLAP at Upper Saranac Lake. However, the presence of Eurasian watermilfoil was verified by a number of researchers, and this plant has been the subject of extensive management activities on the lake. (DEC/DOW, BWAM/CSLAP, March 2007)

#### Lake Uses

This lake waterbody is designated class AA, 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.

#### Source Assessment

Contributing factors to the oxygen depletion in the hypolimnion include organic decomposition, recycling of nutrients (phosphorus) in lake sediments, commercial properties, individual on-site septic systems serving lakeshore residences and natural drainage from nutrient-rich bog areas around the lake. A NYSDEC fish hatchery (the Adirondack Hatchery) and campground (Fish Creek) have been previously listed as contributing to the nutrient (phosphorus) load in the lake. However after considerable upgrades to the hatchery, more recent nutrient budgets for the lake indicate the hatchery contributes only about 1% of the phosphorus load to the lake. Similarly, renovations to address pollution impacts from the campground were completed in 2000 and its contributions have also been minimized. DEC/DFWMR and DOW, Region 5, March 2009)

#### Water Quality Management

Beginning in May of 2004, the residents of Upper Saranac Lake committed to a major effort to control Eurasian watermilfoil using manual removal. The milfoil is hand harvested by divers who begin working their way around the lake in May/June of each year. In addition to harvesting milfoil, the divers also collect data to produce a milfoil distribution map. Results show significant reduction in plant densities since 2005. (Upper Saranac Lake Foundation and Adirondack Watershed Institute, January 2009)

#### Section 303(d) Listing

Upper Saranac Lake is included on the NYS 2008 Section 303(d) List of Impaired Waters. The lake is included among the waters listed in Appendix B - Waters Not Meeting Dissolved Oxygen Standards. This part of the List recognizes waterbodies where low dissolved oxygen in lake bottom waters may be the result of morphology and other natural conditions in thermally stratified lakes. This updated assessment suggests that the impacts to the fishery do not reach the level of an impairment to aquatic life support and the impacts in this non-trout water are largely to coldwater species. Based on the level of impacts, the lake will continue to be assessed as having minor impacts. However because NYS water quality standards for dissolved oxygen do not include an explicit exception for natural conditions or averaging of dissolved oxygen over lake depth, USEPA requires that the Section 303(d) List recognize such waters.

#### Segment Description

This segment includes the total area of Upper Saranac Lake.

# Follensby Clear Pond ( 1003-0088)

NoKnownImpct

## Waterbody Location Information

Revised: 09/28/2000

**Water Index No:** C- 15-P114..P116  
**Hydro Unit Code:** 02010006/010      **Str Class:** AA  
**Waterbody Type:** Lake  
**Waterbody Size:** 490.4 Acres  
**Seg Description:** entire lake

**Drain Basin:** Lake Champlain  
Great Chazy/Saranac  
**Reg/County:** 5/Franklin Co. (17)  
**Quad Map:** UPPER SARANAC LAKE (D-23-B)

## 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

Monitoring of Follensby Pond was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

# Horseshoe Pond ( 1003-0089)

NoKnownImpct

## Waterbody Location Information

Revised: 09/28/2000

**Water Index No:** C- 15-P114..P118  
**Hydro Unit Code:** 02010006/010      **Str Class:** AA  
**Waterbody Type:** Lake  
**Waterbody Size:** 86.4 Acres  
**Seg Description:** entire lake  
**Drain Basin:** Lake Champlain  
Great Chazy/Saranac  
**Reg/County:** 5/Franklin Co. (17)  
**Quad Map:** UPPER SARANAC LAKE (D-23-B)

## 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

Monitoring of Horseshoe and Little Polliwog Ponds was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Segment Description

This segment includes the total area of Horseshoe Pond, and smaller Little Polliwog Pond (P119).

# Polliwog Pond ( 1003-0090)

Impaired Seg

## Waterbody Location Information

Revised: 04/22/2009

**Water Index No:** C- 15-P114..P120  
**Hydro Unit Code:** 02010006/010      **Str Class:** AA  
**Waterbody Type:** Lake  
**Waterbody Size:** 210.5 Acres  
**Seg Description:** entire lake

**Drain Basin:** Lake Champlain  
Great Chazy/Saranac  
**Reg/County:** 5/Franklin Co. (17)  
**Quad Map:** UPPER SARANAC LAKE (D-23-B)

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
FISH CONSUMPTION	Impaired	Known
Aquatic Life	Threatened	Suspected

### Type of Pollutant(s)

Known: METALS (mercury)  
Suspected: ---  
Possible: Acid/Base (pH)

### Source(s) of Pollutant(s)

Known: ATMOSPH. DEPOSITION  
Suspected: ---  
Possible: ---

## Resolution/Management Information

**Issue Resolvability:** 3 (Strategy Being Implemented)  
**Verification Status:** 5 (Management Strategy has been Developed)  
**Lead Agency/Office:** ext/EPA  
**TMDL/303d Status:** 4a (TMDL Complete, Being Implemented, Not Listed)

**Resolution Potential:** Medium

## Further Details

### Overview

Fish consumption in Polliwog Pond is known to be impaired by health advisories that recommend restricting the consumption of fish from the pond. Mercury contamination from atmospheric deposition is the suspected source of the impairment. Aquatic life support in these lakes may also be limited due to low pH, a result of atmospheric deposition (acid rain). However available data indicating such impacts is limited to small ponds within this segment and is more than 20 years old. Until more recent data on the larger waterbodies is available, this segment will be considered to be unassessed regarding these impacts.

### Fish Consumption

Fish consumption in Polliwog Pond is impaired due to a NYS DOH health advisory that recommends eating no more than one meal per month of smallmouth bass because of elevated mercury levels. The source of mercury is considered to be atmospheric deposition, as there are not other apparent sources in the lake watershed. The advisory for this lake was first issued in 2004-05. (2008-09 NYS DOH Health Advisories and DEC/DFWMR, Habitat, January 2009).

### Water Quality Sampling

Monitoring of Polliwog Pond and the smaller West Polliwog Pond in this segment was included by the Adirondack Lake

Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. Monitoring by ALSC revealed somewhat low pH in Polliwog Pond (P120) and very low pH in the smaller West Polliwog Pond (P122). Because the data is limited to single samples and collected more than 20 years ago, this segment will be considered to be unassessed for these impacts until more recent data on the larger waterbodies is available. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

#### Water Quality Management

Efforts are underway on a national level to address problems caused by acid rain by reducing pollutant emissions, as required by the Clean Air Act. New York State (and other northeastern states) have taken legal action against USEPA to accelerate implementation of controls. Monitoring of these waters will continue, in order to assess changes in water quality resulting from implementation of the Clean Air Act. However, these changes are expected to occur only slowly over time.

#### Section 303(d) Listing

West Polliwog Pond (P122) is included on the NYS 2008 Section 303(d) List of Impaired Waters in Appendix A as a Smaller Lakes Impaired by Acid Rain. Due to the fish consumption advisory Polliwog Pond was included in the 2006 Section 303(d) List of Impaired Waters, but it is not included on the 2008 List. The waterbody was delisted in 2008 due to the completion of the Northeast Regional Mercury TMDL which was approved in 2007 and provides coverage for this specific waterbody. (DEC/DOW, BWAM, January 2009)

#### Segment Description

This segment includes the total area of Polliwog Pond (P120) , as well as the smaller West Polliwog Pond (P122) and unnamed pond (P121).

# Fish Creek Pond, East ( 1003-0091)

NoKnownImpct

## Waterbody Location Information

Revised: 09/28/2000

**Water Index No:** C- 15-P114..P123  
**Hydro Unit Code:** 02010006/010      **Str Class:** AA  
**Waterbody Type:** Lake  
**Waterbody Size:** 85.2 Acres  
**Seg Description:** entire lake

**Drain Basin:** Lake Champlain  
Great Chazy/Saranac  
**Reg/County:** 5/Franklin Co. (17)  
**Quad Map:** UPPER SARANAC LAKE (D-23-B)

## 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

Monitoring of Fish Creek Pond East was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

# Fish Creek Pond, West ( 1003-0092)

NoKnownImpct

## Waterbody Location Information

Revised: 01/09/2001

<b>Water Index No:</b>	C- 15-P114..P124	<b>Drain Basin:</b>	Lake Champlain
<b>Hydro Unit Code:</b>	02010006/010	<b>Str Class:</b>	AA
<b>Waterbody Type:</b>	Lake	<b>Reg/County:</b>	5/Franklin Co. (17)
<b>Waterbody Size:</b>	73.6 Acres	<b>Quad Map:</b>	UPPER SARANAC LAKE (D-23-B)
<b>Seg Description:</b>	entire lake		

## 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

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

## Further Details

### Water Quality Sampling

Fish Creek Pond West was included in the 1987 Lake Classification and Inventory monitoring effort; results of this study found no evidence of water quality impairment. However because the data set is more than 10 years old, the assessment is considered to be evaluated, rather than monitored and should be verified with additional monitoring. (DEC/DOW, BWM/Lake Services, December 2000)

Monitoring of Fish Creek Pond West was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

# Middle Pond ( 1003-0111)

NoKnownImpct

## Waterbody Location Information

Revised: 10/05/2000

<b>Water Index No:</b>	C- 15-P114..P143	<b>Drain Basin:</b>	Lake Champlain
<b>Hydro Unit Code:</b>	02010006/010	<b>Str Class:</b>	AA
<b>Waterbody Type:</b>	Lake	<b>Reg/County:</b>	5/Franklin Co. (17)
<b>Waterbody Size:</b>	60.8 Acres	<b>Quad Map:</b>	UPPER SARANAC LAKE (D-23-B)
<b>Seg Description:</b>	entire lake		

## 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

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

## Further Details

### Water Quality Sampling

Monitoring of Middle Pond was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Segment Description

This segment includes the total area of Middle Pond (P143).

# Slang Pond, Turtle Pond ( 1003-0098)

NoKnownImpct

## Waterbody Location Information

Revised: 09/28/2000

**Water Index No:** C- 15-P114..P159, P160  
**Hydro Unit Code:** 02010006/010      **Str Class:** AA  
**Waterbody Type:** Lake  
**Waterbody Size:** 118.8 Acres  
**Seg Description:** entire lake

**Drain Basin:** Lake Champlain  
Great Chazy/Saranac  
**Reg/County:** 5/Franklin Co. (17)  
**Quad Map:** UPPER SARANAC LAKE (D-23-B)

## 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

Monitoring of Slang and Turtle Ponds was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Segment Description

This segment includes the total area of both Sland Pond (P159) and Turtle Pond (P160).

# Rollins Pond ( 1003-0100)

Need Verific

## Waterbody Location Information

Revised: 01/09/2001

<b>Water Index No:</b>	C- 15-P114..P168	<b>Drain Basin:</b>	Lake Champlain
<b>Hydro Unit Code:</b>	02010006/010	<b>Str Class:</b>	AA
<b>Waterbody Type:</b>	Lake	<b>Reg/County:</b>	5/Franklin Co. (17)
<b>Waterbody Size:</b>	447.5 Acres	<b>Quad Map:</b>	UPPER SARANAC LAKE (D-23-B)
<b>Seg Description:</b>	entire lake		

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Recreation	Stressed	Possible
Aesthetics	Stressed	Possible

### Type of Pollutant(s)

Known: ---  
Suspected: NUTRIENTS, Algal/Weed Growth (algal blooms)  
Possible: ---

### Source(s) of Pollutant(s)

Known: ---  
Suspected: ---  
Possible: UNKNOWN SOURCE

## Resolution/Management Information

<b>Issue Resolvability:</b>	1 (Needs Verification/Study (see STATUS))	
<b>Verification Status:</b>	1 (Waterbody Nominated, Problem Not Verified)	
<b>Lead Agency/Office:</b>	DOW/BWM	<b>Resolution Potential:</b> Medium
<b>TMDL/303d Status:</b>	n/a	

## Further Details

### Overview

Recreational uses in Rollins Pond may experience minor impacts due to nutrient loading and algal blooms due to nonpoint sources. These conditions were revealed in a 1987 Lake Classification and Inventory monitoring effort. However the data set is more than 10 years old, and the assessment should be verified with additional monitoring.

### Water Quality Sampling

Monitoring of Rollins Pond and many smaller ponds within this segment was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Segment Description

This segment includes the total area of Rollins Pond (P168), as well as smaller unnamed ponds (P167, P169, P172, P174,

P175, P176).

# West Pine Pond ( 1003-0102)

NoKnownImpct

## Waterbody Location Information

Revised: 09/28/2000

**Water Index No:** C- 15-P114..P173  
**Hydro Unit Code:** 02010006/010      **Str Class:** AA  
**Waterbody Type:** Lake  
**Waterbody Size:** 64.8 Acres  
**Seg Description:** entire lake  
**Drain Basin:** Lake Champlain  
Great Chazy/Saranac  
**Reg/County:** 5/Franklin Co. (17)  
**Quad Map:** UPPER SARANAC LAKE (D-23-B)

## 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

Monitoring of West Pine Pond was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Segment Description

This segment includes the total area of West Pine Pond (P173).

## Deer Pond (Altamont) ( 1003-0103)

NoKnownImpct

### Waterbody Location Information

Revised: 09/28/2000

<b>Water Index No:</b>	C- 15-P114..P178	<b>Drain Basin:</b>	Lake Champlain
<b>Hydro Unit Code:</b>	02010006/010	<b>Str Class:</b>	AA
<b>Waterbody Type:</b>	Lake	<b>Reg/County:</b>	5/Franklin Co. (17)
<b>Waterbody Size:</b>	52.7 Acres	<b>Quad Map:</b>	UPPER SARANAC LAKE (D-23-B)
<b>Seg Description:</b>	entire lake		

### 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

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

### Further Details

#### Water Quality Sampling

Monitoring of Dear Pond was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

#### Segment Description

This segment includes the total area of Deer Pond (P178) and unnamed ponds (P177, P179).

# Whey Pond ( 1003-0104)

NoKnownImpct

## Waterbody Location Information

Revised: 09/28/2000

<b>Water Index No:</b>	C- 15-P114..P180	<b>Drain Basin:</b>	Lake Champlain
<b>Hydro Unit Code:</b>	02010006/010	<b>Str Class:</b>	AA
<b>Waterbody Type:</b>	Lake	<b>Reg/County:</b>	5/Franklin Co. (17)
<b>Waterbody Size:</b>	107.4 Acres	<b>Quad Map:</b>	UPPER SARANAC LAKE (D-23-B)
<b>Seg Description:</b>	entire lake		

## 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

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

## Further Details

### Water Quality Sampling

Monitoring of Whey Pond was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Segment Description

This segment includes the total area of Whey Pond (P180).

# Deer Pond (Santa Clara) ( 1003-0105)

NoKnownImpct

## Waterbody Location Information

Revised: 09/28/2000

<b>Water Index No:</b> C- 15-P114..P181	<b>Drain Basin:</b> Lake Champlain	
<b>Hydro Unit Code:</b> 02010006/010	<b>Str Class:</b> AA	Great Chazy/Saranac
<b>Waterbody Type:</b> Lake	<b>Reg/County:</b> 5/Franklin Co. (17)	
<b>Waterbody Size:</b> 115.8 Acres	<b>Quad Map:</b> UPPER SARANAC LAKE (D-23-B)	
<b>Seg Description:</b> entire lake		

## 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

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

## Further Details

### Water Quality Sampling

Monitoring of Deer Pond as well as a smaller pond with in segment this was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Segment Description

This segment includes the total area of Deer Pond (P181) and Mud Pond (P182).

# Little Green Pond ( 1003-0108)

NoKnownImpct

## Waterbody Location Information

Revised: 09/28/2000

<b>Water Index No:</b>	C- 15-P114..P192	<b>Drain Basin:</b>	Lake Champlain
<b>Hydro Unit Code:</b>	02010006/010	<b>Str Class:</b>	AA
<b>Waterbody Type:</b>	Lake	<b>Reg/County:</b>	5/Franklin Co. (17)
<b>Waterbody Size:</b>	69.9 Acres	<b>Quad Map:</b>	UPPER SARANAC LAKE (D-23-B)
<b>Seg Description:</b>	entire lake		

## 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

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

## Further Details

### Water Quality Sampling

Monitoring of Little Green Pond was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Segment Description

This segment includes the total area of Little Green Pond (P192).

# Lake Clear ( 1003-0109)

Need Verific

## Waterbody Location Information

Revised: 02/24/2009

**Water Index No:** C- 15-P114..P199  
**Hydro Unit Code:** 02010006/010      **Str Class:** AA(T)  
**Waterbody Type:** Lake  
**Waterbody Size:** 1091.8 Acres  
**Seg Description:** entire lake

**Drain Basin:** Lake Champlain  
Great Chazy/Saranac  
**Reg/County:** 5/Franklin Co. (17)  
**Quad Map:** UPPER SARANAC LAKE (D-23-B)

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
AQUATIC LIFE	Impaired	Suspected

### Type of Pollutant(s)

Known: ---  
Suspected: ACID/BASE (PH)  
Possible: ---

### Source(s) of Pollutant(s)

Known: ---  
Suspected: ATMOSPHERIC DEPOSITION  
Possible: ---

## 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:** 2a\*

**Resolution Potential:** Medium

## Further Details

### Overview

Monitoring of Lake Clear reveals no impacts to uses. However aquatic life support in the smaller ponds in this segment is considered to be impaired due to low pH, a result of atmospheric deposition (acid rain). Available data indicating such impacts are limited to smaller ponds within this segment and is more than 20 years old. Until more recent data on the condition of these smaller waters is available, the impairment to aquatic life support in this is segment will be considered to be suspected and limited.

### Water Quality Sampling

Lake Clear has been sampled as part of the NYSDEC Citizen Statewide Lake Assessment Program (CSLAP) beginning in 1998 and continuing through 2005. An Interpretive Summary report of the findings of this sampling was published in 2006. These data indicate that the lake continues to be best characterized as mesoligotrophic, or moderately unproductive. Phosphorus levels in the lake typically fall well below the state guidance values indicating impacted/stressed recreational uses. Corresponding transparency measurements typically significantly 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 color does not appear to limit water transparency. (DEC/DOW, BWAM/CSLAP, July 2006)

### 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 to be very favorable since the lake was first evaluated and continuing through the most recent assessment. The recreational suitability of the lake is described most frequently as "excellent" or only "slightly" impacted. The lake itself is most often described as "crystal clear," an assessment somewhat more favorable than indicated by measured water quality characteristics, while the recreational assessment are slightly less favorable. Assessments have noted that aquatic plants regularly grow to, but not densely at, the lake surface. Aquatic plants surveys have not been conducted on the lake. (DEC/DOW, BWAM/CSLAP, July 2006)

### Lake Uses

This lake waterbody is designated class AA, 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.

### Other/Previous Sampling

Monitoring of Lake Clear (P199) was not included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. However, monitoring by ALSC (1985) revealed very low pH in Lindsey Pond (P200), Saint Germain Pond (P201) and Conley Line Pond (P204) and somewhat low pH in Meadow Pond (P203). Historical surveys of the smaller pond within this segment indicate that low pH due to acid deposition is limiting the fishery. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Water Quality Management

Efforts are underway on a national level to address problems caused by acid rain by reducing pollutant emissions, as required by the Clean Air Act. New York State (and other northeastern states) have taken legal action against USEPA to accelerate implementation of controls. Monitoring of these waters will continue, in order to assess changes in water quality resulting from implementation of the Clean Air Act. However, these changes are expected to occur only slowly over time.

### Section 303(d) Listing

Saint Germain Pond (P201) is included on the 2008 Section 303(d) List of Impaired Waters within the listing for Minor Lakes Trib to Upper Saranac Lake (1002-0086). However the lakes within this segment, including Saint Germain Pond, have been reassigned to other segments. As a result, it is recommended that the listing for Minor Lakes Trib to Upper Saranac Lake be replaced by a listing for Clear Pond. Lindsey Pond (P200) is included on the NYS 2008 Section 303(d) List of Impaired Waters in Appendix A as a Smaller Lakes Impaired by Acid Rain. (DEC/DOW, BWAM, 2008)

### Segment Description

This segment includes the total area of Clear Pond (P199) and St. Germain Pond (P201) and Meadow Pond (P203), as well as smaller Lindsey Pond (P200), Conley Line Pond (P204) and unnamed ponds (P202). All the waters of this segment are Class AA.

# Waterbody Inventory for Ausable-Boquet Rivers Watershed

Water Index Number	Waterbody Segment	Category
<b>Tribs to Lake Champlain Middle, Cumberland Bay to Ausable River</b>		
C- 16 thru 24 (selected)	Minor Tribs to Lake Champlain (1004-0019)	MinorImpacts
C- 21	Salmon River, Lower, and tribs (1004-0010)	NoKnownImpct
C- 21	Salmon River, Upper, and tribs (1004-0047)	Need Verific
C- 21- 2	Riley Brook, Upper, and tribs (1004-0098)	UnAssessed
C- 21-P210c	Davis Lake (1004-0048)	UnAssessed
C- 23	Little Ausable River, Lower, and tribs (1004-0018)	NoKnownImpct
C- 23	Little Ausable River, Upper, and tribs (1004-0021)	Need Verific
<b>Lower Ausable River Watershed</b>		
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-	Tribs 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
<b>West Branch Ausable River Watershed</b>		
C- 25-26	West Br Ausable, Lower, and minor tribs (1004-0042)	MinorImpacts
C- 25-26	West Br Ausable, Middle, and tribs (1004-0013)	MinorImpacts
C- 25-26	West Br Ausable, Upper, and tribs (1004-0056)	NoKnownImpct
C- 25-26- 4-P221	Black Brook Pond (1004-0059)	UnAssessed
C- 25-26- 4-P222	Fern Lake (1004-0060)	UnAssessed
C- 25-26- 4-P224	Slush Pond (1004-0061)	NoKnownImpct
C- 25-26- 4-P225	Military Pond (1004-0062)	NoKnownImpct
C- 25-26- 4-P227, P228	Taylor Pond (and Mud Pond) (1004-0063)	Need Verific
C- 25-26- 4-P227a	Oncio Pond (1004-0094)	NoKnownImpct
C- 25-26- 5-P227b	Newberry Pond (1004-0064)	UnAssessed
C- 25-26-28-P243	Connery Pond (1004-0066)	NoKnownImpct
C- 25-26-35	Chubb River and tribs (1004-0028)	Need Verific
C- 25-26-35-3-P250	Mirror Lake (1004-0067)	NoKnownImpct
C- 25-26-35-5-P254	Lake Placid (1004-0068)	NoKnownImpct
C- 25-26-35-5-P254-	Minor Tribs to Lake Placid (1004-0069)	UnAssessed
C- 25-26..P232 thru P251 (selected)	Minor Lakes Trib to West Br Ausable, Mid (1004-0065)	NoKnownImpct
C- 25-26..P258 thru P265	Minor Lakes Trib to West Br Ausable, Upp (1004-0070)	UnAssessed

# ...Ausable-Boquet Rivers Watershed

Water Index Number	Waterbody Segment	Category
<b>East Branch Ausable River Watershed</b>		
C- 25-27	East Br Ausable, Lower, and minor tribs (1004-0014)	MinorImpacts
C- 25-27	East Br Ausable, Middle, and tribs (1004-0071)	MinorImpacts
C- 25-27	East Br Ausable, Upper, and tribs (1004-0072)	MinorImpacts
C- 25-27- 9	Rocky Branch, Upper, and tribs (1004-0073)	NoKnownImpct
C- 25-27-25-P270,P271	Lower Cascade, Upper Cascade (1004-0075)	Need Verific
C- 25-27-36	Johns Brook and tribs (1004-0074)	NoKnownImpct
C- 25-27-38-P274	Chapel Pond (1004-0076)	NoKnownImpct
C- 25-27-P276, P277	Lower/Upper Ausable Lakes (1004-0077)	NoKnownImpct
<b>Tribes to Lake Champlain Middle, Ausable River to Boquet River</b>		
C- 26 thru 47 (selected)	Minor Tribs to Lake Champlain (1004-0099)	UnAssessed
C- 37	Little Trout Brook and tribs (1004-0095)	NoKnownImpct
C- 43-2-P278	Hadley Pond (1004-0083)	UnAssessed
C- 43-P282	Highlands Forge Lake (1004-0084)	NoKnownImpct
C- 43-P284	Long Pond (1004-0085)	UnAssessed
<b>Boquet River Watershed</b>		
C- 48	Boquet River, Lower, and tribs (1004-0037)	MinorImpacts
C- 48	Boquet River, Middle, and minor tribs (1004-0039)	MinorImpacts
C- 48	Boquet River, Middle, and minor tribs (1004-0046)	MinorImpacts
C- 48	Boquet River, Upper, and tribs (1004-0081)	NoKnownImpct
C- 48- 6	North Branch Boquet, Lower, and tribs (1004-0078)	MinorImpacts
C- 48- 6	North Branch Boquet, Upper, and tribs (1004-0036)	NoKnownImpct
C- 48- 6- 9-5-P286	Frances Lake (1004-0086)	NoKnownImpct
C- 48- 6-10	Spruce Mill Brook, Lower, and tribs (1004-0079)	NoKnownImpct
C- 48- 6-10	Spruce Mill Brook, Upper, and tribs (1004-0080)	NoKnownImpct
C- 48- 6-10-11-P288	Big Pond (1004-0087)	NoKnownImpct
C- 48- 6..P289 thru P310	Minor Lake Tribs to Upper North Branch (1004-0088)	NoKnownImpct
C- 48-26	Black River and tribs (1004-0082)	UnAssessed
C- 48-26-32-P314	Nichols Pond (1004-0089)	NoKnownImpct
C- 48-26-P315	Lincoln Pond (1004-0090)	Impaired Seg
C- 48-26..P318,P316,P319	Mill/Russet/Tanaher Ponds (1004-0091)	NoKnownImpct
C- 48-34	The Branch (Boquet) and tribs (1004-0040)	UnAssessed
C- 48-36,37	Locklaird, Killkenny Brooks and tribs (1004-0096)	UnAssessed
C- 48-45-P326	Little Pond (1004-0092)	NoKnownImpct
C- 48-67-3-P329	Round Pond (1004-0093)	NoKnownImpct

# Minor Tribs to Lake Champlain ( 1004-0019)

# MinorImpacts

## Waterbody Location Information

Revised: 04/21/2009

**Water Index No:** C- 16 thru 24 (selected)      **Drain Basin:** Lake Champlain  
**Hydro Unit Code:** 02010004/      **Str Class:** C\*      **AuSable/Boquet**  
**Waterbody Type:** River (Low Flow)      **Reg/County:** 5/Essex Co. (16)  
**Waterbody Size:** 73.8 Miles      **Quad Map:** KEESEVILLE (C-27-4) ...  
**Seg Description:** total length of selected tribs, Main Lake Middle

## 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 (phosphorus)  
Possible: ---

### Source(s) of Pollutant(s)

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

### Overview

Aquatic life in Silver Stream and other Lake Champlain tribs of this segment are thought to experience minor impacts/threats due to nutrient loadings from agricultural and urban runoff and other nonpoint sources. Silver Stream is just one of several streams that make up this waterbody segment, but it is considered representative of water quality in the segment as a whole. This segment is listed as being evaluated rather than monitored.

### Water Quality Sampling

A biological (macroinvertebrate) assessment of Silver Stream in South Plattsburgh (at Nelson Road) was conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated slightly impacted conditions. Some replacement of sensitive ubiquitous species by more tolerant species was noted although the sample included a balanced distribution of all expected species. Aquatic life is considered 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 some stress to aquatic life. Impact source determination found a community that reflect nonpoint source impacts. (DEC/DOW, BWAM/SBU, January 2009)

### Segment Description

This segment includes total length of smaller tributaries to Lake Champlain between Saranac River and Split Rock Point (HUC 02010004). Tribs within this segment, including Silver Stream (-22), Dead Creek (-24), are primarily Class C,C(T) and D. Saranac River (-15), Salmon River (-21), Little Ausable River (-23) and Ausable River (-25) are listed separately.

# Salmon River, Lower, and tribs ( 1004-0010)

NoKnownImpct

## Waterbody Location Information

Revised: 04/10/2001

**Water Index No:** C- 21  
**Hydro Unit Code:** 02010004/090      **Str Class:** C(T)\*  
**Waterbody Type:** River (Med. Flow)      **Reg/County:** 5/Clinton Co. (10)  
**Waterbody Size:** 81.6 Miles      **Quad Map:** PLATTSBURGH (C-27-1) ...  
**Seg Description:** stream and tribs from mouth to Davis Lake

## 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 Salmon River in south Plattsburgh (at Salmon River Road) was conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated non-impacted conditions. The sample was 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)

NYSDEC Rotating Intensive Basin Studies (RIBS) Intensive Network monitoring of the Salmon River in South Plattsburgh (at Salmon River Road) was also conducted in 1998-99. Biological sampling of the river in both years revealed that non-impacted water quality was clearly indicated. The fauna was diverse and well-balanced, with all indices within the non-impacted range. Other indicators (water chemistry, etc) also indicated good water quality. (DEC/DOW, BWAR/RIBS, January 2001)

### Segment Description

This segment includes the portion of the stream and selected/smaller tribs from the mouth to Davis Lake. The waters of this portion of the stream are Class C(T). Tribs to this reach/segment, including Lower Riley Brook (-2), are Class C(T) and D.

Upper Riley Brook and Upper Salmon River are listed separately.

# Salmon River, Upper, and tribs ( 1004-0047)

NoKnownImpct

## Waterbody Location Information

Revised: 12/07/2000

**Water Index No:** C- 21  
**Hydro Unit Code:** 02010004/090      **Str Class:** C(T)  
**Waterbody Type:** River  
**Waterbody Size:** 73.4 Miles  
**Seg Description:** stream and tribs above Davis Lake

**Drain Basin:** Lake Champlain  
AuSable/Boquet  
**Reg/County:** 5/Clinton Co. (10)  
**Quad Map:** PEASLEEVILLE (C-26-4) ...

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

## Further Details

### Water Quality Sampling

A biological (macroinvertebrate) assessment of Salmon River in Peasleeville (at Westcott Road) 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 relatively insignificant and water quality is considered to be good. The nutrient biotic index and impact source determination indicates some slight enrichment in the stream and fauna that is most similar to natural conditions. 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)

### 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. Concerns have also been raised regarding the operation of dams and the occasional release of large amounts of sediment into the stream which has happened in the past. (DEC/DFWMR, Region 5, June 2009)

The Local Trout Unlimited chapter also indicates some concern regarding streambank erosion along the river. (Lake Champlain Chapter, Trout Unlimited, February 2001)

#### Segment Description

This segment includes the portion of the stream and selected/smaller tribs above Davis Lake. The waters of this portion of the stream are Class C(T). Tribs to this reach/segment are Class C(T) and D. This segment also includes Mud Pond (P211). Lower Salmon River is listed separately.

# Little Ausable River, Lower, and tribs ( 1004-0018)

NoKnownImpct

## Waterbody Location Information

Revised: 12/11/2000

**Water Index No:** C- 23  
**Hydro Unit Code:** 02010004/080      **Str Class:** C  
**Waterbody Type:** River (Med. Flow)      **Reg/County:** 5/Clinton Co. (10)  
**Waterbody Size:** 57.6 Miles      **Quad Map:** PERU (C-26-3) ...  
**Seg Description:** stream and tribs from mouth to dam in Peru

## 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 Little Ausable River in Lapham Mills (at Fuller Road) was conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated non- to slightly impacted conditions. The sample was dominated by clean-water species and the community revealed 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. Low nutrient enrichment likely from nonpoint sources was noted. These results are consistent with previous sampling in 1998, 1997 and 1993 which also should non-impacted conditions. Aquatic life community is considered fully supported. (DEC/DOW, BWAM/SBU, January 2009)

NYSDEC Rotating Intensive Basin Studies (RIBS) Intensive Network monitoring of the Little Ausable River in Lamphams Mills (at Fuller Street) was conducted also in 1998-99. Biological (macroinvertebrate) sampling of the river in both years revealed that non-impacted water quality was clearly indicated. The fauna was diverse and well-balanced, with all indices within the non-impacted range. Other indicators (water chemistry, etc) also indicated good water quality. (DEC/DOW, BWAR/RIBS, January 2001)

#### 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)

#### Segment Description

This segment includes the portion of the stream and all tribs from the mouth to the Peru water supply dam. The waters of this portion of the stream are Class C. Tribs to this reach/segment, including Arnold Brook (-4) and Spaulding Brook (-5), are Class C and D.

# Little Ausable River, Upper, and tribs ( 1004-0021)

Need Verific

## Waterbody Location Information

Revised: 06/01/2009

**Water Index No:** C- 23  
**Hydro Unit Code:** 02010004/080      **Str Class:** A(T)  
**Waterbody Type:** River (Med. Flow)  
**Waterbody Size:** 86.3 Miles  
**Seg Description:** stream and tribs above dam in Peru

**Drain Basin:** Lake Champlain  
AuSable/Boquet  
**Reg/County:** 5/Clinton Co. (10)  
**Quad Map:** PERU (C-26-3) ...

## 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: OTHER POLLUTANTS

### Source(s) of Pollutant(s)

Known: ---  
Suspected: ---  
Possible: OTHER SOURCE

## Resolution/Management Information

**Issue Resolvability:** 3 (Strategy Being Implemented)  
**Verification Status:** 5 (Management Strategy has been Developed)  
**Lead Agency/Office:** DEC/Reg5  
**TMDL/303d Status:** n/a

**Resolution Potential:** High

## Further Details

### Overview

Water supply uses of Upper Little Ausable are 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.

### Water Quality Sampling

A biological (macroinvertebrate) assessment of Little Ausable River in Clintonville (at Clintonville Road) was conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated non- to slightly impacted conditions. The community is slightly 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 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)

### Source (Drinking) Water Assessment

A source water assessment of Furnace Brook Reservoir, on a trib (Furnace Brook) to the Little Ausable, 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 Town of Peru. (NYSDOH, Source Water Assessment Program, 2005)

#### Segment Description

This segment includes the portion of the stream and all tribs above the Peru water supply dam. The waters of this portion of the stream are Class A(T). Tribs to this reach/segment, including Furnace Brook (-10) and Caldwell Brook (-11) are Class C(T) and D. Upper Furnace Brook (and tribs) are Class AA.

# 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/Canton 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 Keeseville 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](http://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)      **Drain Basin:** Lake Champlain  
**Waterbody Size:** 74.2 Miles      **Reg/County:** 5/Clinton Co. (10) ...  
**Seg Description:** stream and selected tribs, abv Ausable Chasm to E/W Br      **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](http://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  
**Hydro Unit Code:** 02010004/070      **Str Class:** A  
**Waterbody Type:** Lake (Unknown Trophic)  
**Waterbody Size:** 359.9 Acres  
**Seg Description:** entire lake

**Drain Basin:** Lake Champlain  
AuSable/Boquet  
**Reg/County:** 5/Essex Co. (16)  
**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

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

## 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

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

# West Br Ausable, Lower, and minor tribs ( 1004-0042)

MinorImpacts

## Waterbody Location Information

Revised: 08/10/2009

**Water Index No:** C- 25-26  
**Hydro Unit Code:** 02010004/060      **Str Class:** C(T)  
**Waterbody Type:** River (Med. Flow)      **Reg/County:** 5/Essex Co. (16)  
**Waterbody Size:** 38.6 Miles      **Quad Map:** AUSABLE FORKS (D-26-A) ...  
**Seg Description:** stream and selected tribs from mouth to Wilmington

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Habitat/Hydrology	Stressed	Suspected

### Type of Pollutant(s)

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

### Source(s) of Pollutant(s)

Known: ---  
Suspected: STREAMBANK EROSION  
Possible: Deicing (stor/appl), Roadbank Erosion

## 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

Fishery habitat in this portion of the West Branch Ausable River is thought to experience some impacts due to sand and sediment depositon from streambank erosion. Roadway runoff is also a contributing source.

### Habitat Assessment

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. Limited natural reproduction of trout and other cold water species has been documented in this reach and high levels of stream embeddedness are suspected as contributing to the impacts. A significant accumulation of silt behind the Wilmington Dam has been raised as a possible threat to fishery habitat. (DEC/DFWMR, Region 5, June 2009)

### Water Quality Sampling

A biological (macroinvertebrate) assessment of West Branch Ausable River in Ausable Forks (at Route 9N) was conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated non- to slightly impacted conditions. The sample was 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. Indications of slight impact are most likely the result of mountain watershed characteristics rather than water quality which is fully supportive of an aquatic life community. (DEC/DOW, BWAM/SBU, January 2009)

Biological (macroinvertebrate) assessments of Black Brook in Black Brook and Little Black Brook in Haselton were also conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated similar conditions in Black Brook, although with some low levels of nutrient enrichment and indications of nonpoint source inputs. Previous Black Brook sampling in 1998 found non-impacted water quality. Results from Little Black Brook showed non-impacted conditions in 2003 and in 1998. The sample was dominated by clean-water species and was most similar to a natural community with minimal human impacts. Aquatic life community in both streams is fully supported. (DEC/DOW, BWAM/SBU, January 2009)

Biological (macroinvertebrate) sampling along the West Branch in Haselton and Ausable Forks in 1998 also revealed clearly non-impacted conditions. Mayflies, stoneflies and caddisflies were all well-represented. No water quality problems were indicated. (DEC/DOW, BWAM/SBU, January 2000)

NYSDEC Rotating Intensive Basin Studies (RIBS) Intensive Network monitoring of the West Branch Ausable River in Ausable Forks (at Route 9N) was conducted in 1993-94. Overall water quality at this site was rated as good; only concerns regarding the impact of sand and sedimentation on the fishery prevented a rating of excellent. (DEC/DOW, BWAM/RIBS, April 1996)

#### 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](http://www.ausableriver.org), 2009)

#### Segment Description

This segment includes the portion of the stream and all tribs from the mouth at Ausable Forks to Wilmington Dam in Wilmington. The waters of this portion of the stream are Class C,C(T). Tribs to this reach/segment, including Black Brook (-4), Little Black Brook (-5), Big Brown Brook (-6), Pettigrew Brook (-8) and Beaver Brook (-9), are Class C(T) and D. This segment also includes Morgan (Cooper Kill) Pond (P229). Middle and Upper West Branch are listed separately.

# West Br Ausable, Middle, and tribs ( 1004-0013)

MinorImpacts

## Waterbody Location Information

Revised: 08/10/2009

**Water Index No:** C- 25-26  
**Hydro Unit Code:** 02010004/060      **Str Class:** C(T)\*  
**Waterbody Type:** River (Med. Flow)      **Reg/County:** 5/Essex Co. (16)  
**Waterbody Size:** 65.0 Miles      **Quad Map:** LAKE PLACID (D-25-B) ...  
**Seg Description:** stream and tribs from Wilmington to Lake Placid

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Habitat/Hydrology	Stressed	Suspected

### Type of Pollutant(s)

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

### Source(s) of Pollutant(s)

Known: ---  
Suspected: STREAMBANK EROSION  
Possible: Deicing (stor/appl), Roadbank Erosion

## 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

Fishery habitat in this portion of the West Branch Ausable River is thought to experience some impacts due to sand and sediment depositon from streambank erosion. Roadway runoff is also a contributing source.

### Habitat Assessment

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. Limited natural reproduction of trout and other cold water species has been documented in this reach and high levels of stream embeddedness are suspected as contributing to the impacts. (DEC/DFWMR, Region 5, June 2009)

### Water Quality Sampling

A biological (macroinvertebrate) assessment of West Branch Ausable River near Lake Placid (at Benham property) was conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated non- to slightly impacted conditions. The sample was dominated by clean-water species and was most similar to a natural community with some indication of nonpoint sources, but only 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. Indications of slight impact are most likely the result of mountain watershed characteristics rather than water quality which is fully supportive of an aquatic life community. (DEC/DOW, BWAM/SBU, January 2009)

A biological assessment of Roaring Brook near Lake Placid (off Route 21) was also conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated non-impacted conditions. The sample was 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)

Sampling at a site below the reach in Ausable Forks was also conducted in 2003. These results indicated mostly non-impacted conditions. 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. Some indications of slight impact are most likely the result of mountain watershed characteristics rather than water quality which is fully supportive of an aquatic life community. Though these sampling points are just outside the described segment, they are consistent with previous sampling in the reach and are considered representative of water quality in the middle reach. (DEC/DOW, BWAM/SBU, January 2009)

Prior to 2003 the most recent sampling in this reach was NYSDEC Rotating Intensive Basin Studies (RIBS) Intensive Network monitoring of the West Branch Ausable River in Wilmington (at County Route 19) which was conducted in 1999. At that time overall water quality was rated as good based on macroinvertebrate sampling, water chemistry, and other indicators. Biological (macroinvertebrate) sampling found clearly non-impacted conditions. Mayflies, stoneflies and caddisflies were all well-represented. No water quality problems were indicated. Biological sampling in 1998-99 at other sites along the West Branch in Lake Placid, Haselton and Ausable Forks also revealed non-impacted conditions. (DEC/DOW, BWAR/RIBS, January 2000)

Monitoring of several smaller ponds within this segment was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

#### Source (Drinking) Water Assessment

A source water assessment of White Brook Reservoir on White Brook found no elevated susceptibility to contamination. 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 Wilmington. (NYSDOH, Source Water Assessment Program, 2005)

#### 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. For more info see West Branch Ausable, Lower, and tribs (1004-0042).

#### Segment Description

This segment includes the portion of the stream and all tribs from the Wilmington Dam in Wilmington to the Chubb River (-35) in Lake Placid. The waters of this portion of the stream are Class B(T) for a one-mile reach above the Wilmington Dam and Class C(T) for the remainder of the reach. Tribs to this reach/segment, including White Brook (-12), Connery Pond Outlet (-28) and Roaring Brook (-33), are primarily Class C(T); a trib to White Brook (-12-3) is Class AA(T). The Chubb River and Lower and Upper West Branches are listed separately.

# West Br Ausable, Upper, and tribs ( 1004-0056)

NoKnownImpct

## Waterbody Location Information

Revised: 06/10/2009

**Water Index No:** C- 25-26  
**Hydro Unit Code:** 02010004/060      **Str Class:** C(T)  
**Waterbody Type:** River  
**Waterbody Size:** 88.4 Miles  
**Seg Description:** stream and tribs above Lake Placid

**Drain Basin:** Lake Champlain  
AuSable/Boquet  
**Reg/County:** 5/Essex Co. (16)  
**Quad Map:** KEENE VALLEY (E-25-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      **Resolution Potential:** n/a  
**TMDL/303d Status:** n/a

## Further Details

### Water Quality Sampling

NYSDEC Rotating Integrated Basin Studies (RIBS) Intensive Network monitoring of West Branch Ausable River in Lake Placid, Essex County, (at Route 73) was conducted in 2003 and 2004. Intensive Network sampling typically includes macroinvertebrate community analysis, water column chemistry, sediment and invertebrate tissues analysis and toxicity evaluation. Biological (macroinvertebrate) sampling results reveal non-impacted conditions, indicating very good water quality. Water column sampling found aluminum to be a parameter of concern, exceeding its assessment criteria in 3 of 10 samples. However, the median aluminum concentration for the samples was below the criterion. Macroinvertebrates collected at this site and chemically analyzed for selected metals and PAHs found no compounds present in concentrations above the established guidance value. Sediment screening for acute toxicity indicated possible slight toxicity, but analysis of sediments found no contaminants above the threshold effects concentration. Based on sediment quality guidelines developed for freshwater ecosystems, overall sediment quality is not likely to result in toxicity to sediment-dwelling organisms. Toxicity testing of the water column also showed no significant mortality or reproductive impacts. Based on the consensus of these established assessment methods, overall water quality at this site shows that in spite of some concerns that should continue to be monitored, aquatic life is considered to be fully supported in the stream, and there are no other apparent water quality impacts to recreational uses. (DEC/DOW, BWAM/RIBS, May 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. For more info see West Branch Ausable, Lower, and tribs (1004-0042).

#### Segment Description

This segment includes the portion of the stream and all tribs above the Chubb River (-35) in Lake Placid. The waters of this portion of the stream are Class C(T). Tribs to this reach/segment, including Alder Brook (-37), Indian Pass Brook (-39), South Meadow Brook (-41), and Marcy Brook (-46), are Class C(T). The Chubb River and Lower and Middle West Branches are listed separately.

# Slush Pond ( 1004-0061)

NoKnownImpct

## Waterbody Location Information

Revised: 03/02/2009

<b>Water Index No:</b> C- 25-26- 4-P224	<b>Drain Basin:</b> Lake Champlain
<b>Hydro Unit Code:</b> 02010004/060 <b>Str Class:</b> C(T)	AuSable/Boquet
<b>Waterbody Type:</b> Lake (Unknown Trophic)	<b>Reg/County:</b> 5/Clinton Co. (10)
<b>Waterbody Size:</b> 40.7 Acres	<b>Quad Map:</b> PEASLEEVILLE (C-26-4)
<b>Seg Description:</b> entire lake	

## 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

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

## Further Details

### Water Quality Sampling

Monitoring of Slush Pond was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Segment Description

This segment includes the total area of Slush Pond (P224).

# Military Pond (1004-0062)

NoKnownImpct

## Waterbody Location Information

Revised: 03/02/2009

<b>Water Index No:</b>	C- 25-26- 4-P225	<b>Drain Basin:</b>	Lake Champlain
<b>Hydro Unit Code:</b>	02010004/060	<b>Str Class:</b>	C(T)
<b>Waterbody Type:</b>	Lake (Mesotrophic)	<b>Reg/County:</b>	5/Clinton Co. (10)
<b>Waterbody Size:</b>	26.6 Acres	<b>Quad Map:</b>	PEASLEEVILLE (C-26-4)
<b>Seg Description:</b>	entire lake		

## 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

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

## Further Details

### Water Quality Sampling

Monitoring of Military Pond was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Segment Description

This segment includes the total area of Military Pond (P225), and smaller unnamed pond (P225b).

# Taylor Pond (and Mud Pond) ( 1004-0063)

Need Verific

## Waterbody Location Information

Revised: 04/28/2009

**Water Index No:** C- 25-26- 4-P227, P228  
**Hydro Unit Code:** 02010004/060      **Str Class:** C(T)  
**Waterbody Type:** Lake  
**Waterbody Size:** 870.1 Acres  
**Seg Description:** entire lake (includes Mud Pond)

**Drain Basin:** Lake Champlain  
AuSable/Boquet  
**Reg/County:** 5/Clinton Co. (10)  
**Quad Map:** WILMINGTON (D-25-A)

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Aquatic Life	Threatened	Suspected

### Type of Pollutant(s)

Known: ---  
Suspected: D.O./OXYGEN DEMAND  
Possible: ---

### Source(s) of Pollutant(s)

Known: ---  
Suspected: ---  
Possible: UNKNOWN SOURCE

## Resolution/Management Information

**Issue Resolvability:** 1 (Needs Verification/Study (see STATUS))  
**Verification Status:** 3 (Cause Identified, Source Unknown)  
**Lead Agency/Office:** DEC/BWAM  
**TMDL/303d Status:** ApdxB

**Resolution Potential:** Medium

## Further Details

### Overview

Aquatic life support, particularly the fishery, in Taylor and Mud Ponds is thought to experience threats due to low dissolved oxygen levels. These conditions occur seasonally in deeper waters of the lake and may very well be naturally occurring.

### Water Quality Sampling

Sampling of Taylor Pond during a 1999 Lake Classification and Inventory (LCI) evaluation found hypolimnetic hypoxia. While the impact of these conditions may or may not affect the fishery (in fact, they could represent natural lake conditions), they suggest at least threat to aquatic life. (DEC/DOW, BWAM/RIBS, April 2009).

Monitoring of Mud Pond, a smaller pond within this segment, was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

#### Section 303(d) Listing

Taylor Pond is included on the NYS 2008 Section 303(d) List of Impaired Waters. The lakes are included among the waters listed in Appendix B - Waters Not Meeting Dissolved Oxygen Standards. This part of the List recognizes waterbodies where low dissolved oxygen in lake bottom waters may be the result of morphology and other natural conditions in thermally stratified lakes. However because NYS water quality standards for dissolved oxygen do not include an explicit exception for natural conditions or averaging of dissolved oxygen over lake depth, USEPA requires that the Section 303(d) List recognize such waters. (DEC/DOW, BWAM/WQAS, April 2009)

#### Segment Description

This segment includes the total area of Taylor Pond (P227) and Mud Pond (P228).

# Oncio Pond ( 1004-0094)

NoKnownImpct

## Waterbody Location Information

Revised: 03/02/2009

<b>Water Index No:</b>	C- 25-26- 4-P227a	<b>Drain Basin:</b>	Lake Champlain
<b>Hydro Unit Code:</b>	02010006/060	<b>Str Class:</b>	C(T)
<b>Waterbody Type:</b>	Lake (Unknown Trophic)	<b>Reg/County:</b>	5/Essex Co. (16)
<b>Waterbody Size:</b>	8.5 Acres	<b>Quad Map:</b>	WILMINGTON (D-25-A)
<b>Seg Description:</b>	entire lake		

## 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

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

## Further Details

### Water Quality Sampling

Monitoring of Oncio Pond was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Segment Description

This segment includes the total area of Oncio Pond (P227a).

# Connery Pond ( 1004-0066)

NoKnownImpct

## Waterbody Location Information

Revised: 03/02/2009

<b>Water Index No:</b>	C- 25-26-28-P243	<b>Drain Basin:</b>	Lake Champlain
<b>Hydro Unit Code:</b>	02010004/060	<b>Str Class:</b>	C(T)
<b>Waterbody Type:</b>	Lake (Mesotrophic)	<b>Reg/County:</b>	5/Essex Co. (16)
<b>Waterbody Size:</b>	80.9 Acres	<b>Quad Map:</b>	LAKE PLACID (D-25-B)
<b>Seg Description:</b>	entire lake		

## 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

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

## Further Details

### Water Quality Sampling

Monitoring of Connery Pond was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Segment Description

This segment includes the total area of Connery Pond (P243).

# Chubb River and tribs ( 1004-0028)

Need Verific

## Waterbody Location Information

Revised: 08/10/2009

**Water Index No:** C- 25-26-35  
**Hydro Unit Code:** 02010004/060      **Str Class:** C  
**Waterbody Type:** River (Med. Flow)  
**Waterbody Size:** 54.7 Miles  
**Seg Description:** entire stream and tribs

**Drain Basin:** Lake Champlain  
AuSable/Boquet  
**Reg/County:** 5/Essex Co. (16)  
**Quad Map:** LAKE PLACID (D-25-B)

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

### Type of Pollutant(s)

Known: - - -  
Suspected: NUTRIENTS  
Possible: Aesthetics (floatables, debris)

### Source(s) of Pollutant(s)

Known: - - -  
Suspected: MUNICIPAL (Lake Placid WWTP), Urban/Storm Runoff  
Possible: - - -

## Resolution/Management Information

**Issue Resolvability:** 6 (Problem Thought to be Abated)  
**Verification Status:** (Not Applicable for Selected RESOLVABILITY)  
**Lead Agency/Office:** DOW/Reg5  
**TMDL/303d Status:** n/a

**Resolution Potential:** Medium

## Further Details

### Overview

Aquatic life and recreational uses in the Chubb River may be continuing to experience minor impacts due to nutrient loads and other pollutants from the Lake Placid WWTP discharge. The WWTP was recently upgraded and follow-up monitoring is recommended to verify conditions in the stream.

### Water Quality Sampling

A biological (macroinvertebrate) assessment of Chubb River in Lake Placid (at confluence with East Branch Ausable) was conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated slightly impacted conditions. Some replacement of sensitive ubiquitous species by more tolerant species was noted although the sample included a balanced distribution of all expected species. Aquatic life is considered to be fully supported in the stream, however the community composition and nutrient biotic evaluation suggests conditions and levels of enrichment are sufficient to cause some stress to aquatic life. Impact source determination found a community that showed indications of nonpoint sources. Some impoundment effect was also indicated. Note: This sampling was conducted prior to the completion of the Lake Placid WWTP upgrade. Previous sampling in both 1997 and also 1998 revealed slightly impacted water quality. Impact Source Determination indicates nutrient enrichment and biodegradable wastes, likely from the Lake Placid WWTP. (DEC/DOW,

BWAM/SBU, January 2009)

#### Source Assessment

A new 2.5 MGD wastewater treatment plant to serve Lake Placid was built and began operation in 2005. This \$14M facility was funded through various sources, including an SRF Loan, and replaced an inadequate facility that was more than 30 years old. The upgraded WWTP continues to provide a highly treated and disinfected wastewater to the adjacent golf course for reclaimed water on 45-holes of golf. (DEC/DOW, Region 5, June 2009)

#### Segment Description

This segment includes the entire stream and all tribs. The waters of the stream are Class C,C(T). Tribs to this reach/segment, including Lower Mirror Lake Outlet (-3) and Lower Lake Placid Outlet (-5), are Class C(T) and D; unnamed trib (-4) and Lake Placid Outlet (-5) are Class B,B(T), and a trib of Lake Placid Outlet (-5-1) is Class AA.

# Mirror Lake ( 1004-0067)

NoKnownImpct

## Waterbody Location Information

Revised: 03/05/2009

**Water Index No:** C- 25-26-35-3-P250  
**Hydro Unit Code:** 02010004/060      **Str Class:** B(T)  
**Waterbody Type:** Lake (Oligotrophic)  
**Waterbody Size:** 121.1 Acres  
**Seg Description:** entire lake

**Drain Basin:** Lake Champlain  
AuSable/Boquet  
**Reg/County:** 5/Essex Co. (16)  
**Quad Map:** LAKE PLACID (D-25-B)

## 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

Mirror Lake has been sampled as part of the NYSDEC Citizen Statewide Lake Assessment Program (CSLAP) beginning in 1998 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 oligotrophic, or unproductive. This has been the condition of the lake throughout the recent sampling. Phosphorus levels in the lake fall well below the state guidance values indicating impacted/stressed recreational uses. Corresponding transparency measurements significantly exceed the recommended minimum for swimming beaches. Measurements of pH are somewhat low but typically fall within the state water quality standard range of 6.5 to 8.5. The lake water is weakly colored, and color does not limit water transparency. (DEC/DOW, BWAM/CSLAP, September 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 to be very favorable since the lake was first evaluated and continuing through the most recent assessment. The recreational suitability of the lake is described most frequently as "excellent." The lake itself is most often described as "not quite crystal clear," an assessment that is somewhat less favorable than expected given the measured water quality characteristics. Assessments have noted that aquatic plants typically grow to the lake surface but are not dense

enough to impact uses. Aquatic plants are dominated by native species. (DEC/DOW, BWAM/CSLAP, September 2007)

#### Lake Uses

This lake waterbody is designated class B(T), suitable for use as a public bathing beach, general recreation and aquatic life support, but not as a public water supply. 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 total area of Mirror Lake (P250).

# Lake Placid ( 1004-0068)

NoKnownImpct

## Waterbody Location Information

Revised: 05/29/2009

**Water Index No:** C- 25-26-35-5-P254  
**Hydro Unit Code:** 02010004/060      **Str Class:** AAspcl  
**Waterbody Type:** Lake (Oligotrophic)      **Drain Basin:** Lake Champlain  
**Waterbody Size:** 1954.3 Acres      **Reg/County:** 5/Essex Co. (16)  
**Seg Description:** entire lake      **Quad Map:** LAKE PLACID (D-25-B)

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

### Type of Pollutant(s)

Known:      - - -  
Suspected:      - - -  
Possible:      OTHER POLLUTANTS (various)

### Source(s) of Pollutant(s)

Known:      - - -  
Suspected:      - - -  
Possible:      OTHER SOURCE (various)

## Resolution/Management Information

**Issue Resolvability:** 3 (Strategy Being Implemented)  
**Verification Status:** 5 (Management Strategy has been Developed)  
**Lead Agency/Office:** DOW/Reg5  
**TMDL/303d Status:** n/a

**Resolution Potential:** High

## Further Details

### Water Quality Sampling

Lake Placid has been sampled as part of the NYSDEC Citizen Statewide Lake Assessment Program (CSLAP) beginning in 1991 and most 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 oligotrophic, or unproductive. These trophic conditions have remained consistent throughout the sampling period. Phosphorus levels in the lake fall well below the state guidance values indicating impacted/stressed recreational uses. Corresponding transparency measurements greatly 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 weakly colored, but color does not limit water transparency. (DEC/DOW, BWAM/CSLAP, July 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 to be very favorable since the lake was first evaluated and continuing through the most recent assessment. The recreational suitability of the lake is described most frequently as "could not be nicer." The lake itself is most often described as "crystal clear" or "not quite crystal clear," an assessment that is somewhat less favorable than expected given measured water quality characteristics. Assessments have noted that aquatic plants rarely grows to the lake

surface. Aquatic plants are dominated by native species and have not been cited as impacting recreational uses. (DEC/DOW, BWAM/CSLAP, July 2007)

#### Lake Uses

This lake waterbody is designated class AA(T), 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.

#### Source (Drinking) Water Assessment

A source water assessment of the Lake Placid water supply found no noteworthy risks to source water quality. 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 Lake Placid. (NYSDOH, Source Water Assessment Program, 2005)

Lake Placid has been designated a Class AA-special water, suitable for use as a drinking water supply. The Class AA-special designation also means there shall be no discharge or disposal of sewage, industrial wastes, or other wastes into these waters. As a result of this designation, the lake is considered a highly valued resource and is subject to special protections which may result in an assessment of threatened (possible) for drinking water use.

#### Segment Description

This segment includes the total area of Lake Placid (P254).

# Minor Lakes Trib to West Br Ausable, Mid ( 1004-0065) NoKnownImpct

## Waterbody Location Information

Revised: 03/02/2009

**Water Index No:** C- 25-26..P232 thru P251 (selected)      **Drain Basin:** Lake Champlain  
**Hydro Unit Code:** 02010004/060      **Str Class:** C(T)      **AuSable/Boquet**  
**Waterbody Type:** Lake      **Reg/County:** 5/Essex Co. (16)  
**Waterbody Size:** 127.5 Acres      **Quad Map:** LAKE PLACID (D-25-B)  
**Seg Description:** total area of selected lakes

## 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

Monitoring of a number of ponds within this segment was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. Data for Owen Pond (P233), Copperas Pond (P234), Marsh Pond (P238), Big Cherrypatch Pond (P241), Tom Peck Pond (P242), Long Pond (P244), Holcomb/Malcolm Pond (P247) and Echo Lake (P251) as well as some other smaller ponds revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

Both Big Cherrypatch Pond (P241) and Holcomb Pond (P247) were included in the 1992 USEPA Environmental Monitoring and Assessment Program (EMAP) effort; results of this study found no evidence of water quality impairment. Highly colored water and elevated nutrients, chlorophyll values in Big Cherrypatch Pond were thought to represent natural conditions of the pond. (DEC/DOW, BWM/Lake Services, December 2000)

Section 303(d) Listing

Copperas Pond (P234) and Marsh Pond (P238) were previously erroneously listed on the Section 303(d) as being impaired by Acid Rain. However it has been determined that the Copperas Pond listing should have been assigned to East Copperas Pond (P138), which is included within the Square Pond (1003-0093) segment. Similarly, Marsh Pond (P238) should have been assigned to Marsh Pond (P145), which is included within the Floodwood Pond (1003-0095) segment. (DEC/DOW, BWAM/WQAS, January 2009)

#### Segment Description

This segment includes the total area of all selected/smaller lakes/ponds within the Middle West Branch Ausable watershed. Lakes within this segment, including Owen Pond (P233), Copperas Pond (P234), Marsh Pond (P238), Big Cherrypatch Pond (P241), Tom Peck Pond (P242), Long Pond (P244), Holcomb/Malcolm Pond (P247) and Echo Lake (P251), as well as smaller ponds Warren Pond (P232), Marsh Pond (P235), Winch Pond (P236), Little Cherrypatch Pond (P240), Duck Pond (P245), Cold Spring Pond (P246) and Newman Pond (P249) are primarily Class C(T). Larger lakes, such as Connery Pond (P243) and Mirror Lake (P250), are listed separately.

# East Br Ausable, Lower, and minor tribs ( 1004-0014)

MinorImpacts

## Waterbody Location Information

Revised: 08/10/2009

**Water Index No:** C- 25-27  
**Hydro Unit Code:** 02010004/050      **Str Class:** C(T)  
**Waterbody Type:** River (Med. Flow)      **Reg/County:** 5/Essex Co. (16)  
**Waterbody Size:** 50.5 Miles      **Quad Map:** AUSABLE FORKS (D-26-A) ...  
**Seg Description:** stream and selected tribs from mouth to Upper Jay

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Habitat/Hydrology	Stressed	Suspected
Recreation	Stressed	Possible

### Type of Pollutant(s)

Known: - - -  
Suspected: SILT/SEDIMENT  
Possible: Aesthetics (floatables, odors), Pathogens

### Source(s) of Pollutant(s)

Known: - - -  
Suspected: STREAMBANK EROSION  
Possible: Deicing (stor/appl), On-Site/Septic Syst, Roadbank Erosion

## 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

Fishery habitat in this portion of the East Branch Ausable River is thought to experience some impacts due to sand and sediment deposition from streambank erosion. Roadway runoff is also a contributing source. Concerns regarding residential discharges to the stream have been noted in the past, but these need to be verified.

### Habitat Assessment

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. Limited natural reproduction of trout and other cold water species has been documented in this reach and high levels of stream embeddedness are suspected as contributing to the impacts. The heavy bedload results in the rapid buildup of gravel bars which also cause ice jamming problems. (DEC/DFWMR, Region 5, June 2009)

### Water Quality Sampling

A biological (macroinvertebrate) assessment of East Branch Ausable River in Ausable Forks (at Route 9R) was conducted

as part of the RIBS biological screening effort in 2003. Sampling results indicated non-impacted conditions. The sample was 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. Biological sampling along the East Branch in Ausable Forks in 1998 also found clearly non-impacted conditions. Mayflies, stoneflies, caddisflies and hellgrammites were all well-represented. Water quality was deemed exemplary and aquatic life community is fully supported. (DEC/DOW, BWAM/SBU, January 2009).

NYSDEC Rotating Intensive Basin Studies (RIBS) Intensive Network monitoring of the East Branch Ausable River in Ausable Forks (at County Route 65) was conducted in 1993-94. Overall water quality at this site was rated as good; only concerns regarding the impact of sand and sedimentation on the fishery prevented a rating of excellent. (DEC/DOW, BWAR/RIBS, April 1996)

#### Source (Drinking) Water Assessment

A source water assessment of Big Brook Impoundment in the Lewis (Mill) Brook watershed 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 Upper Jay. (NYSDOH, Source Water Assessment Program, 2005)

#### 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](http://www.ausableriver.org), 2009)

#### Previous Assessment

Concerns were raised during previous assessment efforts (1998) regarding impacts from the direct discharge of sewage from a few homes along the river. Coliform levels as well as aesthetics were noted as concerns. At the time the practice of direct discharges has been ongoing for many years without being adequately addressed. Solutions would likely require home owners to install leach systems or, in some cases, sand filters. While more recent monitoring does not reveal any related impact on the stream, verification of the situation and appropriate measures to eliminate any discharges is recommended. (DEC/DOW, BWAM/WQAS and Region 5, July 2009)

#### Segment Description

This segment includes the portion of the stream and selected/smaller tribs from the mouth at Ausable Forks to the Town of Keene town line near Upper Jay. The waters of this portion of the stream are Class B(T) from the mouth to unnamed Trib (-1) and Class C(T) for the remainder of the reach. Tribs to this reach/segment, including Rocky Branch (-9), Otis Brook (-12) and Lewis (Mill) Brook (-17), are primarily Class C(T) and D. This segment also includes Lake Eaton (P267) and Clements Pond (P268). Upper Rocky Branch and Middle and Upper East Branches are listed separately.

# East Br Ausable, Middle, and tribs ( 1004-0071)

MinorImpacts

## Waterbody Location Information

Revised: 08/10/2009

**Water Index No:** C- 25-27  
**Hydro Unit Code:** 02010004/050      **Str Class:** AA(T)  
**Waterbody Type:** River  
**Waterbody Size:** 155.9 Miles  
**Seg Description:** stream and selected tribs fr Upper Jay to Keene Valley

**Drain Basin:** Lake Champlain  
**Reg/County:** 5/Essex Co. (16)  
**Quad Map:** LAKE PLACID (D-25-B) ...  
**AuSable/Boquet**

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Habitat/Hydrology	Stressed	Suspected

### Type of Pollutant(s)

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

### Source(s) of Pollutant(s)

Known: ---  
Suspected: STREAMBANK EROSION  
Possible: Deicing (stor/appl), Roadbank Erosion

## 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

Fishery habitat in this portion of the East Branch Ausable River is thought to experience some impacts due to sand and sediment depositon from streambank erosion. Roadway runoff is also a contributing source. There is some data indicating low pH in some smaller ponds within the segment as a result of atmospheric deposition (acid rain). However available data indicating such impacts is limited to these small ponds and is more than 20 years old. The more recent data on the larger waterbody segment is considered to be more reflective of water quality conditions in the segment as a whole.

### Habitat Assessment

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. Limited natural reproduction of trout and other cold water species has been documented in this reach and high levels of stream embeddedness are suspected as contributing to the impacts. The heavy bedload results in the rapid buildup of gravel bars which also cause ice jamming problems. (DEC/DFWMR, Region 5, June 2009)

### Water Quality Sampling

Biological (macroinvertebrate) sampling along the East Branch Ausable River in Keene Valley (at Barclay Road) at the head of this segment was conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated non-impacted conditions. The sample was dominated by clean-water species and was 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. Sampling below this reach in Ausable Forks in 2003 found similar conditions. Biological sampling along the East Branch in Keene and Keene Valley in 1998 also found clearly non-impacted conditions. Mayflies, stoneflies, caddisflies and hellgrammites were all well-represented. Water quality was deemed exemplary and aquatic life community is fully supported. (DEC/DOW, BWAM/SBU, January 2009).

NYSDEC Rotating Integrated Basin Studies (RIBS) Intensive Network monitoring of Cascade Brook in Keene, Essex County, (at Church Street) was conducted in 2003 and 2004. Intensive Network sampling typically includes macroinvertebrate community analysis, water column chemistry, sediment and invertebrate tissues analysis and toxicity evaluation. Biological (macroinvertebrate) sampling results revealed non-impacted conditions, indicating very good water quality. Water column sampling found no parameters of concern. Macroinvertebrates collected at this site and chemically analyzed for selected metals and PAHs found arsenic to be present at a concentration above the established guidance value. Sediment screening for acute toxicity indicated possible toxicity, but analysis of sediments found no contaminants above the threshold effects concentration. Based on sediment quality guidelines developed for freshwater ecosystems, overall sediment quality is not likely to result in toxicity to sediment-dwelling organisms. Chronic toxicity testing using water from this location elevated mortality and reproductive effects on the test organism in one of the three tests performed; the other test showed no significant mortality or reproductive effects. Based on the consensus of these established assessment methods, overall water quality at this site shows that in spite of some concerns that should continue to be monitored, aquatic life is considered to be fully supported in the stream, and there are no other apparent water quality impacts to recreational uses. (DEC/DOW, BWAM/RIBS, May 2009).

Monitoring of small ponds in this segment by the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. Monitoring by ALSC revealed very low pH in Lost Pond (P272) and unnamed pond (P269). (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Water Quality Management

Efforts are underway on a national level to address problems caused by acid rain by reducing pollutant emissions, as required by the Clean Air Act. New York State (and other northeastern states) have taken legal action against USEPA to accelerate implementation of controls. Monitoring of these waters will continue, in order to assess changes in water quality resulting from implementation of the Clean Air Act. However, these changes are expected to occur only slowly over time.

### 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. For more info see East Branch Ausable, Lower, and tribs (1004-0014).

### Section 303(d) Listing

Lost Pond (P272) and an unnamed pond (P269) within this segment are included on the NYS 2008 Section 303(d) List of Impaired Waters in Appendix A as a Smaller Lakes Impaired by Acid Rain. (DEC/DOW, BWAM, 2008)

### Segment Description

This segment includes the portion of the stream and all tribs from the Town of Keene town line near Upper Jay to Johns Brook (-36) in Keene Valley. The waters of this portion of the stream are Class AA. Tribs to this reach/segment, including Lewis Brook (-17), Styles Brook (-21), Nichols Brook (-23), Cascade Brook (-25), Jones Brook (-26), Dart Brook (-27), Walton Brook (-28), Spruce Hill Brook (-30), Porter Brook (-33), Phelps Brook (-35), are Class AA(T). This segment also includes smaller ponds Highland Farm Pond (P272a), Lost Pond (P272) and unnamed pond (P269). Johns Brook (-36) and Lower and Upper East Branches are listed separately.

# East Br Ausable, Upper, and tribs ( 1004-0072)

MinorImpacts

## Waterbody Location Information

Revised: 08/10/2009

**Water Index No:** C- 25-27  
**Hydro Unit Code:** 02010004/050      **Str Class:** AA(T)  
**Waterbody Type:** River  
**Waterbody Size:** 102.6 Miles  
**Seg Description:** stream and tribs above Keene Valley

**Drain Basin:** Lake Champlain  
**Reg/County:** 5/Essex Co. (16)  
**Quad Map:** KEENE VALLEY (E-25-A) ...

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Habitat/Hydrology	Stressed	Suspected

### Type of Pollutant(s)

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

### Source(s) of Pollutant(s)

Known: ---  
Suspected: STREAMBANK EROSION  
Possible: Deicing (stor/appl), Roadbank Erosion

## 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

Fishery habitat in this portion of the East Branch Ausable River is thought to experience some impacts due to sand and sediment depositon from streambank erosion. Roadway runoff is also a contributing source.

### Habitat Assessment

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. Limited natural reproduction of trout and other cold water species has been documented in this reach and high levels of stream embeddedness are suspected as contributing to the impacts. The heavy bedload results in the rapid buildup of gravel bars which also cause ice jamming problems. (DEC/DFWMR, Region 5, June 2009)

### Water Quality Sampling

Biological (macroinvertebrate) sampling along the East Branch Ausable River in Keene Valley (at Barclay Road) was conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated non-impacted conditions. The sample was dominated by clean-water species and was 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. Biological sampling along the East Branch in Keene and Keene Valley in 1998 also found clearly non-impacted conditions. Mayflies, stoneflies, caddisflies and hellgrammites were all well-represented. Water quality was deemed exemplary and aquatic life community is fully supported. (DEC/DOW, BWAM/SBU, January 2009)

Biological sampling of Phelps Brook in Keene Valley (at Palmer Hill Road) was also conducted as part of the RIBS biological screening effort in 2003. Sampling results also indicated non-impacted conditions. The sample was dominated by clean-water species and was similar to a natural community with minimal human impacts. Aquatic life community is fully supported. (DEC/DOW, BWAM/SBU, January 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. For more info see East Branch Ausable, Lower, and tribs (1004-0014).

#### Segment Description

This segment includes the portion of the stream and all tribs above Johns Brook (-36) in Keene Valley. The waters of this portion of the stream are Class AA. Tribs to this reach/segment, including Beede Brook (-38), Gill Brook (-39), Shanty Brook (-46), Cascade Brook (-25), Jones Brook (-26), Dart Brook (-27), Walton Brook (-28), Spruce Hill Brook (-30), Porter Brook (-33), Phelps Brook (-35) and Johns Brook (-36), are Class AA(T). Johns Brook (-36) and Lower and Middle East Branches are listed separately.

# Rocky Branch, Upper, and tribs ( 1004-0073)

NoKnownImpct

## Waterbody Location Information

Revised: 04/21/2009

**Water Index No:** C- 25-27- 9  
**Hydro Unit Code:** 02010004/050      **Str Class:** AA(T)  
**Waterbody Type:** River  
**Waterbody Size:** 23.6 Miles  
**Seg Description:** stream and tribs above Jay water supply dam

**Drain Basin:** Lake Champlain  
**Reg/County:** 5/Essex Co. (16)  
**Quad Map:** LEWIS (D-26-B)  
**AuSable/Boquet**

## 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 Rocky Branch Brook in Jay (at Hazen Road) was conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated non-impacted conditions. The sample was dominated by clean-water species and conditions reflected a natural community with minimal, if any, human impacts. Aquatic life community is clearly fully supported. (DEC/DOW, BWAM/SBU, January 2009)

### Segment Description

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

## Lower Cascade, Upper Cascade ( 1004-0075)

Need Verific

### Waterbody Location Information

Revised: 04/28/2009

**Water Index No:** C- 25-27-25-P270,P271  
**Hydro Unit Code:** 02010004/050      **Str Class:** AA(T)  
**Waterbody Type:** Lake  
**Waterbody Size:** 52.8 Acres  
**Seg Description:** total area of all three lakes

**Drain Basin:** Lake Champlain  
**Reg/County:** 5/Essex Co. (16)  
**Quad Map:** KEENE VALLEY (E-25-A)

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

Use(s) Impacted	Severity	Problem Documentation
Aquatic Life	Threatened	Suspected

#### Type of Pollutant(s)

Known: ---  
Suspected: D.O./OXYGEN DEMAND  
Possible: ---

#### Source(s) of Pollutant(s)

Known: ---  
Suspected: ---  
Possible: UNKNOWN SOURCE

### Resolution/Management Information

**Issue Resolvability:** 1 (Needs Verification/Study (see STATUS))  
**Verification Status:** 3 (Cause Identified, Source Unknown)  
**Lead Agency/Office:** DEC/BWAM  
**TMDL/303d Status:** ApdxB

**Resolution Potential:** Medium

### Further Details

#### Overview

Aquatic life support, particularly the fishery, in Cascade Lakes is thought to experience threats due to low dissolved oxygen levels. These conditions occur seasonally in deeper waters of the lake and may very well be naturally occurring.

#### Water Quality Sampling

Sampling in Upper Cascade Lake during a 1999 Lake Classification and Inventory (LCI) evaluation found hypolimnetic hypoxia. While the impact of these conditions may or may not affect the fishery (in fact, they could represent natural lake conditions), they suggest at least threat to aquatic life. Cascade Lakes are scheduled to be sampled in 2009 as part of the LCI program.(DEC/DOW, BWAM/RIBS, April 2009).

Monitoring of Cascade Lakes was also included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

#### Section 303(d) Listing

Cascade Lakes are included on the NYS 2008 Section 303(d) List of Impaired Waters. The lakes are included among the waters listed in Appendix B - Waters Not Meeting Dissolved Oxygen Standards. This part of the List recognizes waterbodies where low dissolved oxygen in lake bottom waters may be the result of morphology and other natural conditions in thermally stratified lakes. However because NYS water quality standards for dissolved oxygen do not include an explicit exception for natural conditions or averaging of dissolved oxygen over lake depth, USEPA requires that the Section 303(d) List recognize such waters. (DEC/DOW, BWAM/WQAS, April 2009)

#### Segment Description

This segment includes the total area of Lower Cascade (P270) and Upper Cascade (P271) Lakes.

# Johns Brook and tribs ( 1004-0074)

NoKnownImpct

## Waterbody Location Information

Revised: 04/21/2009

**Water Index No:** C- 25-27-36  
**Hydro Unit Code:** 02010004/050      **Str Class:** AA(T)  
**Waterbody Type:** River  
**Waterbody Size:** 40.1 Miles  
**Seg Description:** entire stream and tribs

**Drain Basin:** Lake Champlain  
**Reg/County:** 5/Essex Co. (16)  
**Quad Map:** KEENE VALLEY (E-25-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      **Resolution Potential:** n/a  
**TMDL/303d Status:** n/a

## Further Details

### Water Quality Sampling

A biological (macroinvertebrate) assessment of Johns Brook in Keene Valley (at Johns Brook Road) was conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated non-impacted conditions. The sample was dominated by clean-water species and conditions reflected a natural community with minimal, if any, human impacts. Aquatic life community is clearly fully supported. (DEC/DOW, BWAM/SBU, January 2009)

### Source (Drinking) Water Assessment

A source water assessment of Black Brook, a trib to Johns Brook, found no noteworthy risks to water quality. 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 Johns Brook Lodge. (NYSDOH, Source Water Assessment Program, 2005)

### Segment Description

This segment includes the entire stream and all tribs. The waters of the stream are Class AA(T). Tribs to this reach/segment, including Slide Brook (-1), Dry Bed Brook (-13), Big Slide Mountain Brook (-14), and Black Brook (-15) are Class C(T) and AA(T).

# Chapel Pond ( 1004-0076)

NoKnownImpct

## Waterbody Location Information

Revised: 03/02/2009

**Water Index No:** C- 25-27-38-P274  
**Hydro Unit Code:** 02010004/050      **Str Class:** AA(T)  
**Waterbody Type:** Lake (Oligotrophic)      **Drain Basin:** Lake Champlain  
**Waterbody Size:** 18.8 Acres      **Reg/County:** 5/Essex Co. (16)  
**Seg Description:** entire lake      **Quad Map:** KEENE VALLEY (E-25-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      **Resolution Potential:** n/a  
**TMDL/303d Status:** n/a

## Further Details

### Water Quality Sampling

Monitoring of Chapel Pond was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Segment Description

This segment includes the total area of Chapel Pond (P274) and smaller Giant Washbowl Pond (P273).

## Lower/Upper Ausable Lakes ( 1004-0077)

NoKnownImpct

### Waterbody Location Information

Revised: 03/02/2009

**Water Index No:** C- 25-27-P276, P277  
**Hydro Unit Code:** 02010004/050      **Str Class:** AA  
**Waterbody Type:** Lake  
**Waterbody Size:** 294.1 Acres  
**Seg Description:** total area of both lakes

**Drain Basin:** Lake Champlain  
AuSable/Boquet  
**Reg/County:** 5/Essex Co. (16)  
**Quad Map:** MOUNT MARCY (E-25-B)

### 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

Monitoring of Lower and Upper Ausable Lakes was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

#### Segment Description

This segment includes the total area of both lakes.

# Little Trout Brook and tribs ( 1004-0095)

NoKnownImpct

## Waterbody Location Information

Revised: 04/21/2009

**Water Index No:** C- 37  
**Hydro Unit Code:** 02010004/040      **Str Class:** AA(T)  
**Waterbody Type:** River  
**Waterbody Size:** 10.7 Miles  
**Seg Description:** entire stream and tribs

**Drain Basin:** Lake Champlain  
**Reg/County:** 5/Essex Co. (16)  
**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  
**TMDL/303d Status:** n/a

**Resolution Potential:** n/a

## Further Details

### Water Quality Sampling

A biological (macroinvertebrate) assessment of Little Trout Brook in Port Douglas (at Route 28/Highlands Road) was conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated non-impacted conditions. The sample was dominated by clean-water species and conditions reflected a natural community with minimal, if any, human impacts. Aquatic life community is clearly fully supported. (DEC/DOW, BWAM/SBU, January 2009)

### Segment Description

This segment includes the entire stream and all tribs. The waters of the stream are Class AA(T). Tribs to this reach/segment are also Class AA(T).

# Highlands Forge Lake ( 1004-0084)

NoKnownImpct

## Waterbody Location Information

Revised: 06/01/2009

<b>Water Index No:</b>	C- 43-P282	<b>Drain Basin:</b>	Lake Champlain
<b>Hydro Unit Code:</b>	02010004/040	<b>Str Class:</b>	C(T)
<b>Waterbody Type:</b>	Lake (Oligotrophic)	<b>Reg/County:</b>	AuSable/Boquet
<b>Waterbody Size:</b>	123.9 Acres	<b>Reg/County:</b>	5/Essex Co. (16)
<b>Seg Description:</b>	entire lake	<b>Quad Map:</b>	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

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

## Further Details

### Water Quality Sampling

Highlands Forge Lake was included in the 1993 USEPA Environmental Monitoring and Assessment Program (EMAP) effort; results of this study found no evidence of water quality impairment. Because this sampling was conducted more than 10 years ago this assessment is considered to be evaluated, rather than monitored. (DEC/DOW, BWM/Lake Services, May 2009)

# Boquet River, Lower, and tribs ( 1004-0037)

MinorImpacts

## Waterbody Location Information

Revised: 08/14/2009

<b>Water Index No:</b>	C- 48	<b>Drain Basin:</b>	Lake Champlain
<b>Hydro Unit Code:</b>	02010004/030	<b>Str Class:</b>	C(T)
<b>Waterbody Type:</b>	River (Med. Flow)	<b>Reg/County:</b>	5/Essex Co. (16)
<b>Waterbody Size:</b>	6.1 Miles	<b>Quad Map:</b>	WILLSBORO (D-27-0)
<b>Seg Description:</b>	stream and tribs from mouth to Willsboro		

## 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	Known

### Type of Pollutant(s)

Known: SILT/SEDIMENT (coal ash and debris), Algal/Weed Growth  
 Suspected: Metals  
 Possible: - - -

### Source(s) of Pollutant(s)

Known: LANDFILL/LAND DISP. (Willsboro Black Ash Pond)  
 Suspected: - - -  
 Possible: - - -

## Resolution/Management Information

<b>Issue Resolvability:</b>	2 (Strategy Exists, Needs Funding/Resources)	
<b>Verification Status:</b>	5 (Management Strategy has been Developed)	
<b>Lead Agency/Office:</b>	DEC/DER	<b>Resolution Potential:</b> High
<b>TMDL/303d Status:</b>	n/a	

## Further Details

### Overview

Aquatic life support, recreational uses and aesthetics in this portion of the Boquet River are known to experience impacts from sediment runoff from an old waste site.

### Willsboro Black Ash Pond Site

A pulp mill operated along the Boquet River from the 1880s through to 1964. During this operation the residue of the combustion of black liquor - a combination of soda ash, chemical lime, wood fiber and soft coal used in the paper pulp making - was stored in a pond on site. This black ash accumulated to fill the 900 ft by 400 ft pond to a depth of 16 feet. Over time the dyke constructed to hold the waste has erode, exposing the black ash to the river; it is now eroding directly into the river. A remedial site investigation was completed in 2006. The investigation found that erosion of the fine-grained black ash into the river impacts reproduction and survival of aquatic life. Although impacts to human health are minimal, the poor aesthetics of the site also impact recreational uses. (DEC/DER, Willsboro Black Ash Pond Site, E-5-16-009, March 2007)

### Water Quality Management/Remediation

A remedial alternatives report, issued in 2007, recommended capping the site with clean soil, grading the site to control stormwater and infiltration, and stabilization of the riverbank to eliminate erosion of material into the river. Up to 90% of the funding for the \$4 million remedial project was to come from the State Environmental Restoration Program, however that funding has been depleted. Efforts to find alternative funding have not been successful. (DEC/DER, August 2009)

### Water Quality Sampling

NYSDEC Rotating Integrated Basin Studies (RIBS) Intensive Network monitoring of Boquet River in Willsboro, Essex County, (at Route 22) was conducted in 2003 and 2004. Intensive Network sampling typically includes macroinvertebrate community analysis, water column chemistry, sediment and invertebrate tissues analysis and toxicity evaluation. Biological (macroinvertebrate) sampling results reveal non-impacted conditions, indicating very good water quality. Water column sampling found lead to be a parameter of concern, exceeding its assessment criteria in 2 of 10 samples. However, the exceedences were at the criterion and the median lead concentration for the samples was well below the standard. Macroinvertebrates collected at this site and chemically analyzed for selected metals and PAHs found arsenic and chromium to be present at concentrations above the established guidance values. Sediment screening for acute toxicity indicated possible toxicity, but analysis of sediments found no contaminants above the threshold effects concentration. Based on sediment quality guidelines developed for freshwater ecosystems, overall sediment quality is not likely to result in toxicity to sediment-dwelling organisms. Toxicity testing of the water column also showed no significant mortality or reproductive impacts. Based on the consensus of these established assessment methods, overall water quality at this site shows that in spite of some concerns that should continue to be monitored, aquatic life is considered to be fully supported in the stream, and there are no other apparent water quality impacts to recreational uses. Note that this sampling site is upstream of the Willboro Black Ash Pond Site. (DEC/DOW, BWAM/RIBS, May 2009).

A biological (macroinvertebrate) survey of Boquet River at multiple sites from Wadhams to Underwood was conducted in 2004. Sampling results indicated non-impacted conditions at all sites. The samples were dominated by clean-water species and conditions reflected a natural community with minimal, if any, human impacts. The sample collected in Elizabethtown revealed a slight increase in nutrient and nonpoint impacts, but the site was still most similar to natural communities. These results are consistent with previous sampling at these sites conducted in 2003, 1998 and 1992. Aquatic life community is clearly fully supported. Although these sites are located above this reach, the results support an assessment of good water quality in this downstream reach. (DEC/DOW, BWAM/SBU, January 2009)

### The Boquet River Association

The Boquet River Association is a small, 200-member, grass-roots non-profit organization dedicated to enhancing the quality of water and life in the Boquet watershed. Formed in 1984, it focuses on issues related to land uses, point and non-point source pollution, in-stream and riparian species and habitats, recreation, and the economy. Its membership is primarily local landowners, and its Board is composed of appointees from the five watershed towns and elected representatives. BRASS is known for its dedication to river quality and for mitigating conflicting river interests. It also has a reputation for accomplishing projects through education and by coordinating skills and services of volunteers, businesses, county and town governments, and state agencies. BRASS conducts periodic water quality monitoring, streambank stabilization projects, and public education programs including a newsletter. (Boquet River Association, 2009)

### Segment Description

This segment includes the portion of the stream and all tribs from the mouth to the railroad bridge above Willsboro. The waters of this portion of the stream are Class C,C(T). Tribs to this reach/segment, including Randy Brook (-1), are Class D. Middle/Upper Bouquet River are listed separately.

# Boquet River, Middle, and minor tribs ( 1004-0039)

# MinorImpacts

## Waterbody Location Information

Revised: 08/10/2009

**Water Index No:** C- 48  
**Hydro Unit Code:** 02010004/030      **Str Class:** A  
**Waterbody Type:** River (Med. Flow)      **Reg/County:** 5/Essex Co. (16)  
**Waterbody Size:** 77.4 Miles      **Quad Map:** WILLSBORO (D-27-0) ...  
**Seg Description:** stream and selected tribs from Willsboro to Wadhams

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Habitat/Hydrology	Stressed	Suspected

### Type of Pollutant(s)

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

### Source(s) of Pollutant(s)

Known:      - - -  
Suspected:      STREAMBANK EROSION  
Possible:      Deicing (stor/appl) (road sanding), Roadbank 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

### Overview

Fishery habitat in this portion of the Boquet River is thought to experience some impacts due to sand and sediment deposition from streambank erosion. Roadway runoff is also a contributing source.

### Habitat Assessment

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. Limited natural reproduction of trout and other cold water species has been documented in this reach and high levels of stream embeddedness are suspected as contributing to the impacts. The heavy bedload results in the rapid buildup of gravel bars which also cause ice jamming problems. (DEC/DFWMR, Region 5, June 2009)

### Water Quality Sampling

A biological (macroinvertebrate) survey of Boquet River at multiple sites from Wadhams to Underwood was conducted in 2004. Sampling results indicated non-impacted conditions at all sites, including a site in Wadhams (at Mariam Forge Road). The sample was dominated by clean-water species and conditions reflected a natural community with minimal, if any, human

impacts. These results are consistent with previous sampling at this site conducted in 1998. Aquatic life community is clearly fully supported. (DEC/DOW, BWAM/SBU, January 2009)

NYSDEC Rotating Integrated Basin Studies (RIBS) Intensive Network monitoring of Boquet River in Willsboro, just below this segment was conducted in 2003 and 2004. Intensive Network sampling typically includes macroinvertebrate community analysis, water column chemistry, sediment and invertebrate tissues analysis and toxicity evaluation. Biological (macroinvertebrate) sampling results reveal non-impacted conditions, indicating very good water quality. Water column sampling found lead to be a parameter of concern, exceeding its assessment criteria in 2 of 10 samples. However, the exceedences were at the criterion and the median lead concentration for the samples was well below the standard. Macroinvertebrates collected at this site and chemically analyzed for selected metals and PAHs found arsenic and chromium to be present at concentrations above the established guidance values. Sediment screening for acute toxicity indicated possible toxicity, but analysis of sediments found no contaminants above the threshold effects concentration. Based on sediment quality guidelines developed for freshwater ecosystems, overall sediment quality is not likely to result in toxicity to sediment-dwelling organisms. Toxicity testing of the water column also showed no significant mortality or reproductive impacts. Based on the consensus of these established assessment methods, overall water quality at this site shows that in spite of some concerns that should continue to be monitored, aquatic life is considered to be fully supported in the stream, and there are no other apparent water quality impacts to recreational uses. (DEC/DOW, BWAM/RIBS, May 2009).

#### The Boquet River Association

The Boquet River Association is a small, 200-member, grass-roots non-profit organization dedicated to enhancing the quality of water and life in the Boquet watershed. Formed in 1984, it focuses on issues related to land uses, point and non-point source pollution, in-stream and riparian species and habitats, recreation, and the economy. Its membership is primarily local landowners, and its Board is composed of appointees from the five watershed towns and elected representatives. BRASS is known for its dedication to river quality and for mitigating conflicting river interests. It also has a reputation for accomplishing projects through education and by coordinating skills and services of volunteers, businesses, county and town governments, and state agencies. BRASS conducts periodic water quality monitoring, streambank stabilization projects, and public education programs including a newsletter. (Boquet River Association, 2009)

Other concerns were raised regarding potential impacts from agricultural activities and inadequate and/or failing on-site septic systems in the watershed. Lake Champlain NonPoint Assessment Reports and the Boquet River Assoc report phosphorus loads above amounts predicted by land use models. Accelerated streambank erosion of sandy, noncohesive soils is also a concern. A Town of Essex Sanitary Survey found one-third of septic systems in Wallonsburg operate unsatisfactorily, with 40% of lots too small to conform to standards. Current conditions related to these potential impacts need to be re-evaluated. (Boquet River Assoc and LCBP, April 2000)

#### Segment Description

This segment includes the portion of the stream and selected/smaller tribs from the railroad bridge above Willsboro to the water supply dam in Wadhams. The waters of this portion of the stream are Class A. Tribs to this reach/segment, including Beaver Brook (-15) and Crooked Brook (-21), are primarily Class D, with one trib Class C(T). North Branch (-6) and Lower/Upper Bouquet River are listed separately.

# Boquet River, Middle, and minor tribs ( 1004-0046)

MinorImpacts

## Waterbody Location Information

Revised: 08/10/2009

**Water Index No:** C- 48  
**Hydro Unit Code:** 02010004/030      **Str Class:** C(T)  
**Waterbody Type:** River (Med. Flow)      **Reg/County:** 5/Essex Co. (16)  
**Waterbody Size:** 42.4 Miles      **Quad Map:** ELIZABETHTOWN (E-26-A) ...  
**Seg Description:** stream and selected tribs from Wadhams to Elizabethtown

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Habitat/Hydrology	Stressed	Suspected

### Type of Pollutant(s)

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

### Source(s) of Pollutant(s)

Known:      - - -  
Suspected:      STREAMBANK EROSION  
Possible:      Deicing (stor/appl) (road sanding), Roadbank 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

### Overview

Fishery habitat in this portion of the Boquet River is thought to experience some impacts due to sand and sediment deposition from streambank erosion. Roadway runoff is also a contributing source.

### Habitat Assessment

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. Limited natural reproduction of trout and other cold water species has been documented in this reach and high levels of stream embeddedness are suspected as contributing to the impacts. The heavy bedload results in the rapid buildup of gravel bars which also cause ice jamming problems. (DEC/DFWMR, Region 5, June 2009)

### Water Quality Sampling

A biological (macroinvertebrate) survey of Boquet River at multiple sites from Wadhams to Underwood was conducted in 2004. Sampling results indicated non-impacted conditions at all sites, including a site in Wadhams (at Mariam Forge Road) and in Elizabethtown (at Route 8A). The samples were dominated by clean-water species and conditions reflected a natural

community with minimal, if any, human impacts. The sample collected in Elizabethtown revealed a slight increase in nutrient and nonpoint impacts, but the site was still most similar to natural communities. These results are consistent with previous sampling at these sites conducted in 2003, 1998 and 1992. Aquatic life community is clearly fully supported. (DEC/DOW, BWAM/SBU, January 2009)

#### The Boquet River Association

The Boquet River Association is a small, 200-member, grass-roots non-profit organization dedicated to enhancing the quality of water and life in the Boquet watershed. Formed in 1984, it focuses on issues related to land uses, point and non-point source pollution, in-stream and riparian species and habitats, recreation, and the economy. Its membership is primarily local landowners, and its Board is composed of appointees from the five watershed towns and elected representatives. Brass is known for its dedication to river quality and for mitigating conflicting river interests. It also has a reputation for accomplishing projects through education and by coordinating skills and services of volunteers, businesses, county and town governments, and state agencies. BRASS conducts periodic water quality monitoring, streambank stabilization projects, and public education programs including a newsletter. (Boquet River Association, 2009)

#### Segment Description

This segment includes the portion of the stream and selected/smaller tribs from the water supply dam in Wadhams to The Branch (-34) in Elizabethtown. The waters of this portion of the stream are Class C(T). Tribs to this reach/segment, including Phelps Brook (-31), are primarily Class C(T) and D. Black River (-26) and The Branch (-34) as well as Lower/Upper Bouquet River are listed separately.

# Boquet River, Upper, and tribs ( 1004-0081)

NoKnownImpct

## Waterbody Location Information

Revised: 12/18/2000

**Water Index No:** C- 48  
**Hydro Unit Code:** 02010004/020      **Str Class:** C(T)\*  
**Waterbody Type:** River  
**Waterbody Size:** 100.7 Miles  
**Seg Description:** stream and tribs above Elizabethtown

**Drain Basin:** Lake Champlain  
AuSable/Boquet  
**Reg/County:** 5/Essex Co. (16)  
**Quad Map:** ELIZABETHTOWN (E-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      **Resolution Potential:** n/a  
**TMDL/303d Status:** n/a

## Further Details

### Overview

Aquatic life support and other uses are considered to be fully supported with no notable impacts to uses in this portion of the Boquet River. There is some data indicating low pH in some smaller ponds within the segment as a result of atmospheric deposition (acid rain). However available data indicating such impacts is limited to these small ponds and is more than 20 years old. The more recent data on the larger waterbody segment is considered to be more reflective of water quality conditions in the segment as a whole.

### Water Quality Sampling

A biological (macroinvertebrate) survey of Boquet River at multiple sites from Wadhams to Underwood was conducted in 2004. Sampling results indicated non-impacted conditions at all sites, including a site in Elizabethtown (at Route 8A) and in Underwood (at off Route 9). The samples were dominated by clean-water species and conditions reflected a natural community with minimal, if any, human impacts. The sample collected in Elizabethtown revealed a slight increase in nutrient and nonpoint impacts, but the site was still most similar to natural communities. These results are consistent with previous sampling at these sites conducted in 2003, 1998 and 1992. Aquatic life community is clearly fully supported. (DEC/DOW, BWAM/SBU, January 2009)

Monitoring of small ponds in this segment by the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. Monitoring by ALSC revealed very low pH in Bullet Pond (P327) and Cranberry Pond (P332). (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

#### Water Quality Management

Efforts are underway on a national level to address problems caused by acid rain by reducing pollutant emissions, as required by the Clean Air Act. New York State (and other northeastern states) have taken legal action against USEPA to accelerate implementation of controls. Monitoring of these waters will continue, in order to assess changes in water quality resulting from implementation of the Clean Air Act. However, these changes are expected to occur only slowly over time.

#### The Boquet River Association

The Boquet River Association is a small, 200-member, grass-roots non-profit organization dedicated to enhancing the quality of water and life in the Boquet watershed. Formed in 1984, it focuses on issues related to land uses, point and non-point source pollution, in-stream and riparian species and habitats, recreation, and the economy. Its membership is primarily local landowners, and its Board is composed of appointees from the five watershed towns and elected representatives. BRASS is known for its dedication to river quality and for mitigating conflicting river interests. It also has a reputation for accomplishing projects through education and by coordinating skills and services of volunteers, businesses, county and town governments, and state agencies. BRASS conducts periodic water quality monitoring, streambank stabilization projects, and public education programs including a newsletter. (Boquet River Association, 2009)

#### Section 303(d) Listing

Bullet Pond (P327) and Cranberry Pond (P332) within this segment are included on the NYS 2008 Section 303(d) List of Impaired Waters in Appendix A as a Smaller Lake Impaired by Acid Rain. (DEC/DOW, BWAM, 2008)

#### Segment Description

This segment includes the portion of the stream and all tribs above The Branch (-34) in Elizabethtown. The waters of this portion of the stream are Class C(T). Tribs to this reach/segment, including Little Pond Outlet (-45), Roaring Brook (-46), Stevens Brook (-56), Slide Brook (-62), North Fork (-67) and South Fork (-68), are primarily Class C(T) and D; one unnamed trib (-48) is Class AA(T). This segment also includes the smaller ponds smaller ponds Bullet Pond (P327), Lilypad Pond (P330) and Cranberry Pond (P332). The Branch (-34) as well as Lower/Middle Bouquet River are listed separately.

# North Branch Boquet, Lower, and tribs ( 1004-0078)

MinorImpacts

## Waterbody Location Information

Revised: 08/10/2009

**Water Index No:** C- 48- 6  
**Hydro Unit Code:** 02010004/020      **Str Class:** C(T)  
**Waterbody Type:** River  
**Waterbody Size:** 70.5 Miles  
**Seg Description:** stream and tribs from mouth to Reber/Spruce Mill Brook

**Drain Basin:** Lake Champlain  
AuSable/Boquet  
**Reg/County:** 5/Essex Co. (16)  
**Quad Map:** WILLSBORO (D-27-0)

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Habitat/Hydrology	Stressed	Suspected

### Type of Pollutant(s)

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

### Source(s) of Pollutant(s)

Known:        - - -  
Suspected:   STREAMBANK EROSION, Deicing (stor/appl) (road sanding)  
Possible:     Roadbank Erosion

## 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

Fishery habitat in this portion of the North Branch Boquet River is thought to experience some impacts due to sand and sediment deposition from streambank erosion. Roadway runoff is also a contributing source.

### Habitat Assessment

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. Limited natural reproduction of trout and other cold water species has been documented in this reach and high levels of stream embeddedness are suspected as contributing to the impacts. The heavy bedload results in the rapid buildup of gravel bars which also cause ice jamming problems. (DEC/DFWMR, Region 5, June 2009)

### Water Quality Sampling

A biological (macroinvertebrate) assessment of North Branch Boquet River in Reber (at Route 68/West Road) was conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated non-impacted conditions. The sample was dominated by clean-water species and conditions reflected a natural community with minimal, if any, human impacts.

Similar results were found at this site in 1998. Aquatic life community is clearly fully supported. (DEC/DOW, BWAM/SBU, January 2009)

#### The Boquet River Association

The Boquet River Association is a small, 200-member, grass-roots non-profit organization dedicated to enhancing the quality of water and life in the Boquet watershed. Formed in 1984, it focuses on issues related to land uses, point and non-point source pollution, in-stream and riparian species and habitats, recreation, and the economy. Its membership is primarily local landowners, and its Board is composed of appointees from the five watershed towns and elected representatives. BRASS is known for its dedication to river quality and for mitigating conflicting river interests. It also has a reputation for accomplishing projects through education and by coordinating skills and services of volunteers, businesses, county and town governments, and state agencies. BRASS conducts periodic water quality monitoring, streambank stabilization projects, and public education programs including a newsletter. (Boquet River Association, 2009)

#### Segment Description

This segment includes the portion of the stream and all tribs from the mouth to Spruce Mill Brook (-10) near Reber. The waters of this portion of the stream are Class C,C(T). Tribs to this reach/segment, including Cold/Reber Brook (-9), are Class C,C(T) and D. Spruce Mill Brook (-10) and Upper North Branch are listed separately.

# North Branch Boquet, Upper, and tribs ( 1004-0036)

NoKnownImpct

## Waterbody Location Information

Revised: 07/21/2009

**Water Index No:** C- 48- 6  
**Hydro Unit Code:** 02010004/020      **Str Class:** C(T)  
**Waterbody Type:** River (Med. Flow)      **Reg/County:** 5/Essex Co. (16)  
**Waterbody Size:** 84.2 Miles      **Quad Map:** LEWIS (D-26-B)  
**Seg Description:** stream and tribs above Reber/Spruce Mill Brook

## 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:** ext/WQCC      **Resolution Potential:** n/a  
**TMDL/303d Status:** n/a

## Further Details

### Water Quality Sampling

A biological (macroinvertebrate) assessment of North Branch Boquet River in Reber (at Route 68/West Road) was conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated non-impacted conditions. The sample was dominated by clean-water species and conditions reflected a natural community with minimal, if any, human impacts. Similar results were found at this site in 1998. Aquatic life community is clearly fully supported. (DEC/DOW, BWAM/SBU, January 2009)

### 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 Boquet River Association

The Boquet River Association is a small, 200-member, grass-roots non-profit organization dedicated to enhancing the quality of water and life in the Boquet watershed. Formed in 1984, it focuses on issues related to land uses, point and non-point source pollution, in-stream and riparian species and habitats, recreation, and the economy. Its membership is primarily local landowners, and its Board is composed of appointees from the five watershed towns and elected representatives. BRASS is known for its dedication to river quality and for mitigating conflicting river interests. It also has a reputation for accomplishing projects through education and by coordinating skills and services of volunteers, businesses, county and town governments, and state agencies. BRASS conducts periodic water quality monitoring, streambank stabilization projects, and public education programs including a newsletter. (Boquet River Association, 2009)

### Segment Description

This segment includes the portion of the stream and all tribs above Spruce Mill Brook (-10) near Reber. The waters of this portion of the stream are Class C(T). Tribs to this reach/segment, including Church Brook (-13), Hale Brook (-21) and Doyle Brook (-21-1), are Class D. Spruce Mill Brook (-10) and Lower North Branch are listed separately.

# Frances Lake ( 1004-0086)

NoKnownImpct

## Waterbody Location Information

Revised: 06/01/2009

<b>Water Index No:</b>	C- 48- 6- 9-5-P286	<b>Drain Basin:</b>	Lake Champlain
<b>Hydro Unit Code:</b>	02010004/020	<b>Str Class:</b>	C(T)
<b>Waterbody Type:</b>	Lake (Eutrophic)	<b>Reg/County:</b>	5/Essex Co. (16)
<b>Waterbody Size:</b>	30.2 Acres	<b>Quad Map:</b>	LEWIS (D-26-B)
<b>Seg Description:</b>	entire lake		

## 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

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

## Further Details

### Water Quality Sampling

Monitoring of Francis Lake was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Segment Description

This segment includes the entire area of the lake.

# Spruce Mill Brook, Lower, and tribs ( 1004-0079)

NoKnownImpct

## Waterbody Location Information

Revised: 12/20/2000

**Water Index No:** C- 48- 6-10  
**Hydro Unit Code:** 02010004/020      **Str Class:** C(T)  
**Waterbody Type:** River  
**Waterbody Size:** 46.6 Miles  
**Seg Description:** stream and tribs from mouth to Lewis water supply

**Drain Basin:** Lake Champlain  
**Reg/County:** 5/Essex Co. (16)  
**Quad Map:** LEWIS (D-26-B)

## 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 Spruce Mill Brook near Reber (at County Route 12) was conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated non-impacted conditions. The sample was dominated by clean-water species and conditions reflected a natural community with minimal, if any, human impacts. Similar results were found at this site in 1998. Aquatic life community is clearly fully supported. (DEC/DOW, BWAM/SBU, January 2009)

### Segment Description

This segment includes the portion of the stream and all tribs from the mouth to the Lewis water supply intake above Route 9 in Lewis. The waters of this portion of the stream are Class C(T). Tribs to this reach/segment, including Burpee Brook (-9), and Derby Brook (-11), are also Class C(T). Upper Spruce Mill Brook listed separately.

# Spruce Mill Brook, Upper, and tribs ( 1004-0080)

NoKnownImpct

## Waterbody Location Information

Revised: 04/21/2009

**Water Index No:** C- 48- 6-10  
**Hydro Unit Code:** 02010004/020      **Str Class:** AA(T)  
**Waterbody Type:** River  
**Waterbody Size:** 12.9 Miles  
**Seg Description:** stream and tribs above Lewis water supply intake

**Drain Basin:** Lake Champlain  
**Reg/County:** 5/Essex Co. (16)  
**Quad Map:** LEWIS (D-26-B)  
**AuSable/Boquet**

## 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 Spruce Mill Brook below this segment near Reber (at County Route 12) was conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated non-impacted conditions. The sample was dominated by clean-water species and conditions reflected a natural community with minimal, if any, human impacts. Similar results were found at this site in 1998. Though this sampling point is below the described segment, it is considered representative of water quality in the upper reach and the aquatic life community is considered to be fully supported. This segment is listed as being evaluated rather than monitored. (DEC/DOW, BWAM/SBU, January 2009)

### Segment Description

This segment includes the portion of the stream and all tribs above the Lewis water supply intake above Route 9 in Lewis. The waters of this portion of the stream are Class AA(T). Tribs to this reach/segment are also Class AA(T).

# Big Pond ( 1004-0087)

NoKnownImpct

## Waterbody Location Information

Revised: 03/02/2009

<b>Water Index No:</b>	C- 48- 6-10-11-P288	<b>Drain Basin:</b>	Lake Champlain
<b>Hydro Unit Code:</b>	02010004/020	<b>Str Class:</b>	C(T)
<b>Waterbody Type:</b>	Lake (Unknown Trophic)	<b>Reg/County:</b>	5/Essex Co. (16)
<b>Waterbody Size:</b>	52.6 Acres	<b>Quad Map:</b>	LEWIS (D-26-B)
<b>Seg Description:</b>	entire lake		

## 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

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

## Further Details

### Water Quality Sampling

Monitoring of Big Pond was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Segment Description

This segment includes the entire area of the lake.

# Minor Lake Tribs to Upper North Branch ( 1004-0088)

NoKnownImpct

## Waterbody Location Information

Revised: 03/02/2009

**Water Index No:** C- 48- 6..P289 thru P310  
**Hydro Unit Code:** 02010004/020      **Str Class:** C(T)  
**Waterbody Type:** Lake  
**Waterbody Size:** 94.4 Acres  
**Seg Description:** total area of selected lakes

**Drain Basin:** Lake Champlain  
**Reg/County:** 5/Essex Co. (16)  
**Quad Map:** LEWIS (D-26-B) ...

## 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

Monitoring of a number of ponds in this segment was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. Data for Clear Pond (P301) and Trout Pond (P306), as well as some other smaller ponds revealed no indication of impacts to aquatic life support or recreational use at the time.. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Segment Description

This segment includes the total area of all selected/smaller lakes/ponds within the Upper North Branch watershed. Lakes within this segment, including Mud Pond (P289), Lockart Pond (P297), Clear Pond (P301), Lawson Pond (P302), Trout Pond (P306), are primarily Class C(T).

# Nichols Pond ( 1004-0089)

NoKnownImpct

## Waterbody Location Information

Revised: 03/02/2009

<b>Water Index No:</b>	C- 48-26-32-P314	<b>Drain Basin:</b>	Lake Champlain
<b>Hydro Unit Code:</b>	02010004/030	<b>Str Class:</b>	C(T)
<b>Waterbody Type:</b>	Lake (Mesotrophic)	<b>Reg/County:</b>	5/Essex Co. (16)
<b>Waterbody Size:</b>	78.4 Acres	<b>Quad Map:</b>	ELIZABETHTOWN (E-26-A) ...
<b>Seg Description:</b>	entire lake		

## 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

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

## Further Details

### Water Quality Sampling

Monitoring of Nichols Pond was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Segment Description

This segment includes the total area of Nichols Pond, and smaller Little Nichols Pond (P313).

# Lincoln Pond ( 1004-0090)

Impaired Seg

## Waterbody Location Information

Revised: 03/09/2009

**Water Index No:** C- 48-26-P315  
**Hydro Unit Code:** 02010004/030      **Str Class:** B(T)  
**Waterbody Type:** Lake (Mesotrophic)  
**Waterbody Size:** 656.1 Acres  
**Seg Description:** entire lake

**Drain Basin:** Lake Champlain  
AuSable/Boquet  
**Reg/County:** 5/Essex Co. (16)  
**Quad Map:** ELIZABETHTOWN (E-26-A)

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

### Type of Pollutant(s)

Known: METALS (mercury), PROBLEM SPECIES (Eurasian milfoil)  
Suspected: ---  
Possible: ---

### Source(s) of Pollutant(s)

Known: HABITAT MODIFICATION  
Suspected: ATMOSPHERIC DEPOSITION  
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:** 2b,4c (Multiple Segment/Categorical Water, Fish Consumption, more)

## Further Details

### Overview

Fish consumption and recreational uses in Lincoln Pond are known to be impaired. The fish consumption impairment is the result of elevated mercury levels attributed to atmospheric deposition. Recreational impairments are attributed to excessive aquatic invasive weed growth.

### Fish Consumption

Fish consumption in Lincoln Pond is impaired due to a NYS DOH health advisory that recommends eating no more than one meal per month of larger (over 15 inches) largemouth bass because of elevated mercury levels. The source of mercury is considered to be atmospheric deposition, as there are not other apparent sources in the lake watershed. The advisory for this lake was first issued in 2006-07. (2008-09 NYS DOH Health Advisories and DEC/DFWMR, Habitat, January 2009).

### Water Quality Sampling

Lincoln Pond has been sampled as part of the NYSDEC Citizen Statewide Lake Assessment Program (CSLAP) beginning in 1997 and continuing through 2004. An Interpretive Summary report of the findings of this sampling was published in 2005. These data indicate that the lake continues to be best characterized as mesotrophic, or moderately productive. Phosphorus

levels in the lake only rarely exceed the state guidance values indicating impacted/stressed recreational uses. Corresponding transparency measurements greatly exceed the recommended minimum for swimming beaches. Measurements of pH typically fall within the state water quality range of 6.5 to 8.5. The lake water is weakly to moderately colored, reflecting the natural conditions in the watershed. But color does not appear to limit water transparency. (DEC/DOW, BWAM/CSLAP, October 2005)

#### 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 to be unfavorable, largely reflecting aquatic weed growth. The recreational suitability of the lake is described most frequently as "slightly" or "substantially" impacted, assessment that are inconsistent with measured water quality characteristics. The lake itself is most often described as having a "definite algal greenness," also inconsistent with measured conditions. Assessments have noted that aquatic plants typically grow to the lake surface and have been cited as causing impacts to recreational uses. There appears to be a mix of non-native (Eurasian watermilfoil, curly-leafed pondweed) and native plants in Lincoln Pond, although it is likely that the plant communities are dominated by the Eurasian watermilfoil. This species was the focus of a herbivorous insect project conducted by Cornell Cooperative Extension and the lake association. Cornell University has also conducted extensive aquatic plant surveys of the lake. (DEC/DOW, BWAM/CSLAP, October 2005)

The Lincoln Pond Association, in cooperation with Cornell University and funding from the Lake Champlain Basin Program, conducted a Eurasian watermilfoil control program that used aquatic moth caterpillars {*Acentria ephemerella*} in the pond. The Lincoln Pond project was conducted between 1999 and 2002. The introduction of the moths did not appear to have significantly increased moth populations in Lincoln Pond or to have produced a significant impact on pond milfoil. Fish predation is thought to hinder the expansion of moths in Lincoln Pond. (Lincoln Pond Association and Cornell Cooperative Extension, January 2003)

#### Lake Uses

This lake waterbody is designated class B(T), suitable for use as a public bathing beach, general recreation and aquatic life support, but not as a public water supply. 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.

#### Section 303(d) Listing

Lincoln Pond is included on the NYS 2008 Section 303(d) List of Impaired Waters. The lake is included on Part 2b of the List as a Fish Consumption Water due to the health advisory related to mercury levels. However the Northeast Regional Mercury TMDL which was approved in 2007 provides coverage for waters that are subsequently identified as being impaired by mercury from atmospheric deposition. As a result, NYSDEC anticipates delisting this waterbody when the 2010 Section 303(d) List is issued because of coverage under this TMDL. (DEC/DOW, BWAM, December 2008)

# Mill/Russet/Tanaher Ponds ( 1004-0091)

NoKnownImpct

## Waterbody Location Information

Revised: 03/02/2009

**Water Index No:** C- 48-26..P318,P316,P319  
**Hydro Unit Code:** 02010004/030      **Str Class:** C(T)  
**Waterbody Type:** Lake  
**Waterbody Size:** 88.6 Acres  
**Seg Description:** total area of all three lakes

**Drain Basin:** Lake Champlain  
**Reg/County:** 5/Essex Co. (16)  
**Quad Map:** ELIZABETHTOWN (E-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      **Resolution Potential:** n/a  
**TMDL/303d Status:** n/a

## Further Details

### Water Quality Sampling

Monitoring of these ponds was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. Data for Russet Pond (P316), Murray Pond (P317), Mill Pond (P318) and Tanaher Pond (P319) revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Segment Description

This segment includes the total area of Russet Pond (P316), Mill Pond (P318) and Tanaher Pond (P319), as well as smaller Murray Pond (P317) and Fifth Pond (P320).

# Little Pond ( 1004-0092)

NoKnownImpct

## Waterbody Location Information

Revised: 03/02/2009

<b>Water Index No:</b>	C- 48-45-P326	<b>Drain Basin:</b>	Lake Champlain
<b>Hydro Unit Code:</b>	02010004/030	<b>Str Class:</b>	C(T)
<b>Waterbody Type:</b>	Lake (Mesotrophic)	<b>Reg/County:</b>	5/Essex Co. (16)
<b>Waterbody Size:</b>	28.2 Acres	<b>Quad Map:</b>	ELIZABETHTOWN (E-26-A)
<b>Seg Description:</b>	entire lake		

## 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

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

## Further Details

### Water Quality Sampling

Monitoring of Little Pond was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Segment Description

This segment includes the total area of the lake.

# Round Pond ( 1004-0093)

NoKnownImpct

## Waterbody Location Information

Revised: 03/02/2009

<b>Water Index No:</b>	C- 48-67-3-P329	<b>Drain Basin:</b>	Lake Champlain
<b>Hydro Unit Code:</b>	02010004/030	<b>Str Class:</b>	C(T)
<b>Waterbody Type:</b>	Lake (Unknown Trophic)	<b>Reg/County:</b>	5/Essex Co. (16)
<b>Waterbody Size:</b>	17.7 Acres	<b>Quad Map:</b>	ELIZABETHTOWN (E-26-A)
<b>Seg Description:</b>	entire lake		

## 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

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

## Further Details

### Water Quality Sampling

Monitoring of Round Pond was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Segment Description

This segment includes the total area of Round Pond (P329).

# Waterbody Inventory for Lake Champlain South-Lake George Watershed

Water Index Number	Waterbody Segment	Category
<b>Tribs to Lake Champlain South, Boquet River to Ticonderoga Creek</b>		
C- 57 thru 99 (selected)	Minor Tribs to Lake Champlain (1001-0022)	NoKnownImpct
C- 73	Housington Brook and tribs (1001-0023)	NoKnownImpct
C- 80	Beaver Brook, Upper, and tribs (1001-0024)	UnAssessed
C- 86	Mill Brook and minor tribs (1001-0017)	NoKnownImpct
C- 86-3	Bartlett Brook, Upper, and minor tribs (1001-0025)	NoKnownImpct
C- 86-3-P338,P339,P340	Bartlett, Mud, North Ponds (1001-0027)	Impaired Seg
C- 86-5	Mill Brook Tributary (1001-0026)	NoKnownImpct
C- 86-P335	Mill Pond (1001-0028)	UnAssessed
C- 86..P341 thru P347	Minor Lakes in Mill Creek Watershed (1001-0029)	NoKnownImpct
C- 93-P348	Bullpout Pond (1001-0031)	NoKnownImpct
C- 96	Putnam Creek, Lower, and tribs (1005-0011)	NoKnownImpct
C- 96	Putnam Creek, Upper, and tribs (1005-0015)	UnAssessed
C- 96- 8-P352	Mud Pond (1005-0060)	NoKnownImpct
C- 96-P351a	Penfield Pond (1005-0017)	NoKnownImpct
C- 96-P355/P360	Putnam/North Ponds (1005-0018)	Need Verific
C- 96..P351 (P351b,P351c)	Sherman Lake (Goosepuddle/Burris Pond) (1005-0016)	NoKnownImpct
C- 96..P353 thru P361 (selected)	Minor Lakes in Upper Putnam Creek Wshed (1005-0019)	NoKnownImpct
C-100	Fivemile Run and tribs (1005-0021)	MinorImpacts
C-100-P364,P365	Buck Mountain, Worcester Ponds (1005-0022)	NoKnownImpct
<b>Lake George Watershed</b>		
C-101	Ticonderoga Creek (1006-0017)	MinorImpacts
C-101- 1	Trout Brook and tribs (1006-0018)	NoKnownImpct
C-101- 1-P354a	Haymeadow Pond (1006-0019)	NoKnownImpct
C-101-P367	Lake George (1006-0016)	Impaired Seg
C-101-P367- 1 thru 26	Tribs to L.George, East Shore (1006-0020)	Impaired Seg
C-101-P367- 1-P369,-10-P371	Mud Lake, Sheltered Lake, more (1006-0025)	UnAssessed
C-101-P367-27 thru 31	Tribs to L.George, Southeast Shore (1006-0021)	NoKnownImpct
C-101-P367-32 thru 40	Tribs to L.George, Village of L George (1006-0008)	Impaired Seg
C-101-P367-38-P377	Hidden Lake (1006-0026)	NoKnownImpct
C-101-P367-41	English Brook and tribs (1006-0032)	Impaired Seg
C-101-P367-42 thru 48	Tribs to L.George, Town of Lake George (1006-0004)	NoKnownImpct
C-101-P367-49 thru 73 (selected)	Tribs to L.George, Town of Bolton (1006-0022)	NoKnownImpct
C-101-P367-53,56	Huddle/Finkle Brooks and tribs (1006-0003)	Impaired Seg
C-101-P367-53-P379	Trout Lake (1006-0027)	NoKnownImpct
C-101-P367-56-P381	Edgecomb Pond (1006-0028)	NoKnownImpct
C-101-P367-59	Indian Brook and tribs (1006-0002)	Impaired Seg
C-101-P367-59..P382 thru P393 (sel)	Minor Lakes in L.George (NW) Wshed (1006-0029)	NoKnownImpct

# ...Lake Champlain South-Lake George Watershed

Water Index Number	Waterbody Segment	Category
<b>Lake George Watershed (con't)</b>		
C-101-P367-65	Northwest Bay Brook and tribs (1006-0023)	NoKnownImpct
C-101-P367-74 thru 89 (selected)	Tribs to L.George, Town of Hague (1006-0024)	NoKnownImpct
C-101-P367-83-P394	Jabe Pond (1006-0030)	NoKnownImpct
C-101-P367-86	Hague Brook and tribs (1006-0006)	Impaired Seg
C-101-P367..P395a,P395	Wintergreen Lake, North Lake (1006-0031)	NoKnownImpct
<b>Tribes to Lake Champlain South, Ticonderoga Creek to Mettawee-Poultney Rivers</b>		
C-102	Charter Brook and tribs (1005-0023)	NoKnownImpct
C-103 thru 122 (selected)	Minor Tribs to Lake Champlain (1005-0020)	UnAssessed
C-106	Mill Brook and tribs (1005-0024)	UnAssessed
C-119-P398	Pine Lake (Long Pond) (1005-0025)	NoKnownImpct
C-119-P400,P402	Lapland Lake, Millman Lake (1005-0059)	UnAssessed
C-123 thru 133 (selected)	Minor Tribs to South Bay (1005-0027)	UnAssessed
C-127	Pike Brook, Upper, and tribs (1005-0028)	NoKnownImpct
C-128	Mount Hope Brook and tribs (1005-0033)	NoKnownImpct
C-128- 3-P406,P407	Greenland Pond, Fishbrook Pond (1005-0029)	UnAssessed
C-128- 6-P409,P411	Upper Spectacle Pond, Bumps Pond (1005-0030)	UnAssessed
C-128-P412	Lakes Pond (1005-0031)	NoKnownImpct
C-128-P414,P413	Crossett Pond, Thurber Pond (1005-0032)	NoKnownImpct
<b>Lower Mettawee River Watershed</b>		
C-134	Mettawee River, Lower, and minor tribs (1005-0034)	NoKnownImpct
C-134- 2	Mud Brook and tribs (1005-0035)	MinorImpacts
C-134- 4	Wood Cr/Champlain Canal and minor tribs (1005-0036)	Impaired Seg
C-134- 4- 4-P419	Sawmill Pond (1005-0037)	UnAssessed
C-134- 4-14-P424/P424a	Dolph/Beaver Pond (1005-0038)	NoKnownImpct
C-134- 4-17	Winchell Creek and tribs (1005-0061)	Need Verific
<b>Halfway Creek Watershed</b>		
C-134- 4-19	Halfway Creek, Lower, and tribs (1005-0013)	MinorImpacts
C-134- 4-19	Halfway Creek, Upper, and tribs (1005-0063)	MinorImpacts
C-134- 4-19- 8	Bishop Brook, Lower, and tribs (1005-0064)	UnAssessed
C-134- 4-19- 8	Bishop Brook, Upper, and tribs (1005-0039)	UnAssessed
C-134- 4-19- 8-5-8-P428	Sly Pond (1005-0058)	NoKnownImpct
C-134- 4-19- 8-P432	Hadlock Pond (1005-0040)	Need Verific
C-134- 4-19- 8-P436	Lake Nebo (1005-0041)	NoKnownImpct
C-134- 4-19- 8..P425 thru P433	Minor Lakes in Bishop Brook Watershed (1005-0042)	NoKnownImpct
C-134- 4-19-19	Glen Lake Brook, Lower, and tribs (1005-0043)	UnAssessed
C-134- 4-19-19	Glen Lake Brook, Upper, and tribs (1005-0045)	UnAssessed
C-134- 4-19-19-12-P450,P451a	Rush Pond/Butler Storage Reservoir (1005-0049)	UnAssessed
C-134- 4-19-19-P440	Lake Sunnyside (1005-0047)	MinorImpacts
C-134- 4-19-19-P441	Glen Lake (1005-0009)	NoKnownImpct
C-134- 4-19-19-P452	Butler Pond (1005-0050)	NoKnownImpct

# ...Lake Champlain South-Lake George Watershed

Water Index Number	Waterbody Segment	Category
<b>Halfway Creek Watershed (con't)</b>		
C-134- 4-19-19..P439,P440a	Minor Lakes in Lower Glen Lake Br Wshed (1005-0046)	NoKnownImpct
C-134- 4-19-19..P442 thru P449	Minor Lakes in Middle Glen Lk Br Wshed (1005-0048)	UnAssessed
C-134- 4-19-23-P453	Halfway Creek Reservoir (1005-0051)	Need Verific
C-134- 4-19-P455a	Wilkie Reservoir (1005-0052)	NoKnownImpct
C-134- 4-27	Big Creek and tribs (1005-0004)	MinorImpacts
C-134- 4-27..P456 thru P458	Minor Lakes in Big Creek Watershed (1005-0056)	UnAssessed
<b>Upper Mettawee River Watershed</b>		
C-134	Mettawee River, Upper, and minor tribs (1005-0003)	MinorImpacts
C-134-22	Indian River and tribs (1005-0002)	MinorImpacts
C-134..P459 thru P464	Minor Lakes in Upper Mettawee Watershed (1005-0057)	UnAssessed
<b>Poultney River Watershed</b>		
C-138	Poultney River, Lower, and tribs (1005-0053)	Impaired Seg
C-138	Poultney River, Upper, and tribs (1005-0054)	MinorImpacts

This page intentionally left blank.

# Minor Tribs to Lake Champlain ( 1001-0022)

NoKnownImpct

## Waterbody Location Information

Revised: 04/28/2009

**Water Index No:** C- 49 thru 99 (selected)      **Drain Basin:** Lake Champlain  
**Hydro Unit Code:** 02010001/      **Str Class:** C(T)      Champlain-Lk.George  
**Waterbody Type:** River      **Reg/County:** 5/Essex Co. (16)  
**Waterbody Size:** 33.6 Miles      **Quad Map:** PORT HENRY (E-27-0)  
**Seg Description:** total length of selected tribs, Main Lake South

## 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 McKenzie Brook in Port Henry (at Route 22) 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 insignificant and water quality is considered to be good. The nutrient biotic index and impact source determination indicates some enrichment in the stream. These results are consistent with sampling conducted 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. McKenzie Brook is just one of several streams that make up this waterbody segment, but it is considered representative of water quality in the segment as a whole. This segment is listed as being evaluated rather than monitored. (DEC/DOW, BWAM/SBU, January 2009)

### Segment Description

This segment includes total length of smaller tributaries to Lake Champlain between Boquet River and Crown Point. Tribs within this segment, including Stacy Brook (-78), Mullen Brook (-81), Kenney Brook (-82), McKenzie Brook (-90) and Grove Brook (-93), are Class C,C(T) and D. Boquet River (-48), Hoisington Brook (-73), Beaver Brook (-80), Mill Brook (-86) and Grant Brook (-99), are listed separately. Note this segment includes some tribs north of Split Rock Point that are in HUC

02010004/010.

# Housington Brook and tribs ( 1001-0023)

NoKnownImpct

## Waterbody Location Information

Revised: 04/28/2009

**Water Index No:** C- 73  
**Hydro Unit Code:** 02010001/260      **Str Class:** C(T)\*  
**Waterbody Type:** River  
**Waterbody Size:** 18.1 Miles  
**Seg Description:** entire stream and tribs

**Drain Basin:** Lake Champlain  
Champlain-Lk.George  
**Reg/County:** 5/Essex Co. (16)  
**Quad Map:** PORT HENRY (E-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

### Water Quality Sampling

A biological (macroinvertebrate) assessment of Housington Brook in Westport (at the mouth) was conducted in 1998. Sampling results indicated non-impacted water quality conditions. The sample passed the field screening criteria, and was not retained. Until more recent data is available, this assessment will be considered to be evaluated rather than monitored. (DEC/DOW, BWAR/SBU, January 2000)

### Segment Description

This segment includes the entire stream and all tribs. The waters of the stream are Class C,C(T). of the reach. Tribs to this reach/segment, including Hammond Brook (-2), are primarily Class C(T); with one unnamed trib to Hammond Brook (-2-4) designated Class AA(T).

# Mill Brook and minor tribs ( 1001-0017)

NoKnownImpct

## Waterbody Location Information

Revised: 04/21/2009

**Water Index No:** C- 86  
**Hydro Unit Code:** 02010001/250      **Str Class:** C(T)  
**Waterbody Type:** River (Low Flow)  
**Waterbody Size:** 25.3 Miles  
**Seg Description:** entire stream and selected tribs

**Drain Basin:** Lake Champlain  
Champlain-Lk.George  
**Reg/County:** 5/Essex Co. (16)  
**Quad Map:** PORT HENRY (E-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

### Water Quality Sampling

A biological (macroinvertebrate) assessment of Mill Brook in Port Henry (at Dock Street) 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 insignificant and water quality is considered to be good. The nutrient biotic index and impact source determination indicates some slight enrichment in the stream. These results are consistent with sampling conducted 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)

### Previous Assessments

Previously, concerns were raised regarding habitat impacts in Mill Brook due to road sanding practices in the watershed. Sand applied to roads during the winter runs off into the stream during the spring snowmelt. Once in the stream the sand 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. While such practices remain a concern, they do not appear to affect macroinvertebrate communities at these sampling sites. (DEC/DFWMR, Region 5, 1998)

### Segment Description

This segment includes the entire stream and selected/smaller tribs. The waters of the stream are Class D from the mouth to the Mill Pond (P335) dam and Class C(T) for the remainder of the reach. Tribs to this reach, including Lower Bartlett Brook (-3), are primarily Class C(T) and D. Upper portions of Bartlett Brook and unnamed trib (-5) are listed separately.

# Bartlett Brook, Upper, and minor tribs ( 1001-0025)

NoKnownImpct

## Waterbody Location Information

Revised: 05/29/2009

**Water Index No:** C- 86-3  
**Hydro Unit Code:** 02010001/250      **Str Class:** AA(T)  
**Waterbody Type:** River  
**Waterbody Size:** 7.5 Miles  
**Seg Description:** stream and selected tribs abv Pt Henry water supply dam

**Drain Basin:** Lake Champlain  
Champlain-Lk.George  
**Reg/County:** 5/Essex Co. (16)  
**Quad Map:** PORT HENRY (E-27-0)

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

### Type of Pollutant(s)

Known:      - - -  
Suspected:      - - -  
Possible:      OTHER POLLUTANTS

### Source(s) of Pollutant(s)

Known:      - - -  
Suspected:      - - -  
Possible:      OTHER SOURCE

## Resolution/Management Information

**Issue Resolvability:** 3 (Strategy Being Implemented)  
**Verification Status:** 5 (Management Strategy has been Developed)  
**Lead Agency/Office:** DEC/Reg5  
**TMDL/303d Status:** n/a

**Resolution Potential:** High

## Further Details

### Source (Drinking) Water Assessment

A source water assessment of Bartlett Pond, which is fed by Upper Barlett Brook, found no elevated susceptibility to contamination. 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 Moriah and Port Henry. (NYSDOH, Source Water Assessment Program, 2005)

### Segment Description

This segment includes the portion of the stream and all tribs above the Port Henry water supply dam. The waters of this portion of the stream are Class A from the Port Henry water supply dam to the Moriah water supply dam, and Class AA(T) for the remainder of the reach. Tribs to this reach/segment are also Class A,AA(T).

# Bartlett, Mud, North Ponds ( 1001-0027)

Impaired Seg

## Waterbody Location Information

Revised: 03/11/2009

**Water Index No:** C- 86-3-P338,P339,P340  
**Hydro Unit Code:** 02010001/250      **Str Class:** AA(T)  
**Waterbody Type:** Lake  
**Waterbody Size:** 139.2 Acres  
**Seg Description:** total area of three lakes

**Drain Basin:** Lake Champlain  
Champlain-Lk.George  
**Reg/County:** 5/Essex Co. (16)  
**Quad Map:** PORT HENRY (E-27-0)

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Public Bathing	Stressed	Known
RECREATION	Impaired	Known

### Type of Pollutant(s)

Known: PROBLEM SPECIES (Eurasian milfoil)  
Suspected: ---  
Possible: ---

### 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:** 4c (Impaired by Pollution, Not Pollutant(s), Not Listed)

**Resolution Potential:** Medium

## Further Details

### Overview

Recreational uses in Bartlett Pond are impaired by excessive aquatic weed growth. The plant community is dominated by invasive Eurasian watermilfoil. These impacts also affect public bathing use.

### Water Quality Sampling

Bartlett Pond has been sampled as part of the NYSDEC Citizen Statewide Lake Assessment Program (CSLAP) beginning in 1997 and continuing through 1999. An Interpretive Summary report of the findings of this sampling was published in 2000. These data indicate that the lake continues to be best characterized as mesotrophic, or moderately productive. Phosphorus levels in the lake are consistently below the state guidance values indicating impacted/stressed recreational uses. Corresponding transparency measurements typically exceed the recommended minimum for swimming beaches. Measurements of pH typically fall within the state water quality range of 6.5 to 8.5. The lake water is slightly colored, but color does not limit water transparency. (DEC/DOW, BWAM/CSLAP, 2000)

Monitoring of Mud and North Ponds was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of

parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSA, 1984-86)

#### 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 to be unfavorable. The recreational suitability of the lake is described most frequently as "substantially" impacted for recreational use. The lake itself is most often described as having "definite algal greenness." Assessments have noted that aquatic plants routinely grow to the lake surface and are often sufficient dense in restrict recreational uses. Aquatic plants are dominated by non-native species (Eurasian watermilfoil). (DEC/DOW, BWAM/CSLAP, 2000)

#### Lake Uses

This lake waterbody is designated class AA(T), 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.

#### Source (Drinking) Water Assessment

A source water assessment of Bartlett Pond found no elevated susceptibility to contamination. 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 Moriah and Port Henry. (NYSDOH, Source Water Assessment Program, 2005)

Although there are no specific water quality impacts, the segment is considered a highly valued water resource due to its drinking water supply classification as a AA(T) water. The particular resource value reflected in this designation and the need to provide additional protection may result in an assessment of threatened (possible) for drinking water use.

#### Segment Description

This segment includes the total area of Bartlett (P338), Mud (P339) and North (P340) Ponds. These ponds are 70.4, 6.4 and 25.7 acres in size, respectively.

# Mill Brook Tributary ( 1001-0026)

NoKnownImpct

## Waterbody Location Information

Revised: 06/10/2009

**Water Index No:** C- 86-5  
**Hydro Unit Code:** 02010001/250      **Str Class:** AA(T)  
**Waterbody Type:** River  
**Waterbody Size:** 4.0 Miles  
**Seg Description:** stream and tribs above Mineville water supply dam

**Drain Basin:** Lake Champlain  
**Champlain-Lk.George**  
**Reg/County:** 5/Essex Co. (16)  
**Quad Map:** WITHERBEE (E-26-B)

## 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

### Source (Drinking) Water Assessment

A source water assessment of Roe Pond and the Upper Mill Creek Trib found no elevated susceptibility to contaminants. 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 Moriah Water District and the hamlet of Mineville. (NYSDOH, Source Water Assessment Program, 2005)

### Segment Description

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

# Minor Lakes in Mill Creek Watershed ( 1001-0029)

NoKnownImpct

## Waterbody Location Information

Revised: 03/02/2009

**Water Index No:** C- 86..P341 thru P347  
**Hydro Unit Code:** 02010001/250      **Str Class:** C(T)\*  
**Waterbody Type:** Lake  
**Waterbody Size:** 111.9 Acres  
**Seg Description:** total area of selected lakes

**Drain Basin:** Lake Champlain  
**Reg/County:** Champlain-Lk.George  
**Reg/County:** 5/Essex Co. (16)  
**Quad Map:** WITHERBEE (E-26-B)

## 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

Monitoring of a number of ponds within this segment was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. Data for Parch Pond (P343), Smith Pond (P344), Lower Rockport (P345), Tub Mill Pond (P345a), Big Lock Pond (P346) and Upper Feeder Pond (P347) as well as additional smaller ponds revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Source (Drinking) Water Assessment

A source water assessment of Roe Pond (P341) found no elevated susceptibility to contamination. 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 Moriah Water

District. (NYSDOH, Source Water Assessment Program, 2005)

**Segment Description**

This segment includes the total area of all selected/smaller lakes/ponds within the Mill Creek watershed. Lakes within this segment, including Parch Pond (P343), Smith Pond (P344), Lower Rockport Pond (P345), Tub Mill Pond (P345a), Big Lock Pond (P346) and Upper Feeder Pond (P347) as well as smaller ponds Roes/Mill Pond (P341) and Ensign Pond (P342), are primarily Class C(T), with some AA(T).

# Bullpout Pond ( 1001-0031)

NoKnownImpct

## Waterbody Location Information

Revised: 03/02/2009

**Water Index No:** C- 93-P348  
**Hydro Unit Code:** 02010001/230      **Str Class:** C  
**Waterbody Type:** Lake (Eutrophic)  
**Waterbody Size:** 12.3 Acres  
**Seg Description:** entire lake

**Drain Basin:** Lake Champlain  
Champlain-Lk.George  
**Reg/County:** 5/Essex Co. (16)  
**Quad Map:** WITHERBEE (E-26-B)

## 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

Monitoring of Bullpout Pond was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Segment Description

This segment includes the total area of Bullpout Pond (P348).

# Putnam Creek, Lower, and tribs ( 1005-0011)

NoKnownImpct

## Waterbody Location Information

Revised: 04/21/2009

**Water Index No:** C- 96  
**Hydro Unit Code:** 02010001/220      **Str Class:** C(T)  
**Waterbody Type:** River (Med. Flow)      **Reg/County:** 5/Essex Co. (16)  
**Waterbody Size:** 64.8 Miles      **Quad Map:** CROWN POINT (F-27-1) ...  
**Seg Description:** stream and tribs from mouth to Ironville/Penfield Pond

## 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 Putnam Creek in Factoryville (at Route 2) was conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated non-impacted conditions. The sample was 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)

NYSDEC Rotating Intensive Basin Studies (RIBS) Intensive Network monitoring of Putnam Creek in Factoryville (at Creek Road) was conducted in 1998-99. Biological (macroinvertebrate) sampling of the stream in both years revealed that non-impacted water quality was clearly indicated. The fauna was diverse and well-balanced, with all indices within the non-impacted range. Other indicators (water chemistry, etc) also indicated good water quality. (DEC/DOW, BWAR/RIBS, January 2001)

### Previous Assessments

Previously, concerns were raised regarding habitat impacts in Putnam Creek due to road sanding practices in the watershed. Sand applied to roads during the winter runs off into the stream during the spring snowmelt. Once in the stream the sand 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. While such practices remain a concern, they do not appear to affect macroinvertebrate communities at these sampling sites. (DEC/DFWMR, Region 5, 1998)

#### Segment Description

This segment includes the portion of the stream and all tribs from the mouth to Penfield Pond (P351a). The waters of this portion of the stream are Class C(T). Tribs to this reach, including Phelps Brook (-4), are also Class C(T). Upper Putnam Creek is listed separately.

# Mud Pond ( 1005-0060)

NoKnownImpct

## Waterbody Location Information

Revised: 03/02/2009

<b>Water Index No:</b>	C- 96- 8-P352	<b>Drain Basin:</b>	Lake Champlain
<b>Hydro Unit Code:</b>	02010001/220	<b>Str Class:</b>	C(T)
<b>Waterbody Type:</b>	Lake (Unknown Trophic)	<b>Reg/County:</b>	5/Essex Co. (16)
<b>Waterbody Size:</b>	172.6 Acres	<b>Quad Map:</b>	EAGLE LAKE (F-26-2)
<b>Seg Description:</b>	entire lake		

## 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

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

## Further Details

### Water Quality Sampling

Mud Pond was included in the 1992 USEPA Environmental Monitoring and Assessment Program (EMAP) effort; results of this study found no evidence of water quality impairment. (DEC/DOW, BWM/Lake Services, December 2000)

Monitoring of Bullpout Pond was also included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Segment Description

This segment includes the total area of Mud Pond (P352).

# Penfield Pond ( 1005-0017)

NoKnownImpct

## Waterbody Location Information

Revised: 03/02/2009

**Water Index No:** C- 96-P351a  
**Hydro Unit Code:** 02010001/220      **Str Class:** C(T)  
**Waterbody Type:** Lake (Mesotrophic)  
**Waterbody Size:** 5.4 Acres  
**Seg Description:** entire lake

**Drain Basin:** Lake Champlain  
Champlain-Lk.George  
**Reg/County:** 5/Essex Co. (16)  
**Quad Map:** EAGLE LAKE (F-26-2)

## 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

Penfield Pond was included in the 1992 USEPA Environmental Monitoring and Assessment Program (EMAP) effort; results of this study found no evidence of water quality impairment. (DEC/DOW, BWM/Lake Services, December 2000)

### Segment Description

This segment includes the entire area of Penfield Pond (P351a).

## Putnam/North Ponds ( 1005-0018)

Need Verific

### Waterbody Location Information

Revised: 04/28/2009

<b>Water Index No:</b>	C- 96-P355/P360	<b>Drain Basin:</b>	Lake Champlain
<b>Hydro Unit Code:</b>	02010001/220	<b>Str Class:</b>	C(T)
<b>Waterbody Type:</b>	Lake	<b>Reg/County:</b>	5/Essex Co. (16)
<b>Waterbody Size:</b>	295.1 Acres	<b>Quad Map:</b>	GRAPHITE (F-26-3)
<b>Seg Description:</b>	entire lake		

### Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Aquatic Life	Threatened	Suspected

#### Type of Pollutant(s)

Known: ---  
Suspected: D.O./OXYGEN DEMAND  
Possible: ---

#### Source(s) of Pollutant(s)

Known: ---  
Suspected: ---  
Possible: UNKNOWN SOURCE

### Resolution/Management Information

**Issue Resolvability:** 1 (Needs Verification/Study (see STATUS))

**Verification Status:** 3 (Cause Identified, Source Unknown)

**Lead Agency/Office:** DEC/BWAM

**TMDL/303d Status:** ApdxB

**Resolution Potential:** Medium

### Further Details

#### Overview

Aquatic life support, particularly the fishery, in Putnam/North Ponds is thought to experience threats due to low dissolved oxygen levels. These conditions occur seasonally in deeper waters of the lake and may very well be naturally occurring.

#### Water Quality Sampling

Sampling of Putnam Pond during a 1999 Lake Classification and Inventory (LCI) evaluation found hypolimnetic hypoxia. While the impact of these conditions may or may not affect the fishery (in fact, they could represent natural lake conditions), they suggest at least threat to aquatic life. Putnam Pond is scheduled to be sampled in 2009 as part of the LCI program. (DEC/DOW, BWAM/RIBS, April 2009).

Monitoring of Putnam/North Ponds was also included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Similar results were noted for a number of smaller ponds within this segment. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

#### Section 303(d) Listing

Putnam/North Ponds are included on the NYS 2008 Section 303(d) List of Impaired Waters. The lakes are included among the waters listed in Appendix B - Waters Not Meeting Dissolved Oxygen Standards. This part of the List recognizes waterbodies where low dissolved oxygen in lake bottom waters may be the result of morphology and other natural conditions in thermally stratified lakes. However because NYS water quality standards for dissolved oxygen do not include an explicit exception for natural conditions or averaging of dissolved oxygen over lake depth, USEPA requires that the Section 303(d) List recognize such waters. (DEC/DOW, BWAM/WQAS, April 2009)

#### Segment Description

This segment includes the total area of Putnam/North Ponds (P355, P360).

# Sherman Lake (Goosepuddle/Burriss Pond) ( 1005-0016) NoKnownImpct

## Waterbody Location Information

Revised: 03/02/2009

**Water Index No:** C- 96..P351 (P351b,P351c)      **Drain Basin:** Lake Champlain  
**Hydro Unit Code:** 02010001/220      **Str Class:** C(T)      Champlain-Lk.George  
**Waterbody Type:** Lake      **Reg/County:** 5/Essex Co. (16)  
**Waterbody Size:** 53.1 Acres      **Quad Map:** GRAPHITE (F-26-3)  
**Seg Description:** total area of three lakes

## 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

Monitoring of Sherman Lake was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Similar results were noted for a number of smaller ponds within this segment. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Section 303(d) Listing

Snake Pond (P350) within this segment is included on the NYS 2008 Section 303(d) List of Impaired Waters in Appendix A as a Smaller Lakes Impaired by Acid Rain. (DEC/DOW, BWAM, 2008)

### Segment Description

This segment includes the total area of Sherman Lake (P351), as well as smaller ponds Snake Pond (P350), Goosepuddle Pond (P351b) and Burriss Pond (P351c).

# Minor Lakes in Upper Putnam Creek Wshed ( 1005-0019) NoKnownImpct

## Waterbody Location Information

Revised: 03/02/2009

**Water Index No:** C- 96..P353 thru P361 (selected)      **Drain Basin:** Lake Champlain  
**Hydro Unit Code:** 02010001/220      **Str Class:** C(T)      Champlain-Lk.George  
**Waterbody Type:** Lake      **Reg/County:** 5/Essex Co. (16)  
**Waterbody Size:** 179.8 Acres      **Quad Map:** GRAPHITE (F-26-3)  
**Seg Description:** total area of selected lakes

## 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

Monitoring of a number of ponds within this segment was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. Data for Bear Pond (P353), Lost Pond (P354), Berrymill Pond (P356), Grizzle Ocean (P357), Clear Pond (P358) and Heart Pond (P361) revealed no indication of impacts to aquatic life support or recreational use at the time. Similar results were noted for a number of smaller ponds within this segment. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Section 303(d) Listing

Mud Pond (P350) within this segment is included on the NYS 2008 Section 303(d) List of Impaired Waters in Appendix A as a Smaller Lakes Impaired by Acid Rain. (DEC/DOW, BWAM, 2008)

### Segment Description

This segment includes the total area of all selected/smaller lakes/ponds within the Upper Putnam Creek watershed. Lakes within this segment, including Bear Pond (P353), Cranberry Marsh Pond (P353a), Lost Pond (P354), Berrymill Pond (P356),

Grizzle Ocean (P357), Clear Pond (P358) and Heart Pond (P361) as well as smaller Mud Pond (P359), are Class D.

# Fivemile Run and tribs ( 1005-0021)

# MinorImpacts

## Waterbody Location Information

Revised: 03/01/2009

**Water Index No:** C-100  
**Hydro Unit Code:** 02010001/210      **Str Class:** C(T)\*  
**Waterbody Type:** River  
**Waterbody Size:** 18.1 Miles  
**Seg Description:** entire stream and tribs

**Drain Basin:** Lake Champlain  
Champlain-Lk.George  
**Reg/County:** 5/Essex Co. (16)  
**Quad Map:** CROWN POINT (F-27-1)

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

### Type of Pollutant(s)

Known: ---  
Suspected: NUTRIENTS, Silt/Sediment  
Possible: Pathogens

### Source(s) of Pollutant(s)

Known: ---  
Suspected: AGRICULTURE, STREAMBANK EROSION  
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

Aquatic life support in Fivemile Run is known to experience minor impacts/threats due to nutrient enrichment and other pollutant inputs from agricultural activities and nonpoint sources in the watershed.

### Water Quality Sampling

A biological (macroinvertebrate) assessment of Fivemile Run in Crown Point (at Route 49) was conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated slightly impacted conditions. The community is 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 generally satisfactory. The nutrient biotic index and impact source determination indicates (elevated enrichment in the stream and fauna that indicates nonpoint sources, as well as organic and toxic inputs. Aquatic life support is considered to be fully supported in the stream, although impacts to the communities were apparent. These results are consistent with sampling conducted in 1998. (DEC/DOW, BWAM/SBU, January 2009)

### Segment Description

This segment includes the entire stream and all tribs. The waters of the stream are Class C,C(T). Tribs to this reach are primarily Class C(T) with a portion of unnamed trib (-3) designated Class AA(T).

# Buck Mountain, Worcester Ponds ( 1005-0022)

NoKnownImpct

## Waterbody Location Information

Revised: 10/04/2000

**Water Index No:** C-100-P364,P365  
**Hydro Unit Code:** 02010001/210      **Str Class:** C(T)  
**Waterbody Type:** Lake  
**Waterbody Size:** 26.5 Acres  
**Seg Description:** total area of two lakes

**Drain Basin:** Lake Champlain  
Champlain-Lk.George  
**Reg/County:** 5/Essex Co. (16)  
**Quad Map:** CROWN POINT (F-27-1)

## 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

Monitoring of Buck Mountain and Worcester Ponds was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Segment Description

This segment includes the total area of Buck Mountain Pond (P364) and Worcester Pond (P365).

# Ticonderoga Creek ( 1006-0017)

MinorImpacts

## Waterbody Location Information

Revised: 06/01/2009

**Water Index No:** C-101  
**Hydro Unit Code:** 02010001/200      **Str Class:** D  
**Waterbody Type:** River  
**Waterbody Size:** 3.2 Miles  
**Seg Description:** entire stream

**Drain Basin:** Lake Champlain  
Champlain-Lk.George  
**Reg/County:** 5/Essex Co. (16)  
**Quad Map:** TICONDEROGA (F-27-4)

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

### Type of Pollutant(s)

Known: AESTHETICS (trash, debris)  
Suspected: ---  
Possible: Nutrients, Pathogens

### Source(s) of Pollutant(s)

Known: ---  
Suspected: URBAN/STORM RUNOFF, Private/Comm/Inst  
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

### Overview

Recreational uses (fishing, swimming, etc) and aesthetics in the LaChute/Ticonderoga Creek are thought to be affected by runoff from surrounding village and discharges from residential and commercial on-site septic systems in Ticonderoga.

### Water Quality Sampling

NYSDEC Rotating Integrated Basin Studies (RIBS) Intensive Network monitoring of Ticonderoga Creek in Ticonderoga, Essex County, (at Elk Drive) was conducted in 2003 and 2004. Intensive Network sampling typically includes macroinvertebrate community analysis, water column chemistry, sediment and invertebrate tissues analysis and toxicity evaluation. Biological (macroinvertebrate) sampling results reveal slightly to non-impacted conditions, indicating good water quality. Water column sampling found no contaminants to be parameter(s) of concern. Macroinvertebrates collected at this site and chemically analyzed for selected metals and PAHs found no contaminants to be present at concentrations above the established guidance values. Sediment screening for acute toxicity indicated possible toxicity to be present. Analysis of sediments found elevated concentrations of PAHs that exceed probable effects levels and other metals that exceed the threshold effects concentration. Toxicity testing of the water column also showed no significant mortality or reproductive impacts. Based on the consensus of these established assessment methods, overall water quality at this site shows that in spite

of some concerns regarding contaminants in the sediments that should continue to be monitored, aquatic life is considered to be fully supported in the stream, and there are no other apparent water quality impacts to recreational uses. These findings are consistent with results of RIBS sampling conducted at this site in 1993-94 and 1997-98. (DEC/DOW, BWAM/RIBS, May 2009).

A biological (macroinvertebrate) assessment of LaChute/Ticonderoga Creek in Ticonderoga was also conducted in 1998. Sampling results indicated slightly impacted water quality conditions; similar assessments for this site were noted in 1987 and 1994. Non-impacted conditions were noted in 1993. No obvious causes of impairment are evident. The results may reflect the natural influence of the upstream impoundment (Lake George) which creates an abundance of plankton and would contribute to samples skewed toward intolerant to facultative mayflies and stoneflies. (DEC/DOW, BWAR/SBU, January 2000)

#### Segment Description

This segment includes the entire stream and selected/smaller tribs from the mouth to Lake George. The waters of the stream are Class D. Tribs to this reach/segment are also Class D. Trout Brook (-1) is listed separately.

# Trout Brook and tribs ( 1006-0018)

NoKnownImpct

## Waterbody Location Information

Revised: 04/21/2009

**Water Index No:** C-101- 1  
**Hydro Unit Code:** 02010001/200      **Str Class:** C(T)  
**Waterbody Type:** River  
**Waterbody Size:** 45.3 Miles  
**Seg Description:** entire stream and tribs

**Drain Basin:** Lake Champlain  
Champlain-Lk.George  
**Reg/County:** 5/Essex Co. (16)  
**Quad Map:** TICONDEROGA (F-27-4) ...

## 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 Trout Brook in Ticonderoga (at Lord Howe Street) was conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated slightly impacted conditions. Some replacement of sensitive ubiquitous species by more tolerant species was noted although the sample included a balanced distribution of all expected species. In spite of these minor impacts, aquatic life is considered to be fully supported in the stream. The community composition and nutrient biotic evaluation suggests low levels of nutrient enrichment. Impact source determination found a community that is most similar to natural communities. (DEC/DOW, BWAM/SBU, January 2009)

### Segment Description

This segment includes the entire stream and all tribs. The waters of the stream are Class C(T). Tribs to this reach/segment, including Chilson Brook (-1), are also Class C(T).

# Haymeadow Pond ( 1006-0019)

NoKnownImpct

## Waterbody Location Information

Revised: 10/04/2000

**Water Index No:** C-101- 1-P354a  
**Hydro Unit Code:** 02010001/200      **Str Class:** C(T)  
**Waterbody Type:** Lake  
**Waterbody Size:** 16.0 Acres  
**Seg Description:** entire lake  
**Drain Basin:** Lake Champlain  
Champlain-Lk.George  
**Reg/County:** 5/Essex Co. (16)  
**Quad Map:** GRAPHITE (F-26-3)

## 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

Monitoring of Haymeadow Pond was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Segment Description

This segment includes the total area of Haymeadow Pond (P354a).

# Lake George ( 1006-0016)

# Impaired Seg

## Waterbody Location Information

Revised: 06/11/2009

**Water Index No:** C-101-P367  
**Hydro Unit Code:** 02010001/190      **Str Class:** AAspcl  
**Waterbody Type:** Lake (Oligotrophic)      **Drain Basin:** Lake Champlain  
**Waterbody Size:** 28523.1 Acres      **Reg/County:** Champlain-Lk.George  
**Seg Description:** entire lake      **Quad Map:** 5/Warren Co. (57) ...  
LAKE GEORGE (H-26-1)

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Water Supply	Threatened	Known
RECREATION	Impaired	Known
Habitat/Hydrology	Stressed	Known

### Type of Pollutant(s)

Known: SILT/SEDIMENT, PROBLEM SPECIES (milfoil, zebra mussels)  
Suspected: Restricted Passage  
Possible: Pathogens

### Source(s) of Pollutant(s)

Known: DEICING (STOR/APPL), STREAMBANK EROSION, URBAN/STORM RUNOFF, Roadbank Erosion  
Suspected: On-Site/Septic Syst  
Possible: Construction

## Resolution/Management Information

**Issue Resolvability:** 2 (Strategy Exists, Needs Funding/Resources)  
**Verification Status:** 5 (Management Strategy has been Developed)  
**Lead Agency/Office:** DOW/Reg5      **Resolution Potential:** High  
**TMDL/303d Status:** 1,4c (Individual Waterbody Impairment Requiring a TMDL, more)

## Further Details

### Overview

Recreational uses and habitat/hydrology in Lake George have been listed as impaired by silt/sediment and problem species (invasive plants). Urban/storm runoff, streambank erosion and road deicing practices have been identified as sources of silt/sediment in the lake. Invasive aquatic plants (Eurasian milfoil, in particular) have been cited as restricting recreation. Threats from zebra mussels are also a concern. Navigation buoys are used to restrict areas of the lake to recreational boating due to tributary stream deltas and large milfoil beds. Other threats include impacts from failing and/or inadequate on-site septic system and the overall level of development along the lake shore, particularly at the southern end of the lake.

Lake George has been designated a Class AA-special water, suitable for use as a drinking water supply. The Class AA-special designation also means there shall be no discharge or disposal of sewage, industrial wastes, or other wastes into these waters. As a result of this designation, the lake is considered a highly valued resource and, as such, may be subject to special protections.

### Water Quality Sampling

Lake George has been sampled (at multiple locations) as part of the NYSDEC Citizen Statewide Lake Assessment Program (CSLAP) beginning in 2004 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 oligotrophic, or unproductive. Lake productivity appears to decrease from south to north. Phosphorus levels in the lake are typically below the state guidance values indicating impacted/stressed recreational uses. Corresponding transparency measurements easily exceed the recommended minimum for swimming beaches. Measurements of pH typically fall within the state water quality range of 6.5 to 8.5. The lake water is slightly colored, but color does not limit water transparency. (DEC/DOW, BWAM/CSLAP, April 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 to be very favorable at all but one site. The recreational suitability of the lake is described most frequently as "could not be nicer" for most sites. The lake itself is most often described as "crystal clear" at these sites. At the southernmost site these assessments reflected recreational suitability as being "excellent" to "slightly" impacted for recreational uses. The lake at this site was most often described as "not quite crystal clear" or "having definite algal greenness" despite water quality conditions similar to those at the other sites. Aquatic weed growth was noted as a problem at only one (again, the southernmost) of six sites. Recreational assessments cited "excessive weed growth" as limiting uses, although surface weed growth was not observed during the sampling. Aquatic plants include invasive species (Eurasian milfoil) and have been cited as impacting recreational uses. (DEC/DOW, BWAM/CSLAP, April 2007)

#### Lake Uses

This lake waterbody is designated class AA-special, suitable for use as a water supply, public bathing beach, general recreation and aquatic life support. The Class AA-special designation also means there shall be no discharge or disposal of sewage, industrial wastes, or other wastes into these waters. 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.

#### Source (Drinking) Water Assessment

A source water assessment of Lake George 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 multiple users. (NYSDOH, Source Water Assessment Program, 2005)

#### Source Assessment

Sediment loadings to the lake from streambank erosion, winter road sanding (and salting) and construction activities in the lake watershed also affect uses. Areas of roadbank erosion have been inventoried through the Warren County Critical Area Treatment Seeding Program. Significant sedimentation deltas have formed at the mouths of many tributary segments, the largest of these being Hague, Indian, Finkle, English, West and Foster Brooks, and to lesser extent East and Prospect Mountain Brooks (Bathymetric Mapping of Selected Delta Areas of Lake George, Eichler et al, Darrin Freshwater Institute, 1999). These deltas impede recreational boat navigation and present opportunities for the establishment of non-native aquatic vegetation. Local efforts to reduce sediment loads to the lake are underway for several tribs. See also various Lake George Tributary segments. (Warren County WQSC, June 2000)

While the lake fishery is considered good, fishery habitat in the lake is affected by sediment as well. Sand applied to roads during the winter and sediment from erosion runs off into tributary streams (and eventually the lake) during spring snowmelt and other high flow events. Once in the streams and lake, sand and silt 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. Percent embeddedness has been determined to show a reliable correlation to restriction of trout/salmon spawning habitat. Additionally, fish migration and spawning is known to be restricted by the sediment deltas at the mouths of numerous lake tribs. The DEC Region 5 Fisheries Unit plans continued field investigations of the lake and tribs to monitor the extent of propagation impairment. (DEC/DFWMR, Region 5, April 2000)

In other parts of the lake inadequate and/or failing on-site septic systems serving homes along the lake shore are thought to be contributing nutrient and pathogen contamination to the lake. Numerous summer cottages as well as year-round residences coupled with poor site conditions (small lots, inadequate soils) and poorly designed systems appear to be the major problems. Sanitary surveys by the Lake George Park Commission have confirmed the discharge of inadequately treated wastewater to the lake. Even where systems do not discharge to the lake directly, movement of nutrients via groundwater seep is a concern. (Essex County WQCC, June 2000)

#### Watershed Management

The Lake George Park Commission is currently undertaking the formulation of new regulations on stream corridor management and watershed protection to better protect the water quality of Lake George. More than 25 stakeholder organizations participated through representatives in a public planning effort and series of four workshop meetings. The process produced a literature review, conceptual framework and significant public comment. A Final Generic EIS as well as Draft Stream Corridor Management Regulations are currently available for public review and comment. (Lake George Park Commission, June 2009, <http://www.lgpc.state.ny.us>)

There are a number of citizen advocacy groups focused on the protection of the water resources of Lake George. The Lake George Association (LGA) is comprised of year-round and seasonal residents, members of the business community and local government representatives. Its stated mission is one of advocacy, education and broad-based community involvement. The LGA advocates a reasoned approach to management of the Lake George watershed to ensure long-term stability of water quality and of the watershed's environmental and economic viability. (<http://www.lakegeorgeassociation.org>)

The Fund for Lake George pursues its mission through support for long-term scientific research on the lake, advocacy for new protections, and partnerships with other organizations and local governments. The Fund supports long-term scientific research on the water quality of Lake George through a partnership with the RPI Darrin Freshwater Institute. This results in a science-based approach to the protection of Lake George water quality and the overall health of the Lake George watershed. (<http://www.fundforlakegeorge.org>)

The Lake George Land Conservancy is a land trust that advocates progressive conservation strategies and works with landowners, government officials, conservation partners, volunteers, and supporters to protect water quality of Lake George and to permanently preserve the natural, scenic and recreational resources of the Lake George region. To date, more than 1,300 concerned individuals have helped LGLC and its partners protect more than 48,500 feet of shoreline and 12,530 acres of land around Lake George. (Lake George Land Conservancy, June 2009, <http://www.lglc.org>)

#### Previous Studies

A number of water quality studies have been conducted on Lake George; many of which have focused on urban runoff. These include an extensive USEPA National Urban Runoff Program study (Lake George Urban Runoff Study, Sutherland et al, 1983), a more recent stormwater runoff study by NYS Park Management and Research Institute and NYSDEC (Feasibility of Reducing the Impacts of Runoff in Developed Areas of Lake George Park, Hyatt et al, 1995), various RPI Freshwater Institute studies, Darrin Freshwater Institute studies and investigations sponsored by the Warren County Office of Lake George Affairs. An update of the Lake George Watershed Plan has recently been completed. (Warren County WQSC and Essex County WQCC, June 2000)

The lake was the focus of a Phase II Clean Lakes Project in 1989-1993. This effort sought to address various water quality issues including nuisance aquatic vegetation control, stormwater management, environmental monitoring. The project also included a public participation component. (DEC/DOW, Lake Services, 1999)

#### Section 303(d) Listing

Lake George is included on the NYS 2008 Section 303(d) List of Impaired Waters. The lake is included on Part 1 of the List as a waterbody segment requiring the development of a TMDL or other strategy to address impairments due to silt/sediment. This listing is closely related to similar listings for a number of tributary segments to the lake. This waterbody was first listed on the 2002 Section 303(d) List.

#### Segment Description

This segment includes the total area of Lake George (P367).

# Tribs to L.George, East Shore ( 1006-0020)

Impaired Seg

## Waterbody Location Information

Revised: 06/18/2009

**Water Index No:** C-101-P367- 1 thru 26  
**Hydro Unit Code:** 02010001/190      **Str Class:** AAspl  
**Waterbody Type:** River  
**Waterbody Size:** 63.7 Miles  
**Seg Description:** total length of selected tribs

**Drain Basin:** Lake Champlain  
**Reg/County:** Champlain-Lk.George  
**Quad Map:** 5/Washington Co. (58)  
SHELVING ROCK (G-26-3) ...

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Water Supply	Threatened	Possible
Recreation	Stressed	Possible
HABITAT/HYDROLOGY	Impaired	Known

### Type of Pollutant(s)

Known: SILT/SEDIMENT  
Suspected: Restricted Passage  
Possible: Other Pollutants (various)

### Source(s) of Pollutant(s)

Known: STREAMBANK EROSION  
Suspected: Deicing (stor/appl), Roadbank Erosion  
Possible: Other Source (various)

## Resolution/Management Information

**Issue Resolvability:** 2 (Strategy Exists, Needs Funding/Resources)  
**Verification Status:** 5 (Management Strategy has been Developed)  
**Lead Agency/Office:** ext/WQCC  
**TMDL/303d Status:** 1 (Individual Waterbody Impairment Requiring a TMDL)

**Resolution Potential:** High

## Further Details

### Overview

Fishery habitat and recreational uses in some of the tribs along the east shore of Lake George are restricted by excessive sediment loads. Various nonpoint sources, as well as natural sediment runoff from steep gradient streams, are the source of the sediment.

### Habitat/Hydrology Impacts

Fast-flowing, high gradient streams carry considerable bed load during snowmelt and other high flow events. The sediment is deposited at stream mouths creating large deltas that restrict fish migration and spawning. Additionally, the large delta areas diminish recreation (swimming, fishing, boating) in the lake (see also Lake George segment). The restricted flow at the trib mouths can also impact stream hydrology, and contribute to flooding concerns. Various recreational uses (swimming, fishing) in the streams may also be affected. Sources of additional sediment in the tribs includes streambank and roadbank erosion, winter road sanding practices, and construction activities (primarily residential) in the watershed. Because of the inter-relationship between the sediment loads from the tributaries and the impact of the resulting lake deltas on recreation/fish habitat in the lake itself as well as the tribs, a lake watershed approach would be the most effective means to address the

silt/sedimentation issues in the tribs. (DEC/DOW and FWMR, Region 5, June 2000)

#### Special Protection

The waters of this segment (like all tribs to Lake George) have been designated a Class AA-special water, suitable for use as a drinking water supply. The Class AA-special designation also means there shall be no discharge or disposal of sewage, industrial wastes, or other wastes into these waters. As a result of this designation, the lake is considered a highly valued resource and is subject to special protections which may result in an assessment of threatened (possible) for drinking water use. (DEC/DOW, BWAM, December 2008)

#### Watershed Management

The Lake George Park Commission is currently undertaking the formulation of new regulations on stream corridor management and watershed protection to better protect the water quality of Lake George. More than 25 stakeholder organizations participated through representatives in a public planning effort and series of four workshop meetings. The process produced a literature review, conceptual framework and significant public comment. A Final Generic EIS as well as Draft Stream Corridor Management Regulations are currently available for public review and comment. (Lake George Park Commission, June 2009, <http://www.lgpc.state.ny.us>)

#### Previous Assessments

In Foster Brook (-11) 200 feet of streambank was washed out during the January 1996 flooding. The wash-out was repaired and channel restoration completed under the USDA Emergency Watershed Protection Program. (Washington County WQCC, March 2000)

Particular tribs affected by high sediment loads include Sunset Brook (-10) where a delta at its mouth extends over 100 feet into the lake at the county beach area. A local sand pit had been cited as a possible contributor to sediment in this trib. However Mineral Resources staff visited the mine and determined that significant sand and sediment loads from the operation is not likely. (DEC/DMR, January 2001)

#### Section 303d Listing

These Tribs to Lake George are included on the NYS 2008 Section 303(d) List of Impaired Waters. The tribs are included on Part 1 of the List as a waterbody segment requiring the development of a TMDL or other strategy to attain water quality standards for silt/sediment. A draft TMDL for similarly impacted tribs to Lake George identified the need to dredge sediment deltas in order to fully restore recreational uses. However this non-traditional approach was not considered by EPA to meet the requirements of a TMDL. This waterbody was first listed on the 2002 Section 303(d) List. (DEC/DOW, BWAM, May 2009)

#### Segment Description

This segment includes the total length of all tribs to Lake George along its eastern shore in Washington County. Tribs within this segment, including Sunset Brook (-10) and Foster Brook (-11), are Class AA-special.

# Tribs to L.George, Southeast Shore ( 1006-0021)

NoKnownImpct

## Waterbody Location Information

Revised: 06/12/2009

**Water Index No:** C-101-P367-27 thru 31  
**Hydro Unit Code:** 02010001/190      **Str Class:** AAAspl  
**Waterbody Type:** River  
**Waterbody Size:** 32.6 Miles  
**Seg Description:** total length of selected tribs

**Drain Basin:** Lake Champlain  
**Reg/County:** Champlain-Lk.George  
**Quad Map:** 5/Warren Co. (57)  
LAKE GEORGE (H-26-1)

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

### Type of Pollutant(s)

Known: ---  
Suspected: ---  
Possible: OTHER POLLUTANTS (various)

### Source(s) of Pollutant(s)

Known: ---  
Suspected: ---  
Possible: OTHER SOURCE (various)

## Resolution/Management Information

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

**Resolution Potential:** High

## Further Details

### Special Protection

The waters of this segment (like all tribs to Lake George) have been designated a Class AA-special water, suitable for use as a drinking water supply. The Class AA-special designation also means there shall be no discharge or disposal of sewage, industrial wastes, or other wastes into these waters. As a result of this designation, the lake is considered a highly valued resource and is subject to special protections which may result in an assessment of threatened (possible) for drinking water use. (DEC/DOW, BWAM, December 2008)

### Watershed Management

The Lake George Park Commission is currently undertaking the formulation of new regulations on stream corridor management and watershed protection to better protect the water quality of Lake George. More than 25 stakeholder organizations participated through representatives in a public planning effort and series of four workshop meetings. The process produced a literature review, conceptual framework and significant public comment. A Final Generic EIS as well as Draft Stream Corridor Management Regulations are currently available for public review and comment. (Lake George Park Commission, June 2009, <http://www.lgpc.state.ny.us>)

### Segment Description

This segment includes the total length of all tribs to Lake George along its southeastern shore in Warren County, between the Warren-Washington County line and the Village of Lake George. Tribs within this segment are Class AA-special.

# Tribs to L.George, Village of L George ( 1006-0008)

Impaired Seg

## Waterbody Location Information

Revised: 06/18/2009

**Water Index No:** C-101-P367-32 thru 40  
**Hydro Unit Code:** 02010001/190      **Str Class:** AAAspl  
**Waterbody Type:** River (Low Flow)      **Drain Basin:** Lake Champlain  
**Waterbody Size:** 20.0 Miles      **Reg/County:** 5/Warren Co. (57)  
**Seg Description:** total length of selected tribs      **Quad Map:** LAKE GEORGE (H-26-1)

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Water Supply	Threatened	Possible
Recreation	Stressed	Suspected
HABITAT/HYDROLOGY	Impaired	Known

### Type of Pollutant(s)

Known: SILT/SEDIMENT  
Suspected: Restricted Passage  
Possible: Pathogens

### Source(s) of Pollutant(s)

Known: STREAMBANK EROSION, URBAN/STORM RUNOFF  
Suspected: Deicing (stor/appl), Roadbank Erosion  
Possible: Private/Comm/Inst

## Resolution/Management Information

**Issue Resolvability:** 2 (Strategy Exists, Needs Funding/Resources)  
**Verification Status:** 5 (Management Strategy has been Developed)  
**Lead Agency/Office:** ext/WQCC  
**TMDL/303d Status:** 1 (Individual Waterbody Impairment Requiring a TMDL)

**Resolution Potential:** High

## Further Details

### Overview

Fishery habitat and recreational uses in these tribs to Lake George are restricted by excessive sediment loads. Various nonpoint sources, as well as natural sediment runoff from steep gradient streams, are the source of the sediment.

### Habitat/Hydrology Impacts

Fast-flowing, high gradient streams carry considerable bed load during snowmelt and other high flow events. The sediment is deposited at stream mouths creating large deltas that restrict fish migration and spawning. The most significant trib deltas include those at the mouths of English, West and East Brooks. (Bathymetric Mapping of Selected Delta Areas of Lake George, Eichler et al, Darrin Freshwater Institute, 1999). Additionally, the large delta areas diminish recreation (swimming, fishing, boating) in the lake (see also Lake George segment). The restricted flow at the trib mouths can also impact stream hydrology, and contribute to flooding concerns. Various recreational uses (swimming, fishing) in the streams may also be affected. Sources of additional sediment in the tribs includes streambank and roadbank erosion, winter road sanding practices, and construction activities (primarily residential) in the watershed. Because of the inter-relationship between the sediment loads from the tributaries and the impact of the resulting lake deltas on recreation/fish habitat in the lake itself as well as the

tribs, a lake watershed approach would be the most effective means to address the silt/sedimentation issues in the tribs. (DEC/DOW and FWMR, Region 5, June 2000)

#### Water Quality Sampling

NYSDEC Rotating Integrated Basin Studies (RIBS) Intensive Network monitoring of West Brook in Lake George, Warren County, (at Gage Road) was conducted in 2003 and 2004. Intensive Network sampling typically includes macroinvertebrate community analysis, water column chemistry, sediment and invertebrate tissues analysis and toxicity evaluation. Biological (macroinvertebrate) sampling results reveal non-impacted conditions, indicating very good water quality. Water column sampling found no parameters of concern. Macroinvertebrates collected at this site and chemically analyzed for selected metals and PAHs found no contaminants to be present at a concentration above the established guidance value. Sediment screening for acute toxicity indicated possible toxicity, but analysis of sediments found no contaminants above the threshold effects concentration. Based on sediment quality guidelines developed for freshwater ecosystems, overall sediment quality is not likely to result in toxicity to sediment-dwelling organisms. Chronic toxicity testing using water from this location elevated mortality and reproductive effects on the test organism in one of the three tests performed; the other test showed no significant mortality or reproductive effects. Based on the consensus of these established assessment methods, overall water quality at this site shows that in spite of some concerns that should continue to be monitored, aquatic life is considered to be fully supported in the stream, and there are no other apparent water quality impacts to recreational uses. (DEC/DOW, BWAM/RIBS, May 2009).

A 1999 biological (macroinvertebrate) survey of West Brook (from near the mouth to above the I-87 crossing) found generally good water quality, ranging from non-impacted upstream to slightly impacted conditions downstream. Road runoff, groundwater contributions, and differences in habitat and land use appear to account for the faunal differences seen. A groundwater seep downstream of the Lake George (V) WWTP contributes small amounts of nutrients to the stream. The downstream site was also sampled in 1998 and was assessed as moderately impacted, although very close to the range of slight impact. (West Brook Biological Assessment Report, Bode et al, DEC/DOW, BWAR/SBU, March 2000)

A number of other water quality studies have been focused on urban runoff, stormwater, and other inputs to Lake George. These include an extensive USEPA National Urban Runoff Program study (Lake George Urban Runoff Study, Sutherland et al, 1983), a more recent stormwater runoff study by NYS Park Management and Research Institute and NYSDEC (Feasibility of Reducing the Impacts of Runoff in Developed Areas of Lake George Park, Hyatt et al, 1995), various RPI Freshwater Institute studies, and investigations sponsored by the Warren County Office of Lake George Affairs. (Warren County WQSC and Essex County WQCC, June 2000)

A study conducted for the Lake George Association by the Darrin Fresh Water Institute sampled sediment in deltas at the mouth of numerous tribs to the lake. The study found measurable quantities of various metals and other substances expected in roadway runoff. (Analysis of Sedimentary Metals Associated with Stormwater Runoff in the Lake George Basin, Eichler et al, DFWI, 1997)

#### Special Protection

The waters of this segment (like all tribs to Lake George) have been designated a Class AA-special water, suitable for use as a drinking water supply. The Class AA-special designation also means there shall be no discharge or disposal of sewage, industrial wastes, or other wastes into these waters. As a result of this designation, the lake is considered a highly valued resource and is subject to special protections which may result in an assessment of threatened (possible) for drinking water use. (DEC/DOW, BWAM, December 2008)

#### Watershed Management

A number of lake/watershed restoration and upland control efforts are underway or have been completed. Two former water supply reservoirs (Gage Brook and Orebed) were dredged to serve as sedimentation basins for West Brook. Detention/infiltration basins have also been installed at Exit 22 of the I-87 Northway, and at the Lake George High School bus garage and gymnasium. Additional nonpoint source controls are needed and are being considered. (DEC/DOW, Region 5, June 2009)

A constructed wetland project is underway to address stormwater runoff from the Canada Street/Route 9 corridor in the West Brook watershed. This project - The West Brook Conservation Initiative - aims to transform the former Gaslight Village property into an environmental park, which will include the restoration of a 4.5 acre constructed wetland to capture stormwater to remove sediment and nutrients before entering Lake George. The initiative is a collaborative effort between the FUND for Lake George, the Lake George Land Conservancy and the Lake George Association, along with other partners including NYS DOT. Design of the project is well underway with construction anticipated to begin in 2010. (FUND, LGLC and LGA, June 2009)

The Lake George Park Commission is currently undertaking the formulation of new regulations on stream corridor management and watershed protection to better protect the water quality of Lake George. More than 25 stakeholder organizations participated through representatives in a public planning effort and series of four workshop meetings. The process produced a literature review, conceptual framework and significant public comment. A Final Generic EIS as well as Draft Stream Corridor Management Regulations are currently available for public review and comment. (Lake George Park Commission, June 2009, <http://www.lgpc.state.ny.us>)

#### Previous Assessments

Warren County DPW excavates silt load from the head of the Beach Road culvert annually. In addition to roadway runoff, urban runoff and storm sewers are also sources of the sediment. Heavy sediment load transport and deposition at the tributary mouths also restricts recreational boating and navigation in the lake. An expanding delta also reduces native plant diversity and encourages growth of Eurasian milfoil. The deltas at East Brook (-37), West Brook (-38) and other tribs are being studied by the Lake George Association for possible dredging/removal. Roadbank erosion and runoff from a school athletic field, which enters the stream via drains under the field, are also sources affecting this trib. (Warren County WQSC, June 2000)

#### Source (Drinking) Water Assessment

The source water intake for the Village of Lake George is located in Lake George not far from these tribs at a depth of 35 feet. A source water assessment of Lake George 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. (NYSDOH, Source Water Assessment Program, 2005)

#### Section 303d Listing

These Tribs to Lake George are included on the NYS 2008 Section 303(d) List of Impaired Waters. The tribs are included on Part 1 of the List as a waterbody segment requiring the development of a TMDL or other strategy to attain water quality standards for silt/sediment. A draft TMDL for similarly impacted tribs to Lake George identified the need to dredge sediment deltas in order to fully restore recreational uses. However this non-traditional approach was not considered by EPA to meet the requirements of a TMDL. This waterbody was first listed on the 2002 Section 303(d) List. (DEC/DOW, BWAM, May 2009)

#### Segment Description

This segment includes the total length of all tribs to Lake George along its southern shore in Lake George Village. Tribs within this segment, including East Brook (-37), West Brook (-38), Prospect Mountain Brook (-39) and Marine Village (-40), are Class AA-special.

# Hidden Lake ( 1006-0026)

NoKnownImpct

## Waterbody Location Information

Revised: 10/05/2000

**Water Index No:** C-101-P367-38-P377  
**Hydro Unit Code:** 02010001/190      **Str Class:** AAspcl  
**Waterbody Type:** Lake (Oligotrophic)      **Reg/County:** 5/Warren Co. (57)  
**Waterbody Size:** 20.0 Acres      **Quad Map:** LAKE GEORGE (H-26-1)  
**Seg Description:** entire lake

## 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

Monitoring of Hidden Lake was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Segment Description

This segment includes the total area of Hidden Lake (P377) as well as smaller Lower Hidden Lake (P376).

# English Brook and tribs ( 1006-0032)

Impaired Seg

## Waterbody Location Information

Revised: 06/18/2009

**Water Index No:** C-101-P367-41  
**Hydro Unit Code:** 02010001/190      **Str Class:** AAspl  
**Waterbody Type:** River  
**Waterbody Size:** 15.0 Miles  
**Seg Description:** entire stream and tribs

**Drain Basin:** Lake Champlain  
Champlain-Lk.George  
**Reg/County:** 5/Warren Co. (57)  
**Quad Map:** LAKE GEORGE (H-26-1)

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Water Supply	Threatened	Possible
Recreation	Stressed	Suspected
HABITAT/HYDROLOGY	Impaired	Known

### Type of Pollutant(s)

Known: SILT/SEDIMENT  
Suspected: Restricted Passage  
Possible: Pathogens

### Source(s) of Pollutant(s)

Known: STREAMBANK EROSION, URBAN/STORM RUNOFF  
Suspected: Deicing (stor/appl), Roadbank Erosion  
Possible: Private/Comm/Inst

## Resolution/Management Information

**Issue Resolvability:** 2 (Strategy Exists, Needs Funding/Resources)  
**Verification Status:** 5 (Management Strategy has been Developed)  
**Lead Agency/Office:** ext/WQCC  
**TMDL/303d Status:** 1 (Individual Waterbody Impairment Requiring a TMDL)

**Resolution Potential:** High

## Further Details

### Overview

Fishery habitat and recreational uses in English Brook are restricted by excessive sediment loads. Various nonpoint sources, as well as natural sediment runoff from steep gradient streams, are the source of the sediment.

### Habitat/Hydrology Impacts

Fast-flowing, high gradient streams carry considerable bed load during snowmelt and other high flow events. The sediment is deposited at stream mouths creating large deltas that restrict fish migration and spawning. The most significant trib deltas include those at the mouths of English Brook. (Bathymetric Mapping of Selected Delta Areas of Lake George, Eichler et al, Darrin Freshwater Institute, 1999). Additionally, the large delta areas diminish recreation (swimming, fishing, boating) in the lake (see also Lake George segment). The restricted flow at the trib mouths can also impact stream hydrology, and contribute to flooding concerns. Various recreational uses (swimming, fishing) in the streams may also be affected. Sources of additional sediment in the tribs includes streambank and roadbank erosion, winter road sanding practices, and construction activities (primarily residential) in the watershed. Because of the inter-relationship between the sediment loads from the tributaries and the impact of the resulting lake deltas on recreation/fish habitat in the lake itself as well as the tribs, a lake

watershed approach would be the most effective means to address the silt/sedimentation issues in the tribs. (DEC/DOW and FWMR, Region 5, June 2000)

#### Water Quality Sampling

Aquatic life support in some tributaries is considered to be stressed by nonpoint runoff contributions and nutrient enrichment. Biological (macroinvertebrate) sampling conducted on English Brook in 1998 in Lake George Village (at Route 9) found slightly impacted water quality. Impact Source Determination indicated nonpoint source nutrient enrichment. Mayflies, stoneflies, and caddisflies were numerous at this site, and the enrichment was considered minor. (DEC/DOW, BWAR/SBU, June 1999)

A number of other water quality studies have been focused on urban runoff, stormwater, and other inputs to Lake George. These include an extensive USEPA National Urban Runoff Program study (Lake George Urban Runoff Study, Sutherland et al, 1983), a more recent stormwater runoff study by NYS Park Management and Research Institute and NYSDEC (Feasibility of Reducing the Impacts of Runoff in Developed Areas of Lake George Park, Hyatt et al, 1995), various RPI Freshwater Institute studies, and investigations sponsored by the Warren County Office of Lake George Affairs. (Warren County WQSC and Essex County WQCC, June 2000)

A study conducted for the Lake George Association by the Darrin Fresh Water Institute sampled sediment in deltas at the mouth of numerous tribs to the lake. The study found measurable quantities of various metals and other substances expected in roadway runoff. (Analysis of Sedimentary Metals Associated with Stormwater Runoff in the Lake George Basin, Eichler et al, DFWI, 1997)

#### Special Protection

The waters of this segment (like all tribs to Lake George) have been designated a Class AA-special water, suitable for use as a drinking water supply. The Class AA-special designation also means there shall be no discharge or disposal of sewage, industrial wastes, or other wastes into these waters. As a result of this designation, the lake is considered a highly valued resource and is subject to special protections which may result in an assessment of threatened (possible) for drinking water use. (DEC/DOW, BWAR, December 2008)

#### Watershed Management

The Lake George Park Commission is currently undertaking the formulation of new regulations on stream corridor management and watershed protection to better protect the water quality of Lake George. More than 25 stakeholder organizations participated through representatives in a public planning effort and series of four workshop meetings. The process produced a literature review, conceptual framework and significant public comment. A Final Generic EIS as well as Draft Stream Corridor Management Regulations are currently available for public review and comment. (Lake George Park Commission, June 2009, <http://www.lgpc.state.ny.us>)

#### Previous Assessments

Warren County DPW excavates silt load from the head of the Beach Road culvert annually. In addition to roadway runoff, urban runoff and storm sewers are also sources of the sediment. Heavy sediment load transport and deposition at the tributary mouths also restricts recreational boating and navigation in the lake. An expanding deltas also reduces native plant diversity and encourages growth of Eurasian milfoil. The delta at English Brook (-41) and other tribs are being studied by the Lake George Association for possible dredging/removal. (Warren County WQSC, June 2000)

#### Source (Drinking) Water Assessment

The source water intake for the Village of Lake George is located in Lake George not far from this trib at a depth of 35 feet. A source water assessment of Lake George 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. (NYSDOH, Source Water Assessment Program, 2005)

#### Section 303d Listing

Tribs to Lake George, including English Brook, are included on the NYS 2008 Section 303(d) List of Impaired Waters. The tribs are included on Part 1 of the List as a waterbody segment requiring the development of a TMDL or other strategy to attain water quality standards for silt/sediment. A draft TMDL for similarly impacted tribs to Lake George identified the need to dredge sediment deltas in order to fully restore recreational uses. However this non-traditional approach was not considered by EPA to meet the requirements of a TMDL. This waterbody was first listed on the 2002 Section 303(d) List. (DEC/DOW, BWAM, May 2009)

#### Segment Description

This segment includes the entire stream and all tribs. The waters of the stream are Class AA-special. Tribs to this reach/segment are also Class AA-special.

# Tribs to L.George, Town of Lake George ( 1006-0004)

NoKnownImpct

## Waterbody Location Information

Revised: 06/12/2009

**Water Index No:** C-101-P367-42 thru 48  
**Hydro Unit Code:** 02010001/190      **Str Class:** AAAspl  
**Waterbody Type:** River (Low Flow)      **Drain Basin:** Lake Champlain  
**Waterbody Size:** 5.7 Miles      **Reg/County:** 5/Warren Co. (57)  
**Seg Description:** total length of selected tribs      **Quad Map:** LAKE GEORGE (H-26-1)

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

### Type of Pollutant(s)

Known: ---  
Suspected: ---  
Possible: OTHER POLLUTANTS (various)

### Source(s) of Pollutant(s)

Known: ---  
Suspected: ---  
Possible: OTHER SOURCE (various)

## Resolution/Management Information

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

## Further Details

### Water Quality Sampling

A biological (macroinvertebrate) assessment of Smith Brook in Diamond Point (at Route 9) was conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated non-impacted conditions. The sample was 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)

### Special Protection

The waters of this segment (like all tribs to Lake George) have been designated a Class AA-special water, suitable for use as a drinking water supply. The Class AA-special designation also means there shall be no discharge or disposal of sewage, industrial wastes, or other wastes into these waters. As a result of this designation, the lake is considered a highly valued resource and is subject to special protections which may result in an assessment of threatened (possible) for drinking water use. (DEC/DOW, BWAM, December 2008)

### Watershed Management

The Lake George Park Commission is currently undertaking the formulation of new regulations on stream corridor

management and watershed protection to better protect the water quality of Lake George. More than 25 stakeholder organizations participated through representatives in a public planning effort and series of four workshop meetings. The process produced a literature review, conceptual framework and significant public comment. A Final Generic EIS as well as Draft Stream Corridor Management Regulations are currently available for public review and comment. (Lake George Park Commission, June 2009, <http://www.lgpc.state.ny.us>)

#### Previous Assessment

Smith Brook (-47) is the most significant trib within this segment and has been specifically cited due to road sanding practices and the steep terrain of County Route 35. Failing and/or inadequate on-site septic systems serving homes along the stream are also of concern and a possible source of impact. (Warren County WQSC, June 2000)

#### Segment Description

This segment includes the total length of all tribs to Lake George along its western shore in the Town of Lake George. Tribs within this segment, including Smith Brook (-47), are Class AA-special.

# Tribs to L.George, Town of Bolton ( 1006-0022)

NoKnownImpct

## Waterbody Location Information

Revised: 06/29/2009

**Water Index No:** C-101-P367-49 thru 73 (selected)      **Drain Basin:** Lake Champlain  
**Hydro Unit Code:** 02010001/190      **Str Class:** AAAspl      Champlain-Lk.George  
**Waterbody Type:** River      **Reg/County:** 5/Warren Co. (57)  
**Waterbody Size:** 21.9 Miles      **Quad Map:** BOLTON LANDING (G-26-4) ...  
**Seg Description:** total length of selected tribs

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

### Type of Pollutant(s)

Known:      - - -  
Suspected:      - - -  
Possible:      OTHER POLLUTANTS (various)

### Source(s) of Pollutant(s)

Known:      - - -  
Suspected:      - - -  
Possible:      OTHER SOURCE (various)

## Resolution/Management Information

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

## Further Details

### Water Quality Sampling

A biological (macroinvertebrate) assessment of Stewart Brook in Bolton Landing (above Goodman Avenue) was conducted in 1998. The macroinvertebrate fauna was dominated by midges, although mayflies, stoneflies, and caddisflies were also numerous. Overall water quality was assessed as non-impacted, based on the indices. (DEC/DOW, BWAR/SBU, January 2000)

### Special Protection

The waters of this segment (like all tribs to Lake George) have been designated a Class AA-special water, suitable for use as a drinking water supply. The Class AA-special designation also means there shall be no discharge or disposal of sewage, industrial wastes, or other wastes into these waters. As a result of this designation, the lake is considered a highly valued resource and is subject to special protections which may result in an assessment of threatened (possible) for drinking water use. (DEC/DOW, BWAM, December 2008)

### Watershed Management

The Lake George Park Commission is currently undertaking the formulation of new regulations on stream corridor management and watershed protection to better protect the water quality of Lake George. More than 25 stakeholder

organizations participated through representatives in a public planning effort and series of four workshop meetings. The process produced a literature review, conceptual framework and significant public comment. A Final Generic EIS as well as Draft Stream Corridor Management Regulations are currently available for public review and comment. (Lake George Park Commission, June 2009, <http://www.lgpc.state.ny.us>)

#### Previous Assessment

Impacts to Stewart Brook (-55) from silt/sedimentation, turbidity and discoloration have been previously reported as concerns. A storm sewer outfall at Brook Street and Goodman Avenue conveyed continuous flow, even during long periods of dry weather. The continuous flow and the proximity of the pipe (500 feet) to the leaching beds of the Bolton WWTP suggest that the pipe was capturing treated wastewater leachate from the ground and conveying it to the stream. The town added tertiary sand filters back in the early 2000s. While the storm sewer continues to capture groundwater flow, the improved treatment at the plant has addressed the water quality concerns in the stream. (DEC/DOW, Region 5, June 2009)

#### Segment Description

This segment includes the total length of all tribs to Lake George along its western shore in the Town of Bolton. Tribs within this segment, including Edmunds Brook (-49) and Stewart Brook (-55), are Class AA-special. Huddle Brook (-53) and Finkle Brook (-56) are listed separately.

# Huddle/Finkle Brooks and tribs ( 1006-0003)

Impaired Seg

## Waterbody Location Information

Revised: 06/17/2009

**Water Index No:** C-101-P367-53,56  
**Hydro Unit Code:** 02010001/190      **Str Class:** AAAspl  
**Waterbody Type:** River (Low Flow)      **Reg/County:** 5/Warren Co. (57)  
**Waterbody Size:** 18.9 Miles      **Quad Map:** BOLTON LANDING (G-26-4)  
**Seg Description:** total length of both streams and tribs

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Water Supply	Threatened	Possible
Recreation	Stressed	Suspected
HABITAT/HYDROLOGY	Impaired	Known

### Type of Pollutant(s)

Known: SILT/SEDIMENT  
Suspected: Restricted Passage  
Possible: Other Pollutants (various), Pathogens

### Source(s) of Pollutant(s)

Known: STREAMBANK EROSION, Urban/Storm Runoff  
Suspected: Deicing (stor/appl), Roadbank Erosion  
Possible: On-Site/Septic Syst, Other Source (various)

## Resolution/Management Information

**Issue Resolvability:** 2 (Strategy Exists, Needs Funding/Resources)  
**Verification Status:** 5 (Management Strategy has been Developed)  
**Lead Agency/Office:** ext/WQCC      **Resolution Potential:** High  
**TMDL/303d Status:** 1 (Individual Waterbody Impairment Requiring a TMDL)

## Further Details

### Overview

Fishery habitat and recreational uses in Huddle and Finkle Brooks are restricted by excessive sediment loads. Various nonpoint sources, as well as natural sediment runoff from steep gradient streams, are the source of the sediment.

### Habitat/Hydrology Impacts

Fast-flowing, high gradient streams carry considerable bed load during snowmelt and other high flow events. The sediment is deposited at stream mouths creating large deltas that restrict fish migration and spawning. Additionally, the large delta areas diminish recreation (swimming, fishing, boating) in the lake (see also Lake George segment). The restricted flow at the trib mouths can also impact stream hydrology, and contribute to flooding concerns. Various recreational uses (swimming, fishing) in the streams may also be affected. Sources of additional sediment in the tribs includes streambank and roadbank erosion, winter road sanding practices, and construction activities (primarily residential) in the watershed. Because of the inter-relationship between the sediment loads from the tributaries and the impact of the resulting lake deltas on recreation/fish habitat in the lake itself as well as the tribs, a lake watershed approach would be the most effective means to address the silt/sedimentation issues in the tribs. (DEC/DOW and FWMR, Region 5, June 2000)

### Water Quality Sampling

A biological (macroinvertebrate) assessment of Finkle Brook at Bolton Landing (at Horicon Avenue) was conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated non-impacted conditions. The sample was 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)

A biological (macroinvertebrate) assessment of Huddle Brook in Bolton Landing (at Route 9) 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)

A late 1990s study conducted for the Lake George Association by the Darrin Fresh Water Institute sampled sediment in deltas at the mouth of Finkle Brook and other tribs to the lake. The study found measurable quantities of various metals and other substances expected in roadway runoff. (Analysis of Sedimentary Metals Associated with Stormwater Runoff in the Lake George Basin, Eichler et al, DFWI, 1997)

### Special Protection

The waters of this segment (like all tribs to Lake George, as well as the lake itself) have been designated Class AA-special, suitable for use as a drinking water supply. Consequently, these waters are considered highly valued resources which would be included on the DEC/DOW Priority Waterbodies List as Threatened waters, even in the absence of identified water quality impacts. (DEC/DOW, BWAR, December 2000)

### Watershed Management

Local agencies have implemented a number of stream improvement projects in the Finkle Brook watershed. The Warren County SWCD completed work on the Artist Falls sedimentation basin to capture sand and sediment before it is carried into Lake George and deposited in the trib delta. The Town of Bolton has also conducted stream improvements along Finkle Brook using EPF funding. All appropriate upland sediment controls are now in place throughout the watershed. Local focus has turned toward discussion of the dredging of the sediment delta in Lake George at the mouth of Finkle Brook. A Generic EIS has been issued for the dredging of Lake George trib sediment deltas. (Warren County WQSC and DEC/DOW, Region 5, June 2009)

The Lake George Park Commission is currently undertaking the formulation of new regulations on stream corridor management and watershed protection to better protect the water quality of Lake George. More than 25 stakeholder organizations participated through representatives in a public planning effort and series of four workshop meetings. The process produced a literature review, conceptual framework and significant public comment. A Final Generic EIS as well as Draft Stream Corridor Management Regulations are currently available for public review and comment. (Lake George Park Commission, June 2009, <http://www.lgpc.state.ny.us>)

### Section 303d Listing

Huddle and Finkle Brooks are included on the NYS 2008 Section 303(d) List of Impaired Waters. The tribs are included on Part 1 of the List as a waterbody segment requiring the development of a TMDL or other strategy to attain water quality standards for silt/sediment. A 2005 draft TMDL for Finkle Brook identified the need to dredge sediment deltas in order to fully restore recreational uses. However this non-traditional approach was not considered by EPA to meet the requirements of a TMDL. This waterbody was first listed on the 2002 Section 303(d) List. (DEC/DOW, BWAM, May 2009)

### Segment Description

This segment includes the total length of both Huddle (-53) and Finkle (-56) Brooks and their tribs. The waters of these streams are Class AA-Special. Tribs within this segment are also Class AA-Special.

# Trout Lake ( 1006-0027)

NoKnownImpct

## Waterbody Location Information

Revised: 01/09/2001

**Water Index No:** C-101-P367-53-P379  
**Hydro Unit Code:** 02010001/190      **Str Class:** AAspcl  
**Waterbody Type:** Lake (Unknown Trophic)      **Reg/County:** 5/Warren Co. (57)  
**Waterbody Size:** 257.6 Acres      **Quad Map:** BOLTON LANDING (G-26-4)  
**Seg Description:** entire lake

## 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

Trout Lake was included in the 1992 USEPA Environmental Monitoring and Assessment Program (EMAP) effort; results of this study found no evidence of water quality impairment. (DEC/DOW, BWM/Lake Services, December 2000)

Monitoring of Trout Lake was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Source (Drinking) Water Assessment

A source water assessment of Trout Lake found no noteworthy risks to source water quality. 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 Camp Walden. (NYSDOH, Source Water Assessment Program, 2005)

#### Segment Description

This segment includes the total area of Trout Lake (P379).

# Edgecomb Pond ( 1006-0028)

NoKnownImpct

## Waterbody Location Information

Revised: 10/05/2000

**Water Index No:** C-101-P367-56-P381  
**Hydro Unit Code:** 02010001/190      **Str Class:** AAspcl  
**Waterbody Type:** Lake (Mesotrophic)      **Drain Basin:** Lake Champlain  
**Waterbody Size:** 35.4 Acres      **Reg/County:** Champlain-Lk.George  
**Seg Description:** entire lake      **Quad Map:** 5/Warren Co. (57)  
BOLTON LANDING (G-26-4)

## 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

Monitoring of Edgecomb Pond was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Source (Drinking) Water Assessment

A source water assessment of Edgecomb Pond found this drinking water source does not have an elevated susceptibility to contamination. There are no regulated facilities within this watershed and the corresponding land cover does not pose any substantial risks to the source water quality. 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 Bolton Water District. (NYSDOH, Source Water Assessment Program, 2005)

**Segment Description**

This segment includes the total area of Edgecomb Pond (P381).

# Indian Brook and tribs ( 1006-0002)

Impaired Seg

## Waterbody Location Information

Revised: 06/17/2009

**Water Index No:** C-101-P367-59  
**Hydro Unit Code:** 02010001/190    **Str Class:** AAAspl  
**Waterbody Type:** River (Low Flow)    **Drain Basin:** Lake Champlain  
**Waterbody Size:** 29.5 Miles    **Reg/County:** 5/Warren Co. (57)  
**Seg Description:** entire stream and tribs    **Quad Map:** BOLTON LANDING (G-26-4)

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Water Supply	Threatened	Possible
Recreation	Stressed	Suspected
HABITAT/HYDROLOGY	Impaired	Known

### Type of Pollutant(s)

Known: SILT/SEDIMENT  
Suspected: Restricted Passage  
Possible: Other Pollutants (various)

### Source(s) of Pollutant(s)

Known: STREAMBANK EROSION  
Suspected: Deicing (stor/appl) (road sanding), Roadbank Erosion, Urban/Storm Runoff  
Possible: Other Source (various), Silviculture

## Resolution/Management Information

**Issue Resolvability:** 2 (Strategy Exists, Needs Funding/Resources)  
**Verification Status:** 5 (Management Strategy has been Developed)  
**Lead Agency/Office:** ext/WQCC    **Resolution Potential:** High  
**TMDL/303d Status:** 1 (Individual Waterbody Impairment Requiring a TMDL)

## Further Details

### Overview

Fishery habitat and recreational uses in Indian Brook are restricted by excessive sediment loads. Various nonpoint sources, as well as natural sediment runoff from steep gradient streams, are the source of the sediment.

### Water Quality Sampling

A biological (macroinvertebrate) assessment of Indian Brook at North Bolton (at Route 9N) was conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated non-impacted conditions. The sample was 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)

### Habitat/Hydrology Impacts

Fast-flowing, high gradient streams carry considerable bed load during snowmelt and other high flow events. The sediment is deposited at stream mouths creating large deltas that restrict fish migration and spawning. Additionally, the large delta areas

diminish recreation (swimming, fishing, boating) in the lake (see also Lake George segment). The restricted flow at the trib mouths can also impact stream hydrology, and contribute to flooding concerns. Various recreational uses (swimming, fishing) in the streams may also be affected. Sources of additional sediment in the trib includes streambank and roadbank erosion, winter road sanding practices, and construction activities (primarily residential) in the watershed. Because of the inter-relationship between the sediment loads from the tributaries and the impact of the resulting lake deltas on recreation/fish habitat in the lake itself as well as the tribs, a lake watershed approach would be the most effective means to address the silt/sedimentation issues in the tribs. (DEC/DOW and FWMR, Region 5, June 2000)

A 1998-99 study of Indian Brook (Conceptual Design of Upstream Improvements in Stormwater Management, Myers, 1999) conducted for the Lake George Association highlighted a concern regarding the growth of the sediment delta at the mouth of the brook. Aerial photos taken in 1997 show the fan-shaped delta extending 300 feet into the lake. The study identifies three principal sources of sediment load: overall streambank erosion, road sanding practices, and soil loss/erosion from three specific areas. Stream restoration to prevent or minimize erosion along the brook and installation of controls to collect and remove sediment from the stream were recommended. (Warren County WQSC, June 2000)

#### Special Protection

The waters of this segment (like all tribs to Lake George, as well as the lake itself) have been designated Class AA-special, suitable for use as a drinking water supply. Consequently, these waters are considered highly valued resources which would be included on the DEC/DOW Priority Waterbodies List as Threatened waters, even in the absence of identified water quality impacts. (DEC/DOW, BWAR, December 2000)

#### Watershed Management

Local agencies have implemented a number of stream improvement projects in the Indian Brook watershed and additional restoration activities are continuing. A Generic EIS has been issued for the dredging of Lake George trib sediment deltas. The current focus of activities in the watershed is the completion of appropriate upland sediment controls. Once these are complete, consideration of dredging of the delta would be a future focus. (Warren County WQSC and DEC/DOW, Region 5, June 2009)

The Lake George Park Commission is currently undertaking the formulation of new regulations on stream corridor management and watershed protection to better protect the water quality of Lake George. More than 25 stakeholder organizations participated through representatives in a public planning effort and series of four workshop meetings. The process produced a literature review, conceptual framework and significant public comment. A Final Generic EIS as well as Draft Stream Corridor Management Regulations are currently available for public review and comment. (Lake George Park Commission, June 2009, <http://www.lgpc.state.ny.us>)

#### Section 303d Listing

Indian Brook is included on the NYS 2008 Section 303(d) List of Impaired Waters. The tribs are included on Part 1 of the List as a waterbody segment requiring the development of a TMDL or other strategy to attain water quality standards for silt/sediment. A 2005 draft TMDL for similarly impacted tribs to Lake George identified the need to dredge sediment deltas in order to fully restore recreational uses. However this non-traditional approach was not considered by EPA to meet the requirements of a TMDL. This waterbody was first listed on the 2002 Section 303(d) List. (DEC/DOW, BWAM, May 2009)

#### Segment Description

This segment includes the entire stream and all tribs. The waters of the stream are Class AA-special. Tribs to this reach/segment are also Class AA-special.

## Minor Lakes in L.George (NW) Wshed ( 1006-0029)

NoKnownImpct

### Waterbody Location Information

Revised: 10/05/2000

**Water Index No:** C-101-P367-59..P382 thru P393 (sel)    **Drain Basin:** Lake Champlain  
**Hydro Unit Code:** 02010001/190    **Str Class:** AAAspl    **Champlain-Lk.George**  
**Waterbody Type:** Lake    **Reg/County:** 5/Warren Co. (57)  
**Waterbody Size:** 143.5 Acres    **Quad Map:** BOLTON LANDING (G-26-4) ...  
**Seg Description:** total area of selected lakes

### 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

Monitoring of a number of ponds within this segment was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. Data for Wing Pond (P382), Pole Hill Pond (P383), Indian Pond (P384), Long Pond (P385), Island Pond (P386), Round Pond (P390) and Duck Pond (P391) revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

#### Segment Description

This segment includes the total area of all selected/smaller lakes/ponds within the Upper Putnam Creek watershed. Lakes within this segment, including Wing Pond (P382), Pole Hill Pond (P383), Indian Pond (P384), Long Pond (P385), Island Pond (P386), Pine Lake (P388), Round Pond (P390) and Duck Pond (P391) as well as Brown Pond (P383a), Spectacle Pond (P393) and unnamed ponds (P387, P389a), are Class AA-Special.

# Northwest Bay Brook and tribs ( 1006-0023)

NoKnownImpct

## Waterbody Location Information

Revised: 06/12/2009

**Water Index No:** C-101-P367-65  
**Hydro Unit Code:** 02010001/190      **Str Class:** AAspcl  
**Waterbody Type:** River  
**Waterbody Size:** 70.7 Miles  
**Seg Description:** entire stream and tribs

**Drain Basin:** Lake Champlain  
**Reg/County:** Champlain-Lk.George  
**Quad Map:** 5/Warren Co. (57) SILVER BAY (G-26-2) ...

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

### Type of Pollutant(s)

Known: ---  
Suspected: ---  
Possible: OTHER POLLUTANTS (various)

### Source(s) of Pollutant(s)

Known: ---  
Suspected: ---  
Possible: OTHER SOURCE (various)

## Resolution/Management Information

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

**Resolution Potential:** High

## Further Details

### Water Quality Sampling

A biological (macroinvertebrate) assessment of Northwest Bay Brook in North Bolton (at Route 9N) was conducted in 1998. The sample passed the field screening criteria, indicating non-impacted water quality conditions and was not retained. (DEC/DOW, BWAR/SBU, January 2000)

### Special Protection

The waters of this segment (like all tribs to Lake George) have been designated a Class AA-special water, suitable for use as a drinking water supply. The Class AA-special designation also means there shall be no discharge or disposal of sewage, industrial wastes, or other wastes into these waters. As a result of this designation, the lake is considered a highly valued resource and is subject to special protections which may result in an assessment of threatened (possible) for drinking water use. (DEC/DOW, BWAR, December 2008)

### Watershed Management

The Lake George Park Commission is currently undertaking the formulation of new regulations on stream corridor management and watershed protection to better protect the water quality of Lake George. More than 25 stakeholder organizations participated through representatives in a public planning effort and series of four workshop meetings. The

process produced a literature review, conceptual framework and significant public comment. A Final Generic EIS as well as Draft Stream Corridor Management Regulations are currently available for public review and comment. (Lake George Park Commission, June 2009, <http://www.lgpc.state.ny.us>)

#### Segment Description

This segment includes the entire stream and all tribs. The waters of the stream are Class AA-special. Tribs to this reach/segment are also Class AA-special.

# Tribs to L.George, Town of Hague ( 1006-0024)

NoKnownImpct

## Waterbody Location Information

Revised: 06/12/2009

**Water Index No:** C-101-P367-74 thru 89 (selected)      **Drain Basin:** Lake Champlain  
**Hydro Unit Code:** 02010001/190      **Str Class:** AAAspl      Champlain-Lk.George  
**Waterbody Type:** River      **Reg/County:** 5/Warren Co. (57)  
**Waterbody Size:** 32.7 Miles      **Quad Map:** BOLTON LANDING (G-26-4)  
**Seg Description:** total length of selected tribs

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

### Type of Pollutant(s)

Known:      - - -  
Suspected:      - - -  
Possible:      OTHER POLLUTANTS (various)

### Source(s) of Pollutant(s)

Known:      - - -  
Suspected:      - - -  
Possible:      OTHER SOURCE (various)

## Resolution/Management Information

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

## Further Details

### Special Protection

The waters of this segment (like all tribs to Lake George) have been designated a Class AA-special water, suitable for use as a drinking water supply. The Class AA-special designation also means there shall be no discharge or disposal of sewage, industrial wastes, or other wastes into these waters. As a result of this designation, the lake is considered a highly valued resource and is subject to special protections which may result in an assessment of threatened (possible) for drinking water use. (DEC/DOW, BWAR, December 2008)

### Watershed Management

The Lake George Park Commission is currently undertaking the formulation of new regulations on stream corridor management and watershed protection to better protect the water quality of Lake George. More than 25 stakeholder organizations participated through representatives in a public planning effort and series of four workshop meetings. The process produced a literature review, conceptual framework and significant public comment. A Final Generic EIS as well as Draft Stream Corridor Management Regulations are currently available for public review and comment. (Lake George Park Commission, June 2009, <http://www.lgpc.state.ny.us>)

### Segment Description

This segment includes the total length of selected smaller tribs to Lake George along its western shore within the Town of Hague. Tribs within this segment, including Jabe Pond Brook (-83) are Class AA-special. Hague Brook (-86) is listed separately.

# Jabe Pond ( 1006-0030)

NoKnownImpct

## Waterbody Location Information

Revised: 10/05/2000

**Water Index No:** C-101-P367-83-P394  
**Hydro Unit Code:** 02010001/190      **Str Class:** AAspcl  
**Waterbody Type:** Lake (Unknown Trophic)      **Drain Basin:** Lake Champlain  
**Waterbody Size:** 147.5 Acres      **Reg/County:** 5/Warren Co. (57)  
**Seg Description:** entire lake      **Quad Map:** BOLTON LANDING (G-26-4)

## 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

Monitoring of Jabe Pond was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Segment Description

This segment includes the total area of Jabe Pond (P394) as well as smaller Little Jabe Pond (P394a).

# Hague Brook and tribs ( 1006-0006)

Impaired Seg

## Waterbody Location Information

Revised: 06/17/2009

**Water Index No:** C-101-P367-86  
**Hydro Unit Code:** 02010001/190      **Str Class:** AAAspl  
**Waterbody Type:** River (Low Flow)      **Drain Basin:** Lake Champlain  
**Waterbody Size:** 17.9 Miles      **Reg/County:** 5/Warren Co. (57)  
**Seg Description:** entire stream and tribs      **Quad Map:** GRAPHITE (F-26-3)

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Water Supply	Threatened	Possible
Recreation	Stressed	Suspected
HABITAT/HYDROLOGY	Impaired	Known

### Type of Pollutant(s)

Known: SILT/SEDIMENT  
Suspected: Restricted Passage  
Possible: Pathogens

### Source(s) of Pollutant(s)

Known: STREAMBANK EROSION, Urban/Storm Runoff  
Suspected: Deicing (stor/appl), Roadbank Erosion  
Possible: - - -

## Resolution/Management Information

**Issue Resolvability:** 2 (Strategy Exists, Needs Funding/Resources)  
**Verification Status:** 5 (Management Strategy has been Developed)  
**Lead Agency/Office:** ext/WQCC  
**TMDL/303d Status:** 1 (Individual Waterbody Impairment Requiring a TMDL)

**Resolution Potential:** High

## Further Details

### Overview

Fishery habitat and recreational uses in Hague Brook are restricted by excessive sediment loads. Various nonpoint sources, as well as natural sediment runoff from steep gradient streams, are the source of the sediment.

### Habitat/Hydrology Impacts

Fast-flowing, high gradient streams carry considerable bed load during snowmelt and other high flow events. The sediment is deposited at stream mouths creating large deltas that restrict fish migration and spawning. Additionally, the large delta areas diminish recreation (swimming, fishing, boating) in the lake (see also Lake George segment). The restricted flow at the trib mouths can also impact stream hydrology, and contribute to flooding concerns. Various recreational uses (swimming, fishing) in the streams may also be affected. Sources of additional sediment in the tribs includes streambank and roadbank erosion, winter road sanding practices, and construction activities (primarily residential) in the watershed. Because of the inter-relationship between the sediment loads from the tributaries and the impact of the resulting lake deltas on recreation/fish habitat in the lake itself as well as the tribs, a lake watershed approach would be the most effective means to address the silt/sedimentation issues in the tribs. (DEC/DOW and FWMR, Region 5, June 2000)

A 1998-99 study of Hague Brook (Conceptual Design of Upstream Improvements in Stormwater Management, Myers, 1999) conducted for the Lake George Association highlighted a concern regarding the growth of the sediment delta at the mouth of the brook. Aerial photos taken in 1997 show the fan-shaped delta extending 300 feet into the lake. continuing growth of the delta along the lake shore. The study identifies three principal sources of sediment load overall streambank erosion, road sanding practices, and soil loss/erosion from three specific areas. Stream restoration to prevent or minimize erosion along the brook and installation of controls to collect and remove sediment from the stream are recommended. (Warren County WQSC, June 2000)

#### Water Quality Sampling

A biological (macroinvertebrate) assessment of Hague Brook at Hague (at Route 9N) was conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated non-impacted conditions. The sample was 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)

A late 1990s study conducted for the Lake George Association by the Darrin Fresh Water Institute sampled sediment in deltas at the mouth of Finkle Brook and other tribs to the lake. The study found measurable quantities of various metals and other substances expected in roadway runoff. (Analysis of Sedimentary Metals Associated with Stormwater Runoff in the Lake George Basin, Eichler et al, DFWI, 1997)

A number of other water quality studies and monitoring efforts have been conducted on Hague Brook and Lake George waters. These include Preliminary Design of Upstream Improvements Associated with Stormwater Remediation, Hague Brook Project (Myers, 1999), Final Report for the Lake George Phase II Clean Lakes Project (Sutherland, 1999), Feasibility of Reducing the Impacts of Stormwater Runoff in Developed Areas of the Lake George Park (Hyatt et al, 1995), Final Report: Lake George Urban Runoff Study (Sutherland et al, 1983), and Unpublished Discharge and Water Chemistry Data for Hague Brook (Sutherland et al, 1992-2000)

#### Special Protection

The waters of this segment (like all tribs to Lake George, as well as the lake itself) have been designated Class AA-special, suitable for use as a drinking water supply. Consequently, these waters are considered highly valued resources which would be included on the DEC/DOW Priority Waterbodies List as Threatened waters, even in the absence of identified water quality impacts. (DEC/DOW, BWAR, December 2000)

#### Watershed Management

Local agencies have implemented a number of stream improvement projects in the Hague Brook watershed. Construction of the Hague Brook Sediment Pond and Darrin Sediment Basin (on a small trib adjacent to Hague Brook) were completed using EPF funding. All appropriate upland sediment controls are now in place throughout the watershed. Local focus has turned toward discussion of the dredging of the sediment delta in Lake George at the mouth of Hague Brook. A Generic EIS has been issued for the dredging of Lake George trib sediment deltas. (Warren County WQSC and DEC/DOW, Region 5, June 2009)

The Lake George Park Commission is currently undertaking the formulation of new regulations on stream corridor management and watershed protection to better protect the water quality of Lake George. More than 25 stakeholder organizations participated through representatives in a public planning effort and series of four workshop meetings. The process produced a literature review, conceptual framework and significant public comment. A Final Generic EIS as well as Draft Stream Corridor Management Regulations are currently available for public review and comment. (Lake George Park Commission, June 2009, <http://www.lgpc.state.ny.us>)

#### Section 303d Listing

Hague Brook is included on the NYS 2008 Section 303(d) List of Impaired Waters. The tribs are included on Part 1 of the List as a waterbody segment requiring the development of a TMDL or other strategy to attain water quality standards for silt/sediment. A 2005 draft TMDL for similarly impacted tribs to Lake George identified the need to dredge sediment deltas

in order to fully restore recreational uses. However this non-traditional approach was not considered by EPA to meet the requirements of a TMDL. This waterbody was first listed on the 2002 Section 303(d) List. (DEC/DOW, BWAM, May 2009)

#### Segment Description

This segment includes the entire stream and all tribs. The waters of the stream are Class AA-special. Tribs to this reach/segment are also Class AA-special.

# Wintergreen Lake, North Lake ( 1006-0031)

NoKnownImpct

## Waterbody Location Information

Revised: 10/05/2000

**Water Index No:** C-101-P367..P395a,P395  
**Hydro Unit Code:** 02010001/190      **Str Class:** AAspcl  
**Waterbody Type:** Lake  
**Waterbody Size:** 92.8 Acres  
**Seg Description:** total area of both lakes

**Drain Basin:** Lake Champlain  
**Reg/County:** Champlain-Lk.George  
**Reg/County:** 5/Warren Co. (57)  
**Quad Map:** SILVER BAY (G-26-2) ...

## 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

Monitoring of Wintergreen Lake was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Segment Description

This segment includes the total area of Wintergreen Lake (P395a) and North Pond (P395).

# Charter Brook and tribs ( 1005-0023)

NoKnownImpct

## Waterbody Location Information

Revised: 04/21/2009

**Water Index No:** C-102  
**Hydro Unit Code:** 02010001/180      **Str Class:** C  
**Waterbody Type:** River  
**Waterbody Size:** 13.4 Miles  
**Seg Description:** entire stream and tribs

**Drain Basin:** Lake Champlain  
Champlain-Lk.George  
**Reg/County:** 5/Washington Co. (58)  
**Quad Map:** TICONDEROGA (F-27-4)

## 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 Charter Brook in Wright (at Route 2) 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 indicates no enrichment in the stream, although impact source determination reveals a fauna that reflects some nonpoint source inputs. 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)

### Segment Description

This segment includes the entire stream and all tribs. The waters of the stream are Class C. Tribs to this reach/segment are also Class C.

# Pine Lake (Long Pond) ( 1005-0025)

NoKnownImpct

## Waterbody Location Information

Revised: 10/04/2000

**Water Index No:** C-119-P398  
**Hydro Unit Code:** 02010001/160      **Str Class:** AA  
**Waterbody Type:** Lake (Unknown Trophic)  
**Waterbody Size:** 70.9 Acres  
**Seg Description:** entire lake

**Drain Basin:** Lake Champlain  
Champlain-Lk.George  
**Reg/County:** 5/Washington Co. (58)  
**Quad Map:** WHITEHALL (G-27-4)

## 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

Monitoring of Pine Lake was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Source (Drinking) Water Assessment

A source water assessment of Pine Lake found no elevated susceptibility to contamination. 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 Whitehall. (NYSDOH, Source Water Assessment Program, 2005)

**Segment Description**

This segment includes the total area of Pine Lake (P398).

# Pike Brook, Upper, and tribs ( 1005-0028)

NoKnownImpct

## Waterbody Location Information

Revised: 04/21/2009

**Water Index No:** C-127  
**Hydro Unit Code:** 02010001/150      **Str Class:** AA(T)  
**Waterbody Type:** River  
**Waterbody Size:** 12.6 Miles  
**Seg Description:** stream and tribs above Whitehall water supply dam

**Drain Basin:** Lake Champlain  
**Champlain-Lk.George**  
**Reg/County:** 5/Washington Co. (58)  
**Quad Map:** WHITEHALL (G-27-4)

## 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 Pike Brook in Whitehall (at Route 7) was conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated non-impacted conditions. The sample was dominated by clean-water species. Impact source determination revealed some indications of nonpoint sources, but nutrient biotic indices showed very little enrichment. 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 and there is little evidence of any other water quality impacts. (DEC/DOW, BWAM/SBU, January 2009)

### Segment Description

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

# Mount Hope Brook and tribs ( 1005-0033)

NoKnownImpct

## Waterbody Location Information

Revised: 01/04/2001

**Water Index No:** C-128  
**Hydro Unit Code:** 02010001/150      **Str Class:** C(T)  
**Waterbody Type:** River  
**Waterbody Size:** 52.1 Miles  
**Seg Description:** entire stream and tribs

**Drain Basin:** Lake Champlain  
Champlain-Lk.George  
**Reg/County:** 5/Washington Co. (58)  
**Quad Map:** SHELIVING ROCK (G-26-3) ...

## 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 Mount Hope Brook in South Bay (at Route 16) was conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated non-impacted conditions. The sample was dominated by clean-water species. Impact source determination showed some evidence of nonpoint sources, but enrichment was very low and the sample was also quite 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. These results are consistent with sampling conducted in 1998. Aquatic life community is fully supported. (DEC/DOW, BWAM/SBU, January 2009)

### Segment Description

This segment includes the entire stream and all tribs. The waters of the stream are Class C,C(T). Tribs to this reach, including Greenland Brook (-3), Spectacle Brook (-6) and Cold Brook (-7), are Class C,C(T) and D.

# Lakes Pond ( 1005-0031)

NoKnownImpct

## Waterbody Location Information

Revised: 10/04/2000

<b>Water Index No:</b>	C-128-P412	<b>Drain Basin:</b>	Lake Champlain
<b>Hydro Unit Code:</b>	02010001/150	<b>Str Class:</b>	AA
<b>Waterbody Type:</b>	Lake (Unknown Trophic)	<b>Reg/County:</b>	Champlain-Lk.George
<b>Waterbody Size:</b>	73.8 Acres	<b>Quad Map:</b>	5/Washington Co. (58)
<b>Seg Description:</b>	entire lake		PUTNAM MTN. (H-26-2)

## 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

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

## Further Details

### Water Quality Sampling

Monitoring of Lakes Pond was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Segment Description

This segment includes the total area of Lake Pond (P412).

# Crossett Pond, Thurber Pond ( 1005-0032)

NoKnownImpct

## Waterbody Location Information

Revised: 10/04/2000

**Water Index No:** C-128-P414,P413  
**Hydro Unit Code:** 02010001/150      **Str Class:** C(T)  
**Waterbody Type:** Lake  
**Waterbody Size:** 138.5 Acres  
**Seg Description:** total area of both lakes

**Drain Basin:** Lake Champlain  
Champlain-Lk.George  
**Reg/County:** 5/Washington Co. (58)  
**Quad Map:** PUTNAM MTN. (H-26-2)

## 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

Monitoring of Thurber Pond and Crosset Pond was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Segment Description

This segment includes the total area of Thurber Pond (P413) and Crosset Pond (P414).

# Mettawee River, Lower, and minor tribs ( 1005-0034)

NoKnownImpct

## Waterbody Location Information

Revised: 06/10/2009

**Water Index No:** C-134  
**Hydro Unit Code:** 02010001/120      **Str Class:** C  
**Waterbody Type:** River  
**Waterbody Size:** 33.8 Miles  
**Seg Description:** stream and selected tribs from mouth to trib -15

**Drain Basin:** Lake Champlain  
Champlain-Lk.George  
**Reg/County:** 5/Washington Co. (58)  
**Quad Map:** WHITEHALL (G-27-4)

## 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

NYSDEC Rotating Integrated Basin Studies (RIBS) Intensive Network monitoring of Mettawee River in Whitehall, Washington County, (at Grays Road) was conducted in 2003 and 2004. Intensive Network sampling typically includes macroinvertebrate community analysis, water column chemistry, sediment and invertebrate tissues analysis and toxicity evaluation. Due to poor macroinvertebrate habitat, biological sampling was conducted in North Granville, upstream of this RIBS site. Biological sampling results reveal slightly to non-impacted conditions, indicating generally good water quality. Water column sampling found iron to be a parameter of concern, exceeding its assessment criteria in 2 of 10 samples. However, the median iron concentration for the samples was well below the criterion. Macroinvertebrates (collected at the North Granville site) chemically analyzed for selected metals and PAHs found no contaminants to be present at concentrations above the established guidance values. Sediment screening for acute toxicity indicated no toxicity to be present. Analysis of sediments found elevated levels of nickel above the threshold effects concentration, but not parameters were found to be above the probably effects concentration. Based on sediment quality guidelines developed for freshwater ecosystems, overall sediment quality is not likely to result in toxicity to sediment-dwelling organisms. Toxicity testing of the water column also showed no significant mortality or reproductive impacts. Based on the consensus of these established assessment methods, overall water quality at this site shows that in spite of some concerns that should continue to be monitored, aquatic life is considered to be fully supported in the stream, and there are no other apparent water quality impacts to recreational uses.

(DEC/DOW, BWAM/RIBS, May 2009).

NYSDEC Rotating Intensive Basin Studies (RIBS) Intensive Network monitoring of the Mettawee River in Whitehall (at Gray Lane) was also conducted in 1998-99. Results of this sampling were consistent with the more recent sampling. Biological sampling conducted in North Granville in 1998 indicated non-impacted water quality conditions, though close to the range of slightly impacted. The fauna was dominated by mayflies, caddisflies, and riffle beetles. This site was assessed as slightly impacted in 1993. (DEC/DOW, BWAR/RIBS, January 2001)

#### Previous Assessments

Concern regarding the impact of silt/sediment runoff from agricultural activities has been raised in the past. Extensive row cropping and the lack of riparian vegetation in some areas may also result in warming of the stream. Nutrient runoff is also a concern. (Washington County WQCC, April 2000)

#### Segment Description

This segment includes the portion of the river and selected/smaller tribs from the mouth to/including Martins Pond Outlet (-18) in North Granville. The waters of this portion of the river are Class C,C(T). Tribs to this reach, including Bartholomew Brook/Castle Creek (-5) and Martins Pond Outlet (-18), are Class C,C(T) and D. Mud Brook (-1) and Wood Creek/Champlain Canal (-4) are listed separately.

# Mud Brook and tribs ( 1005-0035)

MinorImpacts

## Waterbody Location Information

Revised: 06/10/2009

**Water Index No:** C-134- 2  
**Hydro Unit Code:** 02010001/130      **Str Class:** D  
**Waterbody Type:** River  
**Waterbody Size:** 16.6 Miles  
**Seg Description:** entire stream and tribs

**Drain Basin:** Lake Champlain  
Champlain-Lk.George  
**Reg/County:** 5/Washington Co. (58)  
**Quad Map:** THORN HILL (G-27-3)

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Aquatic Life	Stressed	Suspected
Habitat/Hydrology	Stressed	Possible

### Type of Pollutant(s)

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

### Source(s) of Pollutant(s)

Known: ---  
Suspected: AGRICULTURE, Urban/Storm Runoff  
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  
**TMDL/303d Status:** n/a

**Resolution Potential:** Medium

## Further Details

### Overview

Aquatic life support in Mud Creek is thought to experience minor impacts due to nutrient loadings and other contaminants from agricultural activities, urban runoff and other nonpoint sources.

### Water Quality Sampling

NYSDEC Rotating Integrated Basin Studies (RIBS) Intensive Network monitoring of Mud Brook in Whitehall, Washington County, (at Beckwith Road) was conducted in 2003 and 2004. Intensive Network sampling typically includes macroinvertebrate community analysis, water column chemistry, sediment and invertebrate tissues analysis and toxicity evaluation. Biological (macroinvertebrate) sampling results reveal slightly to non-impacted conditions, indicating good water quality. Water column sampling found iron to be a parameter of concern, exceeding its assessment criteria in 4 of 10 samples. However, the median iron concentration for the samples was well below the criterion. Macroinvertebrates collected at this site and chemically analyzed for selected metals and PAHs found chromium, lead and titanium to be present at concentrations above the established guidance values. Sediment screening for acute toxicity indicated possible toxicity to be present. Analysis of sediments found elevated levels of nickel above the threshold effects concentration, but not parameters were found to be above the probably effects concentration. Based on sediment quality guidelines developed for freshwater

ecosystems, overall sediment quality is not likely to result in toxicity to sediment-dwelling organisms. Toxicity testing of the water column also showed no significant mortality or reproductive impacts. Based on the consensus of these established assessment methods, overall water quality at this site shows that in spite of some concerns that should continue to be monitored, aquatic life is considered to be fully supported in the stream, and there are no other apparent water quality impacts to recreational uses. (DEC/DOW, BWAM/RIBS, May 2009).

A biological (macroinvertebrate) assessment of the stream at this site in 1998 also found slightly impacted water quality. Although the stream was very muddy, the fauna included many mayflies, stoneflies, caddisflies, riffle beetles, and hellgrammites. Impact Source Determination showed high affinities to nutrient enrichment, siltation, and natural conditions. (DEC/DOW, BWAR/SBU, June 1999)

#### Segment Description

This segment includes the entire stream and all tribs. The waters of the stream are Class D. Tribs to this reach/segment are also Class D.

# Wood Cr/Champlain Canal and minor tribs ( 1005-0036)

Impaired Seg

## Waterbody Location Information

Revised: 06/18/2009

**Water Index No:** C-134- 4  
**Hydro Unit Code:** 02010001/140      **Str Class:** C  
**Waterbody Type:** Canal  
**Waterbody Size:** 128.7 Miles  
**Seg Description:** entire stream and selected tribs

**Drain Basin:** Lake Champlain  
Champlain-Lk.George  
**Reg/County:** 5/Washington Co. (58)  
**Quad Map:** WHITEHALL (G-27-4) ...

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Aquatic Life	Stressed	Known
RECREATION	Impaired	Known

### Type of Pollutant(s)

Known: D.O./OXYGEN DEMAND, NUTRIENTS (phosphorus), PATHOGENS  
Suspected: Silt/Sediment  
Possible: - - -

### Source(s) of Pollutant(s)

Known: MUNICIPAL (Whitehall (v) WWTP), OTHER SANITARY DISCH  
Suspected: Agriculture, Streambank Erosion  
Possible: Roadbank Erosion

## Resolution/Management Information

**Issue Resolvability:** 2 (Strategy Exists, Needs Funding/Resources)  
**Verification Status:** 5 (Management Strategy has been Developed)  
**Lead Agency/Office:** DOW/Reg5  
**TMDL/303d Status:** 1\* or 4b

**Resolution Potential:** High

## Further Details

### Overview

Recreational uses and aquatic life support in the Champlain Canal are impaired by nutrients, pathogens, and low dissolved oxygen from sewage overflows and by-passes from a municipal facility and collection system.

### Source Assessment

Inadequate treatment of municipal wastewater is a source of low dissolved oxygen, nutrients, pathogens and other pollutants to the northern end of the canal. The Whitehall (v) WWTP has a history of operational problems that are the result of excessive infiltration/inflow to the collection system and an undersized WWTP. During wet weather flow the plant by-passes partially and/or untreated sewage into the canal. These events are frequent, occurring 50 to 100 times during a year. Sanitary sewer overflows in the collection system also discharge during wet weather events. The municipality is under enforcement by NYSDEC due to SPDES permit violations. A July 2009 consent order calls for major sewer system rehabilitation (elimination of SSO's, I/I reduction) and WWTP modifications (flow equalization, etc.). The project is scheduled for completion by January 2014. However the funding necessary to upgrade the plant and collection system is beyond what the community can afford and other funding sources are not currently available. Note this situation was inaccurately portrayed as a minor issue in previous assessments; in fact, it is a significant water quality problem and has a long history. There are

four other wastewater facilities in this watershed, however none are known to experience operational problems. (DEC/DOW, Region 5, June, 2009)

#### Previous Assessment

Concerns were raised in previous assessments about silt and sediment deposition in the canal which results in the need for regular dredging to maintain navigable depths. However this dredging is best characterized as routine maintenance of the canal, and not unexpected given that the canal is fed by a number of tribs (Big Creek, Halfway Creek, Mettawee River and Poultney River) that drain highly-erodible clay soils. That being said, land use management efforts to reduce sediment loading to the tributaries could reduce the some dredging need. But the nature of the the watershed and canal hydrology make continued routine maintenance dredging unavoidable. (DEC/DOW, Region 5, June 2009)

#### Section 303d Listing

Wood Creek/Champlain Canal not is currently included on the NYS 2008 Section 303(d) List of Impaired Waters. However this updated assessment suggests it is appropriate to consider including this waterbody on the 2010 List. Because the municipal discharge is being addressed through a consent order, it would be most appropriate to either list this waterbody on Part 3c of the List as a waterbody for which TDML development is deferred pending the implementation and evaluation of other restoration measures, or to designate it a Category 4b water where a TMDL is not necessary because other required control measures are expected to restore the water. (DEC/DOW, BWAM/WQAS, June 2009)

#### Segment Description

This segment includes the entire stream and canal and selected/smaller tribs. The waters of the stream are Class C. Tribs to this reach/segment, including Sawmill Creek (-4), are Class C,C(T) and D. Winchell Creek (-17), Halfway Creek (-19) and Big Creek (-27) are listed separately.

# Dolph/Beaver Pond ( 1005-0038)

NoKnownImpct

## Waterbody Location Information

Revised: 05/29/2009

<b>Water Index No:</b>	C-134- 4-14-P424/P424a	<b>Drain Basin:</b>	Lake Champlain
<b>Hydro Unit Code:</b>	02010001/140	<b>Str Class:</b>	AA
<b>Waterbody Type:</b>	Lake	<b>Reg/County:</b>	Champlain-Lk.George
<b>Waterbody Size:</b>	45.9 Acres	<b>Quad Map:</b>	5/Washington Co. (58)
<b>Seg Description:</b>	entire lake		

## 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

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

## Further Details

### Source (Drinking) Water Assessment

A source water assessment of Dolph Pond found no elevated susceptibility to contamination. 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 Green Meadow Correctional Facility. (NYSDOH, Source Water Assessment Program, 2005)

### Segment Description

This segment includes the total area of both Dolph Pond (P424) and Beaver Pond (P424a).

# Winchell Creek and tribs ( 1005-0061)

Need Verific

## Waterbody Location Information

Revised: 06/18/2009

**Water Index No:** C-134- 4-17  
**Hydro Unit Code:** 02010101/140      **Str Class:** C  
**Waterbody Type:** River (Low Flow)  
**Waterbody Size:** 31.8 Miles  
**Seg Description:** entire stream and tribs

**Drain Basin:** Lake Champlain  
**Reg/County:** 5/Washington Co. (58)  
**Quad Map:** FORT ANN (H-27-1)

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

### Type of Pollutant(s)

Known: ---  
Suspected: ---  
Possible: D.O./OXYGEN DEMAND, NUTRIENTS, PATHOGENS

### Source(s) of Pollutant(s)

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

## Resolution/Management Information

**Issue Resolvability:** 6 (Problem Thought to be Abated)  
**Verification Status:** (Not Applicable for Selected RESOLVABILITY)  
**Lead Agency/Office:** DOW/BWAM  
**TMDL/303d Status:** 4b->n/a

**Resolution Potential:** High

## Further Details

### Overview

In previous assessments, aquatic life support, recreational use and aesthetics of Winchell Creek were reported as impaired by low dissolved oxygen, odors and discoloration. However the source of the problem - a manure lagoon discharge from an area CAFO - has been addressed. Regional staff indicate there are currently no water quality issues in the stream.

### Previous Assessment

Low dissolved oxygen, odors and discoloration were previously reported in Winchell Creek during the summer months. The stream was discolored (varies from greenish-yellow to black) emanated foul odors and was septic (D.O. < 1.0 mg/l). DEC Regional Water staff collected D.O. and temperature data in 1999 and 2000 which documents the poor condition of a trib to the stream. The source of the impacts was identified by DEC Regional Water and BECI staff as a CAFO with an overflowing manure lagoon that was routinely flowing into the creek. A court ordered compliance schedule was implemented in 2001. Since then the owner has complied with the order to cease the illegal discharge. The operation at one time had obtained coverage under the SPDES General Permit for CAFOs. However when USEPA revised the definition of CAFO in 2004, this farm was no longer covered and dropped out of the program. DEC Regional Water staff have found no subsequent violations of water quality problems in the stream. (DEC/DOW, Region 5, June 2009)

### Segment Description

This segment includes the entire stream and all tribs. The waters of the stream are Class C. Tribs to this reach/segment are also Class C.

# Halfway Creek, Lower, and tribs ( 1005-0013)

MinorImpacts

## Waterbody Location Information

Revised: 04/21/2009

**Water Index No:** C-134- 4-19  
**Hydro Unit Code:** 02010001/140      **Str Class:** A(T)  
**Waterbody Type:** River (Low Flow)  
**Waterbody Size:** 46.4 Miles  
**Seg Description:** stream and selected tribs from mouth to Tripoli

**Drain Basin:** Lake Champlain  
Champlain-Lk.George  
**Reg/County:** 5/Washington Co. (58)  
**Quad Map:** PUTNAM MTN. (H-26-2) ...

## 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: NUTRIENTS (phosphorus), SILT/SEDIMENT  
Suspected: D.O./Oxygen Demand  
Possible: Pathogens, Thermal Changes

### Source(s) of Pollutant(s)

Known: AGRICULTURE  
Suspected: URBAN/STORM RUNOFF, Streambank Erosion  
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/WQCC  
**TMDL/303d Status:** n/a

**Resolution Potential:** Medium

## Further Details

### Overview

Aquatic life support in this portion of Halfway Creek are thought to experience minor impacts/threats due to nutrient loadings, organic enrichment and silt/sedimentation from agricultural and other nonpoint sources. Impacts from urban runoff and the more heavily developed upstream watershed are also likely.

### Water Quality Sampling

A biological (macroinvertebrate) assessment of Halfway Creek in Fort Ann (at Route 16) was conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated slightly impacted conditions. The community is 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 minor and water quality is considered to be good. The nutrient biotic index and impact source determination indicates elevated enrichment in the stream and fauna shows evidence some evidence of siltation and organic inputs. Although aquatic life is supported in the stream, nutrient biotic evaluation and other indicators suggests the level of eutrophication and other conditions are sufficient to stress aquatic life support. These results are consistent with sampling conducted in 1999. (DEC/DOW, BWAM/SBU, January 2009)

A biological survey of the creek conducted in 1999 found generally good but slightly impacted water quality conditions at the two sites within this reach (in Tripoli and in Fort Ann). Corresponding fish sampling indicated better water quality at these sites than the macroinvertebrates did. The fish communities were dominated by cool water species, with few gamefish present. Impact Source Determination indicated siltation and some municipal/industrial input and urban runoff were likely sources of the impact. (Halfway Creek Biological Assessment, Bode et al, DEC/DOW, BWAR/SBU, June 1999)

#### Previous Assessment

Previously reported water quality issues in one particular sub-trib to Halfway Creek (-1-1) have been addressed. The trib experienced occasional periods of very low dissolved oxygen along with odors, discoloration and turbidity. The impairment was attributed to an agricultural source, specifically leachate from a bunker silo at a farm. Subsequently the farm obtained coverage under the SPDES General Permit for Concentrated Animal Farming Operations (CAFOs) in 2000. DEC regional staff inspected the operation in 2003 and concurred with the decision to delist this waterbody from the Section 303(d) List in 2004. (DEC/DOW, Region 5 and BWAM, September 2004)

#### Segment Description

This segment includes the portion of the stream and selected/smaller tribbs from the mouth to Tripoli just above unnamed (trib -13). The waters of this portion of the creek are Class D from the mouth to the Fort Ann water intake (0.3 miles above the mouth) and Class A,A(T) for the remainder of the reach. Tribbs to this reach/segment, including Welch Hollow Brook (-2), are Class A and D. Bishop Brook (-8) and Upper Halfway Creek are listed separately.

# Halfway Creek, Upper, and tribs ( 1005-0063)

MinorImpacts

## Waterbody Location Information

Revised: 05/29/2009

**Water Index No:** C-134- 4-19  
**Hydro Unit Code:** 02010001/140      **Str Class:** AA(T)  
**Waterbody Type:** River (Low Flow)  
**Waterbody Size:** 39.5 Miles  
**Seg Description:** stream and selected tribs above Tripoli

**Drain Basin:** Lake Champlain  
Champlain-Lk.George  
**Reg/County:** 5/Warren Co. (57)  
**Quad Map:** PUTNAM MTN. (H-26-2) ...

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Water Supply	Threatened	Suspected
Aquatic Life	Stressed	Known
Recreation	Stressed	Suspected
Habitat/Hydrology	Stressed	Suspected
Aesthetics	Stressed	Known

### Type of Pollutant(s)

Known: NUTRIENTS (phosphorus), Aesthetics (trash, debris)  
Suspected: SILT/SEDIMENT, Metals, Oil and Grease, Thermal Changes  
Possible: Other Pollutants, Pathogens, Salts

### Source(s) of Pollutant(s)

Known: COMB. SEWER OVERFLOW (City of Glens Falls), DEICING (STOR/APPL)  
Suspected: AGRICULTURE, STREAMBANK EROSION, URBAN/STORM RUNOFF, Deicing (stor/appl), Habitat Modification, Other Sanitary Disch  
Possible: Industrial, Other Source, Private/Comm/Inst

## 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

Aquatic life support, fishery habitat, recreational uses and aesthetics in portions of Halfway Creek are stressed by nutrient and organic enrichment, various municipal and industrial inputs, silt/sedimentation and other nonpoint (primarily urban runoff) sources. Agricultural activity in portions of the watershed are also likely sources.

### Water Quality Sampling

A biological (macroinvertebrate) assessment of Halfway Creek in Glens Falls (at Route 9) was conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated slightly impacted conditions. Some replacement of sensitive ubiquitous species by more tolerant species was noted although the sample included a balanced distribution of all expected species. Aquatic life is considered to be fully supported in the stream, however the community composition, nutrient biotic evaluation and impact source determination indicates elevated enrichment in the stream and fauna shows evidence some

evidence of siltation, toxic impacts and organic inputs. Although aquatic life is supported in the stream, these indicators suggests conditions are sufficient to stress aquatic life support. These results are consistent with sampling conducted in 1999. (DEC/DOW, BWAM/SBU, January 2009)

A biological survey of the creek conducted in 1999 found generally good but slightly impacted water quality conditions at the three of the five sites within this reach. A substantial decline in water quality occurs in the reach downstream of the city of Glens Falls. Impact Source Determination indicated nutrient nonpoint sources, organic wastes and urban runoff. Elevated levels of PAHs (polycyclic aromatic hydrocarbons), produced by the incomplete combustion of petroleum fuels, wood and other organic material and an indicator of urban runoff sources, were found in crayfish tissues at many stream locations, and were highest in and downstream of Glens Falls. Corresponding fish sampling also showed an impact at Glens Falls, however communities seemed to recover downstream better than macroinvertebrates. Cool water species were dominant, with few gamefish species present. Trout were caught at only one site. Low holdover from DEC trout stocking efforts is expected due to habitat conditions. Upstream of Glens Falls the stream is considered non-impacted. (Halfway Creek Biological Assessment, Bode etal, DEC/DOW, BWAR/SBU, June 1999)

#### Source (Drinking) Water Assessment

A source water assessment of Halfway Brook Reservoir, which is fed by Upper Halfway Brook, found an elevated susceptibility to contaminants due to runoff from residential/developed land cover. 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 City of Glens Falls. (NYSDOH, Source Water Assessment Program, 2005)

#### Previous Assessment

Sediment, salt, oil, grease and other urban runoff related pollutants are thought to be input to the stream from roadways and storm sewers. Three tributaries in particular are suspected sources of inputs from runoff: Cemetery Brook (-24), "Crandall Park Creek" (-23) and "Adirondack Comm Coll Creek" (-22). Discolored stream water and significant weed growth has been noted in Cemetery Brook. Runoff from road sanding as well as high summer temperatures in the creek may also contribute to fishery habitat concerns. Aesthetics are degraded due to physical trash and debris (tires, car parts, etc) that are often found in and along the stream. (Warren County WQSC, March 2000)

#### Water Quality Management

A Watershed Management Plan has been completed for Halfway Creek. The plan includes recommendations for remediation of stormwater problems within the developed areas of the watershed. (Eight priority areas have been identified.) The management plan is used by municipalities to justify funding for future projects. One such project was an recently completed stormwater abatement project that addresses a major source of stormwater entering this highly values trout fishery. The project is expected to significantly reduce the level of suspended solids, nutrients and trash/debris entering the stream. (Warren County WQSC and DEC/DOW, Region 5, May 2009)

#### Segment Description

This segment includes the portion of the stream and selected/smaller tribs from Tripoli just above unnamed trib (-13) to the source at Wilkie Reservoir (P455a). The waters of this portion of the creek are Class AA(T). Tribs to this reach/segment are Class A,AA,AA(T). Glen Lake Brook (-19) and Lower Halfway Creek are listed separately.

# Sly Pond ( 1005-0058)

NoKnownImpct

## Waterbody Location Information

Revised: 03/04/2009

**Water Index No:** C-134- 4-19- 8-5-8-P428  
**Hydro Unit Code:** 02010001/140      **Str Class:** AA(T)  
**Waterbody Type:** Lake (Unknown Trophic)      **Drain Basin:** Lake Champlain  
**Waterbody Size:** 40.9 Acres      **Reg/County:** Champlain-Lk.George  
**Seg Description:** entire lake      **Quad Map:** 5/Washington Co. (58)  
PUTNAM MTN. (H-26-2)

## 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

Monitoring of Sly Pond was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Segment Description

This segment includes the total area of Sly Pond (P428).

# Hadlock Pond ( 1005-0040)

Need Verific

## Waterbody Location Information

Revised: 03/11/2009

**Water Index No:** C-134- 4-19- 8-P432  
**Hydro Unit Code:** 02010001/140      **Str Class:** AA(T)  
**Waterbody Type:** Lake (Oligotrophic)      **Drain Basin:** Lake Champlain  
**Waterbody Size:** 195.2 Acres      **Reg/County:** Champlain-Lk.George  
**Seg Description:** entire lake      **Quad Map:** 5/Washington Co. (58)  
PUTNAM MTN. (H-26-2)

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

### Type of Pollutant(s)

Known: ---  
Suspected: ---  
Possible: WATER LEVEL/FLOW

### Source(s) of Pollutant(s)

Known: ---  
Suspected: ---  
Possible: HABITAT MODIFICATION, HYDRO MODIFICATION

## 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

On July 2, 2005, the west side of the Hadlock Pond dam failed. Water poured from the lake, destroying four primary homes and one vacation home, while damaging five other homes and otherwise damaging 27 properties. The dam failure completely drained the pond. Reconstruction of the dam was completed in Spring, 2007, and water levels in the lake were gradually restored over that summer. Prior to the dam breach, the most recent assessments of Hadlock Pond indicated that uses were fully supported and that there were no known water quality impacts. However conditions need to be verified to determine if the hydrologic and habitat alteration resulting from the dam failure have had lasting impacts on lake uses or water quality. Sampling of Hadlock Pond by NYSDEC Division of Water is scheduled to be conducted throughout the summer of 2009. (DEC/DOW, BWAM/SWMS, March 2009)

### Water Quality Sampling

Hadlock Pond was included in the 2000 volunteer monitoring effort from 1997 through 2001. The results of this sampling found no evidence of impacts to water quality or recreational uses. (DEC/DOW, BWAM/CSLAP, November 2002)

Monitoring of Lakes Pond was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters,

including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

#### Segment Description

This segment includes the total area of Hadlock Pond (P432) and Copeland Pond (P425).

# Lake Nebo ( 1005-0041)

NoKnownImpct

## Waterbody Location Information

Revised: 03/04/2009

**Water Index No:** C-134- 4-19- 8-P436  
**Hydro Unit Code:** 02010001/140      **Str Class:** AA(T)  
**Waterbody Type:** Lake (Oligotrophic)      **Reg/County:** 5/Washington Co. (58)  
**Waterbody Size:** 122.6 Acres      **Quad Map:** PUTNAM MTN. (H-26-2)  
**Seg Description:** entire lake

## 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

Monitoring of Lake Nebo was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Segment Description

This segment includes the total area of Lake Nebo (P436).

# Minor Lakes in Bishop Brook Watershed ( 1005-0042)

NoKnownImpct

## Waterbody Location Information

Revised: 10/04/2000

**Water Index No:** C-134- 4-19- 8..P425 thru P433  
**Hydro Unit Code:** 02010001/140      **Str Class:** AA(T)  
**Waterbody Type:** Lake  
**Waterbody Size:** 24.8 Acres  
**Seg Description:** total area of selected lakes

**Drain Basin:** Lake Champlain  
Champlain-Lk.George  
**Reg/County:** 5/Washington Co. (58)  
**Quad Map:** PUTNAM MTN. (H-26-2)

## 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

Monitoring of a number of ponds within this segment was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. Data for First Pond (P329), Third Pond (P331) and Inman Pond (P333) revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Segment Description

This segment includes the total area of all selected/smaller lakes/ponds within the Bishop Brook watershed. Lakes within this segment, including Bacon Pond (P327), First Pond (P329), Third Pond (P331), Inman Pond (P333), are primarily Class AA(T).

# Lake Sunnyside ( 1005-0047)

# MinorImpacts

## Waterbody Location Information

Revised: 03/11/2009

**Water Index No:** C-134- 4-19-19-P440  
**Hydro Unit Code:** 02010001/140      **Str Class:** B  
**Waterbody Type:** Lake (Mesotrophic)  
**Waterbody Size:** 37.4 Acres  
**Seg Description:** entire lake

**Drain Basin:** Lake Champlain  
Champlain-Lk.George  
**Reg/County:** 5/Warren Co. (57)  
**Quad Map:** LAKE GEORGE (H-26-1)

## 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: PROBLEM SPECIES (Eurasian milfoil)  
Suspected: ---  
Possible: ---

### Source(s) of Pollutant(s)

Known: HABITAT MODIFICATION  
Suspected: Urban/Storm Runoff  
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/WQCC  
**TMDL/303d Status:** n/a

**Resolution Potential:** Medium

## Further Details

### Overview

Recreational uses in Lake Sunnyside are known to experience minor impacts/threats due to excess aquatic weed growth. Invasive species (Eurasian watermilfoil) is considered to be the primary water quality issue.

### Water Quality Sampling

Lake Sunnyside has been sampled as part of the NYSDEC Citizen Statewide Lake Assessment Program (CSLAP) beginning in 1999 and continuing through 2003. An Interpretive Summary report of the findings of this sampling was published in 2004. These data indicate that the lake continues to be best characterized as mesotrophic, or moderately unproductive. Conditions have been mostly stable over the sampling period. Phosphorus levels in the lake rare consistently below the state guidance values indicating impacted/stressed recreational uses. Corresponding transparency measurements easily exceed the recommended minimum for swimming beaches. Measurements of pH are typically high, at times exceeding the state water quality range of 6.5 to 8.5, however impacts to aquatic life are not suspected. The lake water is weakly colored, and color does not limit water transparency. (DEC/DOW, BWAM/CSLAP, May 2004)

### 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 to be favorable since the lake was first evaluated and continuing through the most recent assessment. The recreational suitability of the lake is described most frequently as "excellent" or only "slightly" impacted, an assessment that is less favorable than expected given measured water quality characteristics. The lake itself is most often described as "not quite crystal clear." Assessments have noted that aquatic plants regularly grow to the lake surface, and are often sufficiently dense to restrict recreational use. Aquatic plants are dominated by non-native species (Eurasian watermilfoil), prompting herbicide treatment of the lake in 2000. (DEC/DOW, BWAM/CSLAP, May 2004)

#### Lake Uses

This lake waterbody is designated class B, suitable for use as a public bathing beach, general recreation and aquatic life support, but not as a public water supply. 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.

#### Previous Source Assessment

A variety of urban and other nonpoint runoff sources have in the past been identified as affect the water quality in the lake. Heavy shoreline development result in roadway and stormwater runoff. Inadequate and/or failing septic systems serving lake shore homes are also possible sources of nutrients, pathogens. Algal blooms have also been reported. (Lake Sunnyside Watershed Assessment, Warren County SWCD, September 1999)

#### Segment Description

This segment includes the total area of Lake Sunnyside (P440). Lake Sunnyside is actually an isolated lake, which falls within the Glen Lake Brook watershed.

# Glen Lake ( 1005-0009)

NoKnownImpct

## Waterbody Location Information

Revised: 03/09/2009

**Water Index No:** C-134- 4-19-19-P441  
**Hydro Unit Code:** 02010001/140      **Str Class:** B(T)  
**Waterbody Type:** Lake (Unknown Trophic)  
**Waterbody Size:** 324.2 Acres  
**Seg Description:** entire lake

**Drain Basin:** Lake Champlain  
Champlain-Lk.George  
**Reg/County:** 5/Warren Co. (57)  
**Quad Map:** GLENS FALLS (H-26-4)

## 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

Glen Lake has been sampled as part of the NYSDEC Citizen Statewide Lake Assessment Program (CSLAP) beginning in 1986 and continuing through the present. An Interpretive Summary report of the findings of this sampling was published in 2008. These data indicate that the lake continues to be best characterized as mesoligotrophic, or moderately unproductive. This trophic status has been fairly consistent over the sampling period. Phosphorus levels in the lake consistently fall below the state guidance values indicating impacted/stressed recreational uses. Corresponding transparency measurements also typically exceed the recommended minimum for swimming beaches. Measurements of pH typically fall within the state water quality range of 6.5 to 8.5. The lake water is weakly colored, but color has increased in recent years contributing to lower clarity in the lake. (DEC/DOW, BWAM/CSLAP, March 2008)

### 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 to be generally favorable since the lake was first evaluated and continuing through the most recent assessment. 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." These assessments are slightly less favorable than would be expected based on measured water quality characteristics, but might be influenced by increased lake color in

recent years. Most assessments have noted that aquatic plants rarely grow densely at the lake surface and have not been cited as impacting recreational uses. Aquatic plant sampling conducted independent of CSLAP has identified the invasive plant Eurasian watermilfoil as the dominant aquatic plant in Glen Lake, and the focus of most of the management efforts suggested at the lake. However, during most sampling seasons, at least since 1986, nuisance macrophyte (weed) growth has not been identified as significantly impacting recreational use of Glen Lake, and the limited CSLAP surveys indicate a wide diversity of aquatic plants growing in the lake, including a number of aquatic plant species that are desired from the perspective of fisheries habitat. (DEC/DOW, BWAM/CSLAP, March 2008)

#### Lake Uses

This lake waterbody is designated class B, suitable for use as a public bathing beach, general recreation and aquatic life support, but not as a public water supply. 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.

#### Previous Assessment

However, algal growth and previously reported outbreaks of swimmer's itch discourage various recreational uses. Local officials indicate the lake is currently impacted by zebra mussels and Eurasian milfoil. A variety of urban and other nonpoint runoff sources, a result of heavy shoreline development, also affect the water quality in the lake. A 1998 Glen Lake Watershed Management Plan includes DEC CSLAP monitoring results and outlines specific recommendations for limiting further nonpoint source impacts. The plan was produced by the Glen Lake Technical Committee, with assistance from Adirondack Community College staff. Other educational programs, including a recent (1998) program focusing on the use and maintenance of on-site septic systems, have been offered by the Warren County SWCD and the Glen Lake Association. (Warren County WQSC, March 2000)

#### Segment Description

This segment includes the total area of Glen Lake (P441).

# Butler Pond ( 1005-0050)

NoKnownImpct

## Waterbody Location Information

Revised: 10/05/2000

<b>Water Index No:</b>	C-134- 4-19-19-P452	<b>Drain Basin:</b>	Lake Champlain
<b>Hydro Unit Code:</b>	02010001/140	<b>Str Class:</b>	AA
<b>Waterbody Type:</b>	Lake (Mesotrophic)	<b>Reg/County:</b>	5/Warren Co. (57)
<b>Waterbody Size:</b>	87.5 Acres	<b>Quad Map:</b>	GLENS FALLS (H-26-4)
<b>Seg Description:</b>	entire lake		

## 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

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

## Further Details

### Water Quality Sampling

Monitoring of Butler Pond was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Segment Description

This segment includes the total area of Butler Pond (P452).

# Minor Lakes in Lower Glen Lake Br Wshed ( 1005-0046) NoKnownImpct

## Waterbody Location Information

Revised: 10/05/2000

**Water Index No:** C-134- 4-19-19..P439,P440a  
**Hydro Unit Code:** 02010001/140      **Str Class:** AA(T)  
**Waterbody Type:** Lake  
**Waterbody Size:** 18.9 Acres  
**Seg Description:** total area of selected lakes

**Drain Basin:** Lake Champlain  
**Reg/County:** Champlain-Lk.George  
**Quad Map:** 5/Warren Co. (57)  
**Quad Map:** LAKE GEORGE (H-26-1)

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

**Resolution Potential:** n/a

## Further Details

### Water Quality Sampling

Monitoring of Bear Lake was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC, 1984-86)

### Segment Description

This segment includes the total area of the total area of all selected/smaller lakes/ponds within the Lower Glen Lake Brook watershed. Lakes within this segment, including Bear Pond (P439) and Dream Lake (P440a), are Class AA(T).

# Halfway Creek Reservoir ( 1005-0051)

Need Verific

## Waterbody Location Information

Revised: 05/29/2009

**Water Index No:** C-134- 4-19-23-P453  
**Hydro Unit Code:** 02010001/140      **Str Class:** AA(T)  
**Waterbody Type:** Lake  
**Waterbody Size:** 10.9 Acres  
**Seg Description:** entire lake

**Drain Basin:** Lake Champlain  
Champlain-Lk.George  
**Reg/County:** 5/Warren Co. (57)  
**Quad Map:** GLENS FALLS (H-26-4)

## 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: OTHER POLLUTANTS

### Source(s) of Pollutant(s)

Known: ---  
Suspected: ---  
Possible: OTHER SOURCE

## 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

Water supply uses of Halfway Brook Reservoir are thought to experience threats from pathogens due to the level of residential/developed land use 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 are appropriate.

### Source (Drinking) Water Assessment

A source water assessment of Halfway Brook Reservoir, which is fed by Upper Halfway Brook, found an elevated susceptibility to contaminants due to runoff from residential/developed land cover. 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 City of Glens Falls. (NYSDOH, Source Water Assessment Program, 2005)

**Segment Description**

This segment includes the total area of Halfway Creek Reservoir (P453).

# Wilkie Reservoir ( 1005-0052)

NoKnownImpct

## Waterbody Location Information

Revised: 05/29/2009

<b>Water Index No:</b>	C-134- 4-19-P455a	<b>Drain Basin:</b>	Lake Champlain
<b>Hydro Unit Code:</b>	02010001/140	<b>Str Class:</b>	AA(T)
<b>Waterbody Type:</b>	Lake (Mesotrophic)	<b>Reg/County:</b>	5/Warren Co. (57)
<b>Waterbody Size:</b>	15.3 Acres	<b>Quad Map:</b>	GLENS FALLS (H-26-4)
<b>Seg Description:</b>	entire lake		

## 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

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

## Further Details

### Source (Drinking) Water Assessment

A source water assessment of Wilkie Reservoir found no elevated sources of contaminants. 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 City of Glens Falls. (NYSDOH, Source Water Assessment Program, 2005)

### Water Quality Sampling

Monitoring of Wilkie Reservoir was included in the Adirondack Lake Survey Corporation (ALSC) lake monitoring and assessment effort conducted in the mid-1980s (1984-86). Generally these were one-time samples analyzed for variety of parameters, including total phosphorus, pH and water color. These data revealed no indication of impacts to aquatic life support or recreational use at the time. Because the data is limited to single samples and collected more than 20 years ago, this assessment is considered to be evaluated, rather than monitored. (DEC, DOW, BWAM/WQAS, January 2009 and ALSC,

1984-86)

**Segment Description**

This segment includes the total area of Wilkie Reservoir (P455a).

# Mettawee River, Upper, and minor tribs ( 1005-0003)

MinorImpacts

## Waterbody Location Information

Revised: 06/10/2009

**Water Index No:** C-134  
**Hydro Unit Code:** 02010001/120      **Str Class:** C(T)  
**Waterbody Type:** River (Low Flow)      **Reg/County:** 5/Washington Co. (58)  
**Waterbody Size:** 65.2 Miles      **Quad Map:** GRANVILLE (H-27-2) ...  
**Seg Description:** stream and selected tribs from trib -15 to NY-VT border

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Habitat/Hydrology	Stressed	Suspected

### Type of Pollutant(s)

Known: ---  
Suspected: SILT/SEDIMENT, THERMAL CHANGES  
Possible: ---

### Source(s) of Pollutant(s)

Known: ---  
Suspected: AGRICULTURE, HABITAT MODIFICATION, Streambank Erosion  
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

Fishery habitat in this portion of the Mettawee River is thought to experience minor impacts from silt and sediment runoff from agricultural activities in the watershed and elevated stream temperatures that are the result of riparian vegetation loss.

### Water Quality Sampling

A biological (macroinvertebrate) assessment of Mettawee River in North Granville (at Whitehall Turnpike) was conducted as part of the RIBS sampling effort in 2003 and 2004. Sampling results indicated non-impacted conditions in 2004. The sample was 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. The 2003 sampling results indicated slightly impacted conditions, with the community somewhat altered from natural conditions. Some sensitive species had 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 levels of enrichment in the stream. Based on the consensus of this sampling, aquatic life support is considered to be fully supported in the stream. (DEC/DOW, BWAM/SBU, January 2009)

A biological (macroinvertebrate) assessment of the Mettawee River in North Granville was also conducted in 1998. Sampling results indicated non-impacted water quality conditions, though close to the range of slightly impacted. The fauna was dominated by mayflies, caddisflies, and riffle beetles. This site was assessed as slightly impacted in 1993 sampling. Further sampling is needed to document whether or not the improvement represents a genuine trend. The site was not sampled in 1999 due to very high flows. (DEC/DOW, BWAR/SBU, January 2000)

#### Source Assessment

The stream waters are reported at or above critical temperature levels for support of trout. Extensive row cropping and the lack of riparian vegetation in many areas around Middle Granville contribute to the warming of the stream. Nutrient runoff and streambank erosion are also concerns. Several projects have been implemented to stabilize the river and establish riparian buffers. (Washington County WQCC, April 2000)

The Vermont-DEC has also reported aquatic life/habitat impacts in the Mettawee in Vermont due to elevated temperatures, silt/sediment loads and nutrient enrichment due to agriculture, riparian vegetation loss and streambank erosion. A segment of the Mettawee River just above the NY-VT border is listed on the State of Vermont's 2000 Section 303(d) List. (Poultney-Mettawee Watershed Assessment Report, Vermont DEC, December 1999)

#### Segment Description

This segment includes the portion of the river and selected/smaller tribs above Martins Pond Outlet (-19) in North Granville. The waters of this portion of the river are Class C(T). Tribs to this reach, including Holcomb Creek (-19), are Class C,C(T),C(TS) and D. Indian River (-22) is listed separately.

# Big Creek and tribs ( 1005-0004)

# MinorImpacts

## Waterbody Location Information

Revised: 04/21/2009

**Water Index No:** C-134- 4-27  
**Hydro Unit Code:** 02010001/140      **Str Class:** C(T)  
**Waterbody Type:** River (Low Flow)  
**Waterbody Size:** 53.7 Miles  
**Seg Description:** entire stream and tribs

**Drain Basin:** Lake Champlain  
Champlain-Lk.George  
**Reg/County:** 5/Washington Co. (58)  
**Quad Map:** HARTFORD (H-27-4)

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Aquatic Life	Stressed	Suspected
Habitat/Hydrology	Stressed	Suspected

### Type of Pollutant(s)

Known: - - -  
Suspected: NUTRIENTS, SILT/SEDIMENT, Thermal Changes  
Possible: Pathogens

### Source(s) of Pollutant(s)

Known: - - -  
Suspected: AGRICULTURE, Streambank Erosion  
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

Aquatic life support and fishery habitat are thought to experience minor impacts due to nutrients and silt/sediment from agricultural and other nonpoint sources in the watershed. Elevated stream temperatures may also impact the fishery.

### Water Quality Sampling

A biological (macroinvertebrate) assessment of Big Creek in Hartford (at Route 149) was conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated slightly impacted conditions. The community is 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 minor. The nutrient biotic index and impact source determination indicates elevated enrichment in the stream and fauna that shows indications of nonpoint and siltation effects. Although aquatic life is supported in the stream, various indicators suggest the level of eutrophication and other conditions are sufficient to stress aquatic life support. Previous sampling in 1998 revealed conditions that were assessed and non-impacted. (DEC/DOW, BWAM/SBU, January 2009)

### Source Assessment

The stream meanders through several large dairy farms where livestock have unfettered access to the stream. Streambank erosion, compounded by continuing loss of riparian vegetation, result in sediment loadings and warmer water temperatures in the stream. As a result, only portions in the upper reaches of the Class C(T) portion of the stream are thought to actually support trout populations. Sediment for the creek are also transported and deposited into the Champlain Canal, affecting boat traffic. (Washington County WQCC, April 2000)

#### Segment Description

This segment includes the entire stream and all tribs. The waters of the stream are Class D from the mouth to unnamed trib (-4) and Class C(T) for the remainder of the reach. Tribs to this reach are Class D.

# Indian River and tribs ( 1005-0002)

MinorImpacts

## Waterbody Location Information

Revised: 04/21/2009

**Water Index No:** C-134-22  
**Hydro Unit Code:** 02010001/140      **Str Class:** C(T)  
**Waterbody Type:** River (Low Flow)  
**Waterbody Size:** 31.6 Miles  
**Seg Description:** entire stream and tribs (within NYS)

**Drain Basin:** Lake Champlain  
Champlain-Lk.George  
**Reg/County:** 5/Washington Co. (58)  
**Quad Map:** GRANVILLE (H-27-2)

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Aquatic Life	Stressed	Suspected
Habitat/Hydrology	Stressed	Suspected

### Type of Pollutant(s)

Known: ---  
Suspected: SILT/SEDIMENT, Nutrients, Thermal Changes  
Possible: ---

### Source(s) of Pollutant(s)

Known: ---  
Suspected: AGRICULTURE, Streambank Erosion  
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

Aquatic life support and fishery habitat in Indian River are thought to experience minor impacts due to nutrients and silt/sediment from agricultural and other nonpoint sources in the watershed. Elevated stream temperatures may also impact the fishery.

### Water Quality Sampling

A biological (macroinvertebrate) assessment of Indian River in Granville (at Route 149) was conducted as part of the RIBS biological screening effort in 2003. Sampling results indicated slightly impacted conditions. The community is 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 minor. The nutrient biotic index and impact source determination indicates elevated enrichment in the stream and fauna that shows indications of nonpoint sources while also showing similarity to natural communities. Although aquatic life is supported in the stream, various indicators suggest the level of eutrophication and other conditions may be sufficient to stress aquatic life support. (DEC/DOW, BWAM/SBU, January 2009)

#### Source Assessment

Aquatic life support and fishery habitat is thought to be stressed by silt/sediment runoff from agricultural activities in the watershed and elevated stream temperatures. Much of the problem originates in the Pawlet Valley of Vermont. There is only one active dairy farm along the river in New York State. The lack of riparian vegetation result in warm stream temperature, which stress the trout fishery. DEC Regional Fisheries staff has identified this stream as a priority within the county. (Washington County WQCC, April 2000)

#### Segment Description

This segment includes the entire stream and all tribs within New York State. The waters of the stream are Class C(T). Tribs to this reach/segment are also Class C(T).

# Poultney River, Lower, and tribs ( 1005-0053)

Impaired Seg

## Waterbody Location Information

Revised: 07/20/2009

**Water Index No:** C-138  
**Hydro Unit Code:** 02010001/060      **Str Class:** C  
**Waterbody Type:** River  
**Waterbody Size:** 8.1 Miles  
**Seg Description:** stream and tribs from mouth at East Bay to Carver Falls

**Drain Basin:** Lake Champlain  
Champlain-Lk.George  
**Reg/County:** 5/Washington Co. (58)  
**Quad Map:** WHITEHALL (G-27-4) ...

## 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
Habitat/Hydrology	Stressed	Known

### Type of Pollutant(s)

Known: METALS (mercury), Nutrients, Silt/Sediment, Problem Species  
Suspected: Thermal Changes  
Possible: Pathogens

### Source(s) of Pollutant(s)

Known: Agriculture, Habitat Modification, Streambank Erosion  
Suspected: ATMOSPH. DEPOSITION  
Possible: - - -

## Resolution/Management Information

**Issue Resolvability:** 3 (Strategy Being Implemented)  
**Verification Status:** 5 (Management Strategy has been Developed)  
**Lead Agency/Office:** ext/Vt  
**TMDL/303d Status:** 4a (TMDL Complete, Being Implemented, Not Listed)

**Resolution Potential:** Medium

## Further Details

### Overview

Fish consumption in the Lower Poultney River is known to be impaired by mercury contamination of walleye. The State of Vermont DEC has a fish consumption advisory in place that results in only partial support of fish consumption. The source of the contamination is thought to be atmospheric deposition. Habitat/hydrologic uses are also known to experience minor impacts due to nutrient enrichment and silt/sedimentation from agricultural runoff and streambank erosion in the watershed. Invasive species are also a concern.

### Water Quality Sampling

NYSDEC Rotating Integrated Basin Studies (RIBS) Intensive Network monitoring of Poultney River in Hampton Flats, upstream of this segment, was conducted in 2003 and 2004. Intensive Network sampling typically includes macroinvertebrate community analysis, water column chemistry, sediment and invertebrate tissues analysis and toxicity evaluation. Biological (macroinvertebrate) sampling results reveal slightly to non-impacted conditions, indicating good water quality. Water column sampling found iron to be a parameter of concern, exceeding its assessment criteria in 2 of 10 samples. However, the median iron concentration for the samples was well below the criterion. Macroinvertebrates collected at this site and chemically

analyzed for selected metals and PAHs found chromium to be present at a concentration above the established guidance value. Sediment screening for acute toxicity indicated no toxicity to be present. Analysis of sediments found elevated levels of nickel above the threshold effects concentration, but not parameters were found to be above the probably effects concentration. Based on sediment quality guidelines developed for freshwater ecosystems, overall sediment quality is not likely to result in toxicity to sediment-dwelling organisms. Toxicity testing of the water column also showed no significant mortality or reproductive impacts. Based on the consensus of these established assessment methods, overall water quality at this site shows that in spite of some concerns that should continue to be monitored, aquatic life is considered to be fully supported in the stream, and there are no other apparent water quality impacts to recreational uses. Though this sampling point is above the described segment, it is considered representative of water quality in the lower reach. This segment is listed as being evaluated rather than monitored. (DEC/DOW, BWAM/RIBS, May 2009).

#### Watershed Management

The Vermont DEC has conducted considerable monitoring and water quality management efforts within the Poultney-Mettawee Watershed. Impacts to habitat along the watershed streams have been noted. Sediment and nutrient enrichment are the major causes of these impacts. Land runoff (from agriculture, roadways, residential and industrial uses), the loss of riparian vegetation, streambank erosion, and municipal wastewater facilities. Thermal modification from the loss of riparian vegetation and pathogens are also of concern. Since 1988, the Poultney-Mettawee Watershed Partnership - a collaboration of state and local agencies, watershed organizations, environmental groups, private interests - has guided the development of a watershed plan and led efforts to implement watershed restoration projects. (Vermont DEC, Poultney-Mettawee Basin Plan, March 2005)

Invasive species are also a concern in this reach of the Poultney River. In addition to Eurasian milfoil and water chesnut, sea lamprey also impact the river. This reach of the Poultney is a significant sea lamprey spawning tributary. A sea lamprey control program was restarted in the river in 2007. The lower reach of the river was designated an Outstanding Resource Water in 1992. (Vermont DEC, June 2009)

#### Previous Assessment

Concerns were raised during a previous (2000) assessment effort regarding the hydrologic impacts of a Central Vermont Public Service hydropower operation at Carver Falls on habitat and recreational uses in the river. The facility has since been relicensed and is now a run-of-river operation. As a results the previous impacts have been largely addressed. (Vermont DEC, June 2009)

#### Section 303(d) Listing

Due to the fish consumption advisory the Lower Poultney River was included in the 2006 Section 303(d) List of Impaired Waters, but it is not included on the 2008 List. The waterbody was delisted in 2008 due to the completion of the Northeast Regional Mercury TMDL which was approved in 2007 and provides coverage for this specific waterbody. (DEC/DOW, BWAM, January 2009)

#### Segment Description

This segment includes the portion of the stream and all tribs (within New York State) from the mouth to Carver Falls. The waters of this portion of the stream are Class C. Tribs to this reach/segment are Class D. Upper Poultney River is listed separately.

# Poultney River, Upper, and tribs ( 1005-0054)

MinorImpacts

## Waterbody Location Information

Revised: 07/17/2009

**Water Index No:** C-138  
**Hydro Unit Code:** 02010001/040      **Str Class:** C(T)  
**Waterbody Type:** River  
**Waterbody Size:** 32.2 Miles  
**Seg Description:** stream and tribs above Carver Falls (within NYS)

**Drain Basin:** Lake Champlain  
Champlain-Lk.George  
**Reg/County:** 5/Washington Co. (58)  
**Quad Map:** THORN HILL (G-27-3) ...

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Recreation	Stressed	Suspected
Habitat/Hydrology	Stressed	Known

### Type of Pollutant(s)

Known: NUTRIENTS, SILT/SEDIMENT  
Suspected: Thermal Changes  
Possible: Pathogens

### Source(s) of Pollutant(s)

Known: AGRICULTURE, STREAMBANK EROSION  
Suspected: Roadbank Erosion  
Possible: - - -

## Resolution/Management Information

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

**Resolution Potential:** Medium

## Further Details

### Overview

Habitat/hydrologic uses in the Poultney River are known to experience minor impacts due to nutrient enrichment and silt/sedimentation from agricultural runoff and streambank erosion in the watershed.

### Water Quality Sampling

NYSDEC Rotating Integrated Basin Studies (RIBS) Intensive Network monitoring of Poultney River in Hampton Flats, Washington County, (at Route 22A) was conducted in 2003 and 2004. Intensive Network sampling typically includes macroinvertebrate community analysis, water column chemistry, sediment and invertebrate tissues analysis and toxicity evaluation. Biological (macroinvertebrate) sampling results reveal slightly to non-impacted conditions, indicating good water quality. Water column sampling found iron to be a parameter of concern, exceeding its assessment criteria in 2 of 10 samples. However, the median iron concentration for the samples was well below the criterion. Macroinvertebrates collected at this site and chemically analyzed for selected metals and PAHs found chromium to be present at a concentration above the established guidance value. Sediment screening for acute toxicity indicated no toxicity to be present. Analysis of sediments found elevated levels of nickel above the threshold effects concentration, but not parameters were found to be above the probably effects concentration. Based on sediment quality guidelines developed for freshwater ecosystems, overall sediment

quality is not likely to result in toxicity to sediment-dwelling organisms. Toxicity testing of the water column also showed no significant mortality or reproductive impacts. Based on the consensus of these established assessment methods, overall water quality at this site shows that in spite of some concerns that should continue to be monitored, aquatic life is considered to be fully supported in the stream, and there are no other apparent water quality impacts to recreational uses. (DEC/DOW, BWAM/RIBS, May 2009).

NYSDEC Rotating Intensive Basin Studies (RIBS) Intensive Network monitoring of the Poultney River in Hampton (at Route 22A) was conducted in 1998 and 1999 and found similar results. A biological (macroinvertebrate) assessment of the Poultney in Hampton Flats (at Route 22A) was conducted in 1998. Although the stream bottom was considered poor habitat, the fauna was diverse and well-balanced, with mayflies dominant, resulting in an assessment of non-impacted water quality. This site was assessed as slightly impacted in 1993. (DEC/DOW, BWAR/RIBS, January 2000)

#### Watershed Management

The Vermont DEC has conducted considerable monitoring and water quality management efforts within the Poultney-Mettawee Watershed. Impacts to habitat along the watershed streams have been noted. Sediment and nutrient enrichment are the major causes of these impacts. Land runoff (from agriculture, roadways, residential and industrial uses), the loss of riparian vegetation, streambank erosion, and municipal wastewater facilities. Thermal modification from the loss of riparian vegetation and pathogens are also of concern. Since 1988, the Poultney-Mettawee Watershed Partnership - a collaboration of state and local agencies, watershed organizations, environmental groups, private interests - has guided the development of a watershed plan and led efforts to implement watershed restoration projects. (Vermont DEC, Poultney-Mettawee Basin Plan, March 2005)

#### Segment Description

This segment includes the portion of the stream and all tribs (within New York State) above Carver Falls. The waters of this portion of the stream are Class C(T). Tribs to this reach/segment are also Class C(T). Lower Poultney River is listed separately.

# **Summary Listing of Priority Waters**

This page intentionally left blank.

# Lake Champlain Basin

# Priority Waterbodies List

# Table 1

Water Index Number	Waterbody/Segment Name (ID) Use Impairment(s)	County	Seg Size	Type	Class	W.B.Category
C (portion 1) <b>2008 Section 303(d) Listed Water</b>	Lake Champlain, Main Lake, North (1000-0001) Fish Consumption KNOWN to be IMPAIRED Recreation KNOWN to be STRESSED Public Bathing POSSIBLY THREATENED	Clinton	18334.7 Acre	Lake	A	Impaired Seg
C (portion 2) <b>2008 Section 303(d) Listed Water</b>	Lake Champlain, Main Lake, Middle (1000-0002) Fish Consumption KNOWN to be IMPAIRED Recreation KNOWN to be STRESSED Public Bathing POSSIBLY THREATENED	Clinton	54971.6 Acre	Lake	A	Impaired Seg
C (portion 2a) <b>2008 Section 303(d) Listed Water</b>	Cumberland Bay (1001-0001) Fish Consumption KNOWN to be IMPAIRED Aquatic Life KNOWN to be IMPAIRED Public Bathing KNOWN to be STRESSED Recreation KNOWN to be STRESSED Aesthetics KNOWN to be STRESSED	Clinton	2658.4 Acre	Bay	B	Impaired Seg
C (portion 2b)	Willsboro Bay (1001-0015) Fish Consumption KNOWN to be IMPAIRED Recreation KNOWN to be STRESSED	Essex	2376.7 Acre	Bay	A	Impaired Seg
C (portion 3) <b>2008 Section 303(d) Listed Water</b>	Lake Champlain, Main Lake, South (1000-0003) Fish Consumption KNOWN to be IMPAIRED Recreation KNOWN to be STRESSED Public Bathing SUSPECTED of being STRESSED	Essex	10454.9 Acre	Lake	A	Impaired Seg
C (portion 4) <b>2008 Section 303(d) Listed Water</b>	Lake Champlain, South Lake (1000-0004) Fish Consumption KNOWN to be IMPAIRED Recreation KNOWN to be IMPAIRED Public Bathing KNOWN to be STRESSED Aesthetics KNOWN to be STRESSED	Essex	5754.0 Acre	Lake	B	Impaired Seg
C (portion 5)	Lake Champlain, South Bay (1005-0014) Recreation KNOWN to be IMPAIRED Public Bathing KNOWN to be STRESSED Aesthetics KNOWN to be STRESSED	Washington	1188.6 Acre	Lake	B	Impaired Seg

# Lake Champlain Basin

# Priority Waterbodies List

# Table 1

Water Index Number	Waterbody/Segment Name (ID) Use Impairment(s)	County	Seg Size	Type	Class	W.B.Category
C- 3 (portion 2) <b>2008 Section 303(d) Listed Water</b>	Great Chazy River, Lower, Main Stem (1002-0001) Water Supply KNOWN to be IMPAIRED Habitat/Hydrology POSSIBLY STRESSED	Clinton	24.5 Mile	River	A	Impaired Seg
C- 3- 2	Corbeau Creek and tribs (1002-0012) Aquatic Life KNOWN to be STRESSED	Clinton	62.2 Mile	River	D	MinorImpacts
C- 4	Little Chazy River, Lower, and tribs (1002-0003) Aquatic Life KNOWN to be STRESSED	Clinton	55.3 Mile	River	C	MinorImpacts
C- 15 (portion 4)/P74 <b>2008 Section 303(d) Listed Water</b>	Saranac River, Union Falls Reservoir (1003-0040) Fish Consumption KNOWN to be IMPAIRED	Clinton	1570.7 Acre	Lake(R)	C(T)	Impaired Seg
C- 15 (portion 5)/P76	Saranac River, Franklin Falls Pond (1003-0045) Fish Consumption KNOWN to be IMPAIRED	Essex	447.7 Acre	Lake(R)	C	Impaired Seg
C- 15-P104 <b>2008 Section 303(d) Listed Water</b>	Lower Saranac Lake (1003-0080) Fish Consumption KNOWN to be IMPAIRED	Franklin	2145.1 Acre	Lake	AA	Impaired Seg
C- 15-P110, P207 thru P209	Middle Saranac Lake (incl Weller Pond) (1003-0083) Fish Consumption KNOWN to be IMPAIRED Aquatic Life SUSPECTED of being THREATENED	Franklin	1587.7 Acre	Lake	AA	Impaired Seg
C- 15-P114 <b>2008 Section 303(d) Listed Water</b>	Upper Saranac Lake (1003-0048) Aquatic Life SUSPECTED of being STRESSED Recreation SUSPECTED of being THREATENED	Franklin	4844.1 Acre	Lake	AA	MinorImpacts
C- 15-P114..P120	Polliwog Pond (1003-0090) Fish Consumption KNOWN to be IMPAIRED Aquatic Life SUSPECTED of being THREATENED	Franklin	210.5 Acre	Lake	AA	Impaired Seg

# Lake Champlain Basin

# Priority Waterbodies List

# Table 1

Water Index Number	Waterbody/Segment Name (ID) Use Impairment(s)	County	Seg Size	Type	Class	W.B.Category
C- 16 thru 24 (selected)	Minor Tribs to Lake Champlain (1004-0019) Aquatic Life SUSPECTED of being STRESSED	Essex	73.8 Mile	River	C*	MinorImpacts
			Causes: Nutrients Sources: Agriculture, Urban/Storm Runoff			
C- 25- 8-P213	Augur Lake (1004-0050) Recreation KNOWN to be STRESSED	Essex	359.9 Acre	Lake	A	MinorImpacts
			Causes: Algal/Weed Growth, Problem Species Sources: Habitat Modification			
C- 25-26	West Br Ausable, Lower, and minor tribs (1004-0042) Habitat/Hydrology KNOWN to be STRESSED	Essex	38.6 Mile	River	C(T)	MinorImpacts
			Causes: Silt/Sediment Sources: Deicing (stor/appl), Streambank Erosion			
C- 25-26	West Br Ausable, Middle, and tribs (1004-0013) Habitat/Hydrology SUSPECTED of being STRESSED	Essex	65.0 Mile	River	C(T)*	MinorImpacts
			Causes: Silt/Sediment Sources: Streambank Erosion			
C- 25-27	East Br Ausable, Lower, and minor tribs (1004-0014) Habitat/Hydrology SUSPECTED of being STRESSED	Essex	50.5 Mile	River	C(T)	MinorImpacts
			Causes: Silt/Sediment Sources: Streambank Erosion			
C- 25-27	East Br Ausable, Middle, and tribs (1004-0071) Habitat/Hydrology SUSPECTED of being STRESSED	Essex	155.9 Mile	River	AA(T)	MinorImpacts
			Causes: Silt/Sediment Sources: Streambank Erosion			
C- 25-27	East Br Ausable, Upper, and Tribs (1004-0072) Habitat/Hydrology SUSPECTED of being STRESSED	Essex	102.6 Mile	River	AA(T)	MinorImpacts
			Causes: Silt/Sediment Sources: Streambank Erosion			
C- 48	Boquet River, Lower, and tribs (1004-0037) Aquatic Life KNOWN to be STRESSED Recreation KNOWN to be STRESSED Aesthetics KNOWN to be STRESSED	Essex	6.1 Mile	River	C(T)	MinorImpacts
			Causes: Silt/Sediment Sources: Landfill/Land Disp.			
C- 48	Boquet River, Middle, and minor tribs (1004-0039) Habitat/Hydrology SUSPECTED of being STRESSED	Essex	77.4 Mile	River	A	MinorImpacts
			Causes: Silt/Sediment Sources: Streambank Erosion			

# Lake Champlain Basin

# Priority Waterbodies List

# Table 1

Water Index Number	Waterbody/Segment Name (ID) Use Impairment(s)	County	Seg Size	Type	Class	W.B.Category
C- 48	Boquet River, Middle, and minor tribs (1004-0046) Habitat/Hydrology SUSPECTED of being STRESSED	Essex	42.4 Mile	River	C(T)	MinorImpacts
		Causes: Silt/Sediment Sources: Streambank Erosion				
C- 48- 6	North Branch Boquet, Lower, and tribs (1004-0078) Habitat/Hydrology SUSPECTED of being STRESSED	Essex	70.5 Mile	River	C(T)	MinorImpacts
		Causes: Silt/Sediment Sources: Streambank Erosion				
C- 48-26-P315 <b>2008 Section 303(d) Listed Water</b>	Lincoln Pond (1004-0090) Fish Consumption KNOWN to be IMPAIRED Recreation KNOWN to be IMPAIRED	Essex	656.1 Acre	Lake	B(T)	Impaired Seg
		Causes: Metals, Problem Species Sources: Habitat Modification, Atmosph. Deposition				
C- 86-3-P338,P339,P340	Bartlett, Mud, North Ponds (1001-0027) Recreation KNOWN to be IMPAIRED Public Bathing KNOWN to be STRESSED	Essex	139.2 Acre	Lake	AA(T)	Impaired Seg
		Causes: Problem Species Sources: Habitat Modification				
C-100	Fivemile Run and tribs (1005-0021) Aquatic Life KNOWN to be STRESSED Recreation POSSIBLY STRESSED	Essex	18.1 Mile	River	C(T)*	MinorImpacts
		Causes: Nutrients Sources: Agriculture, Streambank Erosion				
C-101	Ticonderoga Creek (1006-0017) Aesthetics KNOWN to be STRESSED Recreation SUSPECTED of being STRESSED	Essex	3.2 Mile	River	D	MinorImpacts
		Causes: Aesthetics Sources: Urban/Storm Runoff				
C-101-P367 <b>2008 Section 303(d) Listed Water</b>	Lake George (1006-0016) Recreation KNOWN to be IMPAIRED Habitat/Hydrology KNOWN to be STRESSED Water Supply KNOWN to be THREATENED	Warren	28523.1 Acre	Lake	AAspl	Impaired Seg
		Causes: Silt/Sediment, Problem Species Sources: Deicing (stor/appl), Streambank Erosion, Urban/Storm Runoff				
C-101-P367- 1 thru 26 <b>2008 Section 303(d) Listed Water</b>	Tribes to L.George, East Shore (1006-0020) Habitat/Hydrology KNOWN to be IMPAIRED Recreation POSSIBLY STRESSED Water Supply POSSIBLY THREATENED	Washington	63.7 Mile	River	AAspl	Impaired Seg
		Causes: Silt/Sediment Sources: Streambank Erosion				

# Lake Champlain Basin

# Priority Waterbodies List

# Table 1

Water Index Number	Waterbody/Segment Name (ID) Use Impairment(s)	County	Seg Size	Type	Class	W.B.Category
C-101-P367-32 thru 40 <b>2008 Section 303(d) Listed Water</b>	Tribs to L.George, Village of L George (1006-0008) Habitat/Hydrology KNOWN to be IMPAIRED Recreation SUSPECTED of being STRESSED Water Supply POSSIBLY THREATENED	Warren	20.0 Mile	River	AAspl	Impaired Seg
C-101-P367-41 <b>2008 Section 303(d) Listed Water</b>	English Brook and tribs (1006-0032) Habitat/Hydrology KNOWN to be IMPAIRED Recreation SUSPECTED of being STRESSED Water Supply POSSIBLY THREATENED	Warren	15.0 Mile	River	AAspl	Impaired Seg
C-101-P367-53,56 <b>2008 Section 303(d) Listed Water</b>	Huddle/Finkle Brooks and tribs (1006-0003) Habitat/Hydrology KNOWN to be IMPAIRED Recreation SUSPECTED of being STRESSED Water Supply POSSIBLY THREATENED	Warren	18.9 Mile	River	AAspl	Impaired Seg
C-101-P367-59 <b>2008 Section 303(d) Listed Water</b>	Indian Brook and tribs (1006-0002) Habitat/Hydrology KNOWN to be IMPAIRED Recreation SUSPECTED of being STRESSED Water Supply POSSIBLY THREATENED	Warren	29.5 Mile	River	AAspl	Impaired Seg
C-101-P367-86 <b>2008 Section 303(d) Listed Water</b>	Hague Brook and tribs (1006-0006) Habitat/Hydrology KNOWN to be IMPAIRED Recreation SUSPECTED of being STRESSED Water Supply POSSIBLY THREATENED	Warren	17.9 Mile	River	AAspl	Impaired Seg
C-134	Mettawee River, Upper, and minor tribs (1005-0003) Habitat/Hydrology SUSPECTED of being STRESSED	Washington	65.2 Mile	River	C(T)	MinorImpacts
C-134- 2	Mud Brook and tribs (1005-0035) Aquatic Life SUSPECTED of being STRESSED Habitat/Hydrology POSSIBLY STRESSED	Washington	16.6 Mile	River	D	MinorImpacts
C-134- 4	Wood Cr/Champlain Canal and minor tribs (1005-0036) Recreation KNOWN to be IMPAIRED Aquatic Life KNOWN to be STRESSED	Washington	128.7 Mile	Canal	C	Impaired Seg

# Lake Champlain Basin

# Priority Waterbodies List

# Table 1

Water Index Number	Waterbody/Segment Name (ID) Use Impairment(s)	County	Seg Size	Type	Class	W.B.Category
C-134- 4-19	Halfway Creek, Lower, and tribs (1005-0013) Aquatic Life SUSPECTED of being STRESSED Recreation SUSPECTED of being STRESSED	Washington	46.4 Mile	River	A(T)	MinorImpacts
C-134- 4-19	Halfway Creek, Upper, and tribs (1005-0063) Aquatic Life KNOWN to be STRESSED Aesthetics KNOWN to be STRESSED Recreation SUSPECTED of being STRESSED Habitat/Hydrology SUSPECTED of being STRESSED Water Supply SUSPECTED of being THREATENED	Warren	39.5 Mile	River	AA(T)	MinorImpacts
C-134- 4-19-19-P440	Lake Sunnyside (1005-0047) Recreation KNOWN to be STRESSED	Warren	37.4 Acre	Lake	B	MinorImpacts
C-134- 4-27	Big Creek and tribs (1005-0004) Aquatic Life SUSPECTED of being STRESSED Habitat/Hydrology SUSPECTED of being STRESSED	Washington	53.7 Mile	River	C(T)	MinorImpacts
C-134-22	Indian River and tribs (1005-0002) Aquatic Life SUSPECTED of being STRESSED Habitat/Hydrology SUSPECTED of being STRESSED	Washington	31.6 Mile	River	C(T)	MinorImpacts
C-138	Poultney River, Lower, and tribs (1005-0053) Fish Consumption KNOWN to be IMPAIRED Habitat/Hydrology KNOWN to be STRESSED Recreation SUSPECTED of being STRESSED	Washington	8.1 Mile	River	C	Impaired Seg
C-138	Poultney River, Upper, and tribs (1005-0054) Habitat/Hydrology KNOWN to be STRESSED Recreation SUSPECTED of being STRESSED	Washington	32.2 Mile	River	C(T)	MinorImpacts

# The Waterbody Inventory

## Priority Waterbodies List

### Assessment Methodology

---

*Assessment Methodology* refers to what monitoring tools are used and how resulting data and information are interpreted to determine the level of support of designated uses and to arrive at an overall assessment of water quality. In some cases a lack of use support is apparent (e.g., beaches closed to public bathing or acid rain lakes devoid of fish). However, in most cases, designated use support is evaluated using established water quality criteria or surrogate indicators of water quality. The assessment methodology presented here outlines various water quality monitoring tools and considers other aspects of the resulting data and information, such as the type of data and information generated (numerical, observational/narrative or anecdotal), the source of the data/information, and the level of confidence in the data/information. The methodology also outlines specific criteria that relates water quality monitoring data and information to the degree of use support. Such criteria are critical to providing a balanced and consistent assessment of the quality of waters throughout New York State.

#### **Types of Assessment Criteria**

The methodology outlined here relies on a combination of three categories of assessment criteria:

- Use Restriction Orders,
- Numerical and Narrative Standards and Criteria, and
- Surrogate Water Quality Indicators

**Use Restriction Orders** are administrative restrictions or closures of waters to specific uses. These orders are issued by regulatory agencies charged with protecting particular aspects of public health and are based on data collected through monitoring activities directed by those agencies. While the restriction orders are based on monitoring data, the raw data itself is not usually re-interpreted by NYSDEC in making the use support decisions; rather the level of restricted use already in place drives the use support determination. Examples of use restriction orders include fish consumption advisories, closed shellfishing areas, seasonal or conditional shellfishing areas, public bathing beach closures, etc.

**Numerical (and narrative) Water Quality Standards and Criteria** represent parameter-specific thresholds for establishing limits regarding the discharge of substances to the waters of the state such that various water uses are protected. In New York State, such standards are adopted in the state Code of Rules and Regulations while criteria are established through development of formal DEC guidance. For many substances the standard or criterion exists as a numeric value; for other parameters, the standard/criterion is more descriptive (narrative) in nature (e.g., *no increase in turbidity that will cause a substantial visible contrast to natural conditions*). Although the use of standards and criteria (particularly numeric standards/criteria) would seem to be directly applicable to determining use support in ambient waters, an assessment methodology is necessary to address issues such as appropriate sampling methods, location, frequency or sample size, natural or background conditions, mixing zones, and so on.

**Surrogate Water Quality Indicators** are other measures of water quality conditions that are not established in standards or formal criteria. These are often used when an exact determination of use support is not possible. For example, it is difficult to say exactly when a waterbody moves from supporting to not supporting recreational activities. The use of water quality indicators, such as nutrient levels and Secchi disc measurements, bring added consistency to the evaluation. Biological assessments, sediment toxicity evaluations, Section 319 nonpoint source assessments, source water assessments, dilution calculations and predictive models all reflect levels of water quality condition and use support without reliance on standards. Even where these indicators are more subjective, indicator-specific criteria help to maintain a degree of consistency and allow for the incorporation of additional information/data sets into water quality assessments.

## Waterbody Inventory/Priority Waterbodies List

NYSDEC maintains information regarding use support, including impaired waters and lesser water quality impacts, through its *Waterbody Inventory/Priority Waterbodies List (WI/PWL)* database. The *Waterbody Inventory* refers to a listing of all waters, identified as specific individual waterbodies or Assessment Units, within the state. The Waterbody Inventory includes both assessed and currently unassessed waters. The *Priority Waterbodies List* is the subset of waters in the Waterbody Inventory that have documented water quality impairments, minor impacts and/or threats. The WI/PWL assessments provide the foundation for both the compilation of the biennial Section 305(b) Water Quality Report on all waters of the state, and for the development of the state Section 303(d) List, which is comprised of waters that do not meet water quality standards and do not support water uses and require development of a TMDL. More detail regarding the WI/PWL assessment effort can be found at <http://www.dec.ny.gov/chemical/23846.html>.

As well as providing the basis of the New York State Section 305(b)/303(d) integrated assessment, the water quality assessment information in the WI/PWL is also instrumental in directing other water quality efforts. It is used to prioritize monitoring, permitting and compliance activities, to provide a comprehensive inventory of water quality conditions suitable for establishing funding priorities, to enlist participation of other agencies and local partners, and to track progress toward improving the state's water resources. The methodology outlined here goes beyond Section 305(b)/303(d) Integrated Reporting and reflects the use of the WI/PWL in supporting these additional needs. The methodology specific to developing the Section 303(d) List of Impaired/TMDL waters is discussed in more detail in the Section 303(d) *Listing Methodology*.

As well as providing the basis of the New York State Section 305(b)/303(d) integrated assessment, the water quality assessment information in the WI/PWL is also instrumental in directing other water quality efforts. The methodology outlined here goes beyond Section 305(b)/303(d) integrated reporting and reflects the use of the WI/PWL in supporting these additional needs.

To accommodate a thorough evaluation including public participation, the review and updating of the WI/PWL follows a continuing rotating basin schedule in which two or three of the 17 drainage areas in the state are scheduled for reassessment each year. These basin reassessments typically follow the same basin five year rotation schedule employed by the NYSDEC Rotating Integrated Basin Studies (RIBS) monitoring program (<http://www.dec.ny.gov/chemical/30951.html>). This continuous rotating basin schedule allows for comprehensive solicitation of available data and information, meaningful public participation and review, and more thoughtful dialogue and consideration of water quality assessments. In addition, it is easier to manage than a biennial review of all waters of the state.

To incorporate recent well-documented information, particularly for waters that have not undergone a WI/WPL update during the two-year Integrated Reporting cycle, **NYSDEC will establish September 30 of the year prior to the issuing of a Section 305(b)/303(d) Integrated Report as the cut-off date to receive data and information to be considered for inclusion in the Section 305(b)/303(d) assessment.** Establishing a September 30 "cut-off" date (6 months before the Integrated Report is due) allows both an opportunity for consideration of additional data as well as sufficient time for consideration and comment by all parties on any proposed revisions to existing water quality assessments, and time for a public review component comparable to the WI/PWL process.

## **Segmentation of Waterbodies**

The delineation of waterbodies (Assessment Units) must strike a balance between being too specific (resulting in more segments than can be assessed with finite resources) and too general (resulting in segments that are too large and diverse and difficult to assess accurately). Determining specific boundaries for individual waterbody segments is based on a number of considerations. These factors, which correspond to those outlined in *EPA Guidance for 2004 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d) and 305(b) of the Clean Water Act* (July 21, 2003), include:

Waterbody Type Different waterbody types are not combined into single waterbody segments. That is, lakes (including reservoirs and ponds) are not combined with river reaches to form one segment. Similarly, estuary waters, ocean coastline and Great Lakes shoreline are distinct waterbody types that must be tracked as separate Assessment Units.

Stream Classification A change in the stream class (A, B, C) of a waterbody usually necessitates the division of the waterbody into separate segments, since the two different classes of waters will be assessed for the support of different designated uses. However, differences regarding trout support (T, TS waters) do not require designation of a separate segment. In the case of trout/trout spawning and non-trout portions of the same segment, the assessment reflects the support of the appropriate corresponding fish community. Similarly, Class AA, AA-Spcl or A-Spcl may be grouped with Class A waters in one segment, and Class I waters may be combined with Class SC waters which support similar uses. Note however that some small reaches of Class A or B waters might be combined with a Class C waterbody (and vice versa), if these small reaches are unlikely to be assessed separately.

Hydrologic Drainage Waterbodies that cross 8-digit Hydrologic Unit Code (HUC) and 11-digit watershed boundaries are usually broken into separate waterbody segments at the boundaries.

Waterbody Length/Size As a practical matter, waterbodies should not be too large or too small. There should also be some consistency with regard to segment size. Length/size of particular types of waterbody segments are outlined below.

Rivers and Streams - River and stream segments may be limited to main stem waters, or may include tributaries. Typically 5<sup>th</sup> order streams and above – which are significantly larger than their direct tributaries – are listed as main stem segments and tributary waters are listed as separate segments. Larger tributaries (or portions of tributaries) are considered as separate segments but in most cases include smaller tributary waters. Occasionally, smaller tributary waters to a larger main stem or lake are combined into one segment, where land use, hydrologic boundaries and other commonality indicate this is appropriate. Generally, river segments include between 10 and 25 miles of stream.

Lakes and Reservoirs - Lakes/reservoirs must be greater than 6.4 acres (0.01 square mile) to be included in the Waterbody Inventory. This is consistent with the threshold for inclusion in the New York State Lake Gazetteer. Lakes are generally listed as “entire lake.” However, some very large lakes (e.g., Lake Champlain) may be segmented into separate portions. Conversely, some lake chains and/or smaller lakes in more remote watersheds may be joined together as a single segment, if land use and other commonality indicate this is appropriate.

Estuary Waters - Estuary segments are defined by physical features and stream classification with less consideration to consistency of size. Homogeneity of the waters within a segment is a key consideration.

Great Lakes/Ocean Coastline - Segments are delineated to reflect classification, hydrologic unit boundaries, and political boundaries, with an attempt to be consistent in regard to size.

Land Use and Character In addition, all waters within a single waterbody segment should drain areas of generally similar land use and character. If land use and other character changes, a separate segment is considered.

Waterbody segments are **not** defined solely upon the length/size of area impacted by a water quality problem. Estimates of the extent of water quality impacts are often inexact and may change regularly. Therefore, using this information to establish segment boundaries would make the Waterbody Inventory/Priority Waterbodies List considerably more difficult to manage and update, while providing little added benefit. Flexibility in the segmenting of waterbodies is allowed in order to provide sufficient protection of all designated uses.

### Evaluation of Water Use Support

The assessment of New York State water resources is based on the ability of waters to support a range of specific designated uses (see box). The particular uses that a specific waterbody is expected to support are dependent upon the classification of that waterbody. For example, only specifically designated waterbodies are considered to have best uses of *Drinking Water Supply* (Class A, AA), *Shellfishing* (Class SA) and *Public Bathing* (Class A, SA, B, SB). (See Appendix B, *New York State Water Quality Classifications*.)

#### WI/PWL Water Uses

Drinking Water Supply  
Shellfishing  
Public Bathing  
Recreation  
Fish Consumption  
Aquatic Life  
Habitat/Hydrology  
Aesthetics

The determination of use support and degree of water quality impact is drawn from a wide range of available data sources and relies on various criteria. These sources and criteria include use restriction orders (drinking water restrictions, bathing beach closures, fish consumption and shellfishing advisories), comparison of data (from NYSDEC ambient monitoring network as well as other agency, local or public/citizen monitoring program) with parameter-specific criteria that reflect water quality standards, the use of surrogate indicators, and qualitative perception and observational information (stream habitat assessments, recreational use or fishery resource surveys, citizen complaints). Given the growing involvement of local agency and citizen volunteers in water quality monitoring, the WI/PWL updating process has expanded to include a significant public participation and outreach component. This effort relies on a network of local Water Quality Coordinating Committees working in conjunction with the NYSDEC staff to capture additional available water quality information. To help ensure consistency in the assessments, basin update efforts begin with a regional WI/PWL workshop with other agency and local partners to introduce the assessment methodology and solicit water quality information.

After all readily available water quality information is collected, judgments and evaluations are made regarding:

- what specific use(s), if any, is/are affected,
- the severity of the impact on the use(s), and
- the level of documentation that corresponds to the use impact/impairment.

The focus of a water quality assessment is based on whether a specific use is restricted. If this is the case, then the severity of use impact (i.e., the degree to which the use is restricted) is evaluated as either *Precluded*, *Impaired*, *Stressed* or *Threatened* (see box). The water use impact and level of severity are also identified as *Known*, *Suspected* or *Possible* (see box) based upon available documentation. The severity of use impacts and the corresponding levels of documentation are dependent upon a number of factors, including the *magnitude* of the impact, the *frequency* of occurrence or *extent* of affected area, and *confidence* of data.

The *magnitude* of water quality impacts or degrees of use restrictions are reflected in the WI/PWL level of severity; the more significant the impact, the greater the severity. For example, fish consumption advisories may recommend eating no more than one fish per week (*Stressed*), eating no more than one meal per month (*Impaired*), or eating no fish at all (*Precluded*). With regard to water quality monitoring and its evaluation against criteria, in-stream concentrations may be below, near, at, above or well above applicable water quality criteria. Such conditions correspond to varying degrees of impact ranging from *No Known Impact, Threatened, Stressed, Impaired* or *Precluded*.

The *frequency* with which water quality conditions occurs, is also reflected in the WI/PWL level of severity. The more frequently a specific condition occurs, the more significant – or severe – the effect on related water resource uses. Similarly, the spatial *extent* of the water quality condition (i.e., the percent of total waterbody affected) is also reflected in the severity. For example, a bay where shellfishing is restricted in one small cove is less severely impacted than if shellfishing were restricted in the entire bay.

### WI/PWL Level of Documentation

**Known** - Water quality monitoring data and/or studies have been completed and conclude that the use of the waterbody is restricted to the degree indicated by the listed severity.

**Suspected** - Reasonably strong evidence, supported by best professional judgment of DEC staff, suggests the use of the waterbody is impacted. However, water quality data/studies that establish an impact have not been completed or there is conflicting information.

**Possible** - Anecdotal evidence, public perception and/or specific citizen complaints indicate that the use of the waterbody may be restricted. However, there is currently very little, if any, documentation of an actual water quality problem.

## WI/PWL Severity of Use Impact

### PRECLUDED

*Frequent/persistent* water quality, or quantity, conditions and/or associated habitat degradation prevents all aspects of a specific waterbody use.

### IMPAIRED

*Occasional* water quality, or quantity, conditions and/or habitat characteristics periodically prevent specific uses of the waterbody, or;

Waterbody uses are not precluded, but some aspects of the use are *limited or restricted*, or;

Waterbody uses are not precluded, but *frequent/persistent* water quality, or quantity, conditions and/or associated habitat degradation discourage the use of the waterbody, or;

Support of the waterbody use requires *additional/advanced* measures or treatment.

### STRESSED

Waterbody uses are not significantly limited or restricted (i.e. uses are *Fully Supported*), but *occasional* water quality, or quantity, conditions and/or associated habitat degradation periodically discourage specific uses of the waterbody.

### THREATENED

Water quality supports waterbody uses and ecosystem exhibits no obvious signs of stress, however *existing or changing land use patterns* may result in restricted use or ecosystem disruption, or;

*Data reveals decreases in water quality* or presence of toxics below the level of concern, or;

Frequency of occurrence and spatial extent also influence the WI/PWL level of documentation. For example, if a specific condition occurs less than 10% of the time (or in less than 10% of the waterbody), the overall water quality impacts for the total waterbody are less certain than if the frequency/extent of the condition is greater than 50%. As general guidelines, if frequency/extent of conditions are less than 10%, the level of documentation for impacts to uses corresponding to that condition is considered *Possible*. If the frequency or extent is between 10 and 25%, the level of documentation should be considered *Suspected*. If greater than 25%, the impact should be considered *Known*.

However, the use of the 10% and 25% thresholds outlined above assumes that the frequency/extent of a condition is well-established. For some measures of impact, this is not very difficult (e.g., fish consumption advisories are in effect 100% of the time, for beaches that are closed 14 days out of a 100 day season the frequency is 14%, for estuary segments where shellfishing is restricted in 40 of 200 acres the extent is 20%). However, for other water quality monitoring the determination of frequency/extent depends upon a number of factors, including the level of data confidence.

*Data confidence* refers to statistical measures that help determine the degree of certainty that a condition exists. Such statistical confidence depends upon a number of factors ( monitoring design, number of samples collected, variability of analysis) and is an important factor in determining the WI/PWL level of documentation. Other considerations, such as quality and age of data, also influence the level of documentation.

Though they are related, it is important not to confuse data confidence with the frequency/extent of a condition. For example a single data point might show exceedence of a standard. While this represents high frequency of a condition (100%), the level of data confidence based on just one sample is usually quite low.

## **WI/PWL Assessment Categories**

Based on the degree of use support, severity of impact/impairment and level of documentation, all waterbodies in the WI/PWL are assigned to one of five possible *Water Quality Assessment Categories*. These categories are outlined below and in Table 1.

*Impaired Waters* are waterbodies with well documented water quality problems that result in *Precluded*, or *Impaired* uses and, in most cases, a level of documentation of *Known* (occasionally *Suspected*). Waters with *Stressed*, *Threatened* uses are not included in this category.

*Waters with Minor Impacts* are waterbodies where less severe water quality impacts are apparent, but uses are considered fully supported. These waters correspond to waters listed as having *Stressed* uses and a level of documentation of *Known* or *Suspected*.

*Threatened Waters* are waterbodies for which uses are not restricted and no water quality problems currently exist, but where data suggests declining water quality trends or specific land use or other changes in the surrounding watershed are *Known* to be threatening water quality. Also included in this category are waterbodies where the support of a specific and/or distinctive use make the waterbody more susceptible to *Possible* water quality threats.

*Waters with Impacts Needing Verification* are waterbodies that are thought to have water quality problems or impact, but for which there is not sufficient or definitive documentation. These segments include waters with *Stressed* uses and a level of documentation of *Possible* and waters with *Threatened* uses and a *Suspected* level of documentation. Such waterbodies require additional monitoring to determine whether uses are restricted or threatened.

Waters Having No Known Impacts are waterbodies where monitoring data and information indicate that there are no use restrictions or other water quality impacts, threats or issues.

UnAssessed Waters are waterbodies where there is no available water quality information to assess the support of designated uses.

<b>Table 1 Relationships Between WI/PWL Severity/Documentation and Water Quality Assessment Categories</b>			
<b>Severity of Problem</b>	<b>Level of Problem Documentation</b>		
	<b>Known</b>	<b>Suspected</b>	<b>Possible</b>
Precluded	Impaired Water	N/A*	N/A*
Impaired		Impaired Water	N/A*
Stressed	Minor Impacts but Fully Supporting	Minor Impacts but Fully Supporting	Needs Verification (Considered Minor Impacts But Fully Supporting)
Threatened	Threatened, but Fully Supporting	Needs Verification (Considered Threatened)	Threatened (Poss) (But Fully Supporting)
None	No Known Impairment - Fully Supporting Uses		
Unknown	UnAssessed Water		

\* For more severe impacts (*Precluded, Impaired*) a greater level of documentation is needed.

The WI/PWL Water Quality Assessment Categories differ somewhat from the national Use Attainment Categories suggested by USEPA in their Integrated Reporting guidance for reporting on water quality. Whereas the Integrated Reporting Use Attainment Categories are more narrowly tailored to focus on questions concerning the attainment of water quality standards and the appropriateness of TMDLs to address water quality impairments, the WI/PWL categories are crafted to better provide support for a myriad of NYSDEC water quality management programs.

Perhaps the most significant difference between the two frameworks involves the WI/PWL’s inclusion of *Waters with Minor Impacts (Stressed waters)*. This category allows the WI/PWL to track waters that fully support uses but with less than ideal water quality. Conditions in these waters are considered stable, have been well documented and additional protection activities are not necessarily needed to maintain use support into the future.

The tracking of waters with minor impacts – while not readily accommodated in the national Use Attainment Category scheme – supports the NYSDEC water quality management programs and is an integral component of its overall watershed restoration and protection efforts. The emphasis at the federal government level regarding water quality efforts continues to be focused on the restoration of waters that do not support uses (*Precluded, Impaired*).

The tracking of waters with minor impacts – while not readily accommodated in the national Use Attainment Category scheme – supports the NYSDEC water quality management programs and is an integral component of its overall watershed restoration and protection efforts.

However in New York – at both the state and local levels – there is growing interest and support for directing

resources to protection efforts as well. Maintaining non-impacted waters and improving waters with lesser impacts is often a more effective use of limited resources for the advancing of water quality goals and progress. The more comprehensive framework of WI/PWL assessment categories better supports efforts to benefit these waters.

Although the current national Integrated Reporting Use Attainment Categories differ from the WI/PWL Assessment Categories, the two schemes share significant similarities. As a result waters assigned to WI/PWL Assessment Categories translate easily to corresponding USEPA designations. A more detailed discussion of the linkage between the WI/PWL Assessment Categories and the national Integrated Reporting Categories is presented in the Listing Methodology.

### ***Monitored and Evaluated Waters***

In compiling water quality information for 305(b) Reporting, states are to distinguish between water quality assessments based on monitoring data, and assessments based on other information. The distinctions between *Monitored* and *Evaluated* Waters in New York State are outlined below.

**Monitored Waters** are those waterbodies for which the use support assessment is based primarily on current (i.e., less than 5 years old) site-specific ambient monitoring data. Such data includes biological monitoring (macroinvertebrate assessment, toxicity testing) and/or chemical/physical monitoring results. Because fixed-station chemical/physical monitoring represents only a “snapshot” in time, such monitoring should be conducted quarterly or more frequently if it is to accurately portray water quality conditions at the site.

**Evaluated Waters** are those waterbodies for which the use support assessment is based on information other than current site-specific ambient monitoring data. Such assessments may rely on land use data, identification of sources, predictive modeling and/or surveys of water quality and natural resource staff. Also, assessments based on older ambient monitoring data are generally considered to be “evaluated.”

### **Use-Specific Assessment Criteria**

Detailed guidelines regarding the relationships between the results of various monitoring and assessment indicators and corresponding levels of support for specific water uses are discussed on the following pages. Assessment criteria tables for specific designated water uses, which are intended to provide guidance to insure consistent evaluation of water quality, are included in these guidelines. The criteria in the tables are intended to define general boundaries between levels of impact (severity) and degrees of confidence (documentation). Individual waterbody assessments are evaluated on a case-by-case basis. These assessments may take into account additional or alternative indicators not captured in the assessment criteria tables and may require the application of best professional judgment. Multiple water quality indicators that may suggest conflicting levels of impacts also require careful consideration (see also *Independent Applicability and Weight of Evidence*).

In establishing assessment criteria to determine what uses are supported in a waterbody, New York State takes into consideration a number of factors. The starting point for the criteria is often based on established NYS water quality standards and/or guidance values. These standards and guidance values are integral to many water quality activities, including – and perhaps most prominently – the derivation of water quality-based effluent limitations for SPDES discharge permits. The NYS water quality standards and accompanying guidance recognize that the application of standards to the derivation of permit limits and the determination of compliance or noncompliance of discharges with the standards require additional interpretation and instruction, as approved by the department. This additional guidance is necessary to address issues such as appropriate sampling methods, sampling location, flow variability, averaging periods, frequency of sampling or sample size, natural or background conditions, mixing zones, and so on.

Similarly, the application of water quality standards and guidance values to determine use support and levels of impact/impairment also requires some interpretation and additional guidance. The most recent USEPA Integrated Reporting Guidance notes specifically the need for states to address issues of data quality, data quantity and data representativeness in making assessment decisions. The guidance speaks at some length on the issue of data representativeness, and recognizes that the "...spatial and temporal representativeness of data and information should be considered by states as they attempt to characterize conditions..." The guidance continues to note that:

"...state methodologies should describe, in general terms, the decision logic used to determine the temporal and spatial extent a grab sample can be construed to represent. In order to make credible assessment determinations, states should employ approaches that strike a balance between the extremes of: (1) considering every grab sample to be representative of merely the instant in which, and the drop of water from which, each was taken, or (2) assuming that each such sample is representative of conditions over several years, and covering hundreds of stream miles of hundreds of lake acres."

This New York State Assessment Methodology, and the associated Listing Methodology attempts to strike the balance called for in the USEPA guidance through the use of established water quality standards and guidance values, other criteria and indicators and the application of best professional judgment. However, NYDEC recognizes that achieving this balance is a work in progress and is continuing to work together with USEPA to improve the transparency of decision-making based on different types of data collected from numerous monitoring programs.

### **Drinking Water Supply Use**

Only those waters where *Drinking Water Supply* is designated as the best usage (i.e., Class A, AA, A/AA-Special surface and Class GA groundwaters) are evaluated for support of this use. The evaluation of *Drinking Water Supply* use support is driven largely by water quality information and monitoring data generated by the New York State Department of Health (NYSDOH) or local health departments, which are primarily responsible for the protection of public health in the state.

A comprehensive evaluation of *Drinking Water Supply* use must consider the use on a number of levels. The first of these considerations focuses on administrative closures or restrictions on a *Drinking Water Supply* use. However, while this criterion is most directly related to the use, it is not sensitive to impacts.

Consequently, a secondary level of assessment uses the degree of treatment necessary for a water supply to be used for drinking water. The intent of this assessment criterion is to categorize as *Impaired* any water supply that requires "extra-ordinary" treatment measures. Given national filtration rules and other considerations, defining "extra-ordinary" is somewhat difficult. The criteria language – "*additional treatment beyond conventional processes (coagulation, sedimentation, filtration, disinfection) is required to remove any impurities that are not naturally present*" – reflects similar language used in the New York State Water Quality Regulations for classification of waters.

Because of the human health implications, threats to and protection of the *Drinking Water Supply* use take on added significance. Therefore, it is also appropriate to evaluate these waters prior to and without consideration of final treatment. This level of assessment evaluates contaminant concentrations relative to standards for the protection of Health (Water Source). In addition, other information regarding nutrient levels, precursors to Trihalomethane (THM) formation and other contaminants that may affect *Drinking Water Supply* use and quality is reflected in measures of natural sensitivity and susceptibility as determined through the NYSDOH Source Water Assessment Program (SWAP).

<b>Table 2 Drinking Water Supply Use Assessment Criteria</b>				
<b>Use Assessment Criteria</b>		<b>WI/PWL Use Impact</b>		
		<b>Severity</b>	<b>Documentation</b>	
<b>Frequent/Persistent Conditions Prevent Use</b> • NYS/local Health Department water supply closures lasting >30 days.		Precluded	Known	
<b>Occasional Conditions Prevent Use</b> • NYS/local Health Department water supply closures lasting up to 30 days.		Impaired	Known	
<b>Frequent/Persistent Conditions Discourage Use</b> • Impacts do not require closure or advisories but adversely affect the quality of the finished water and/or treatment costs (e.g., taste/odors, color, turbidity, activated charcoal filtration, etc.), or • Monitoring data show exceedence of <i>Impaired</i> criteria* for cryptosporidium, coliform, or • Monitoring data show exceedence of <i>Impaired</i> parameter-specific criteria* for other substances more than 10% ( <i>suspected</i> ) or 25% ( <i>known</i> ) of time.		Impaired	Known or Suspected	
<b>Occasional Conditions Discourage Use</b> • SWAP determination of <i>very high susceptibility</i> <sup>1</sup> • Monitoring data show exceedence of <i>Stressed</i> criteria* for cryptosporidium, coliform, or • Monitoring data show exceedence of <i>Stressed</i> parameter-specific criteria* for other substances more than 10% ( <i>suspected</i> ) or 25% ( <i>known</i> ) of time.		Stressed	Known or Suspected <sup>1</sup>	
<b>Conditions Support Use, but Threats Noted</b> • SWAP determination of <i>high susceptibility</i> <sup>1</sup> • Monitoring data show exceedence of <i>Threatened</i> parameter-specific criteria* more than 10% ( <i>suspected</i> ) or 25% ( <i>known</i> ) of time.		Threatened	Known or Suspected <sup>1</sup>	
<b>No Known Impairment or Imminent Threat</b> • No drinking water restrictions, and • No additional treatment required, and • No significant contaminants/threats present.		No Known Impact	Assessment Level <i>Monitored or Evaluated</i>	
<b>*Parameter-Specific Criteria</b>	<i>Impaired</i>	<i>Stressed</i>	<i>Threatened</i>	
Cryptosporidium (average)	7.5	3.0	–	oocysts/100 L
Cryptosporidium (individual)	–	7.5	3.0	oocysts/100 L
Coliform, Total (median) <sup>2</sup>	50/2,400	–	–	per 100 ml
Coliform, Fecal (geometric mean)	200	–	–	per 100 ml
Ammonia/Ammonium	20	10	5	mg/l
Nitrate, as N	10	5	2	mg/l
other substances (source water) <sup>3</sup>	Standard	50% of Std.	20% of Std.	
other substances (finished water) <sup>4</sup>	MCL	50% of MCL	20% of MCL.	
<sup>1</sup> Impacts/impairments based on SWAP susceptibility determinations should be listed as <i>Suspected</i> .				
<sup>2</sup> Refers to Class AA and A respectively.				
<sup>3</sup> Refers to substances for which there are NYS water quality standards for protection of <i>Health (Water Source)</i> .				
<sup>4</sup> Refers to substances for which there are Maximum Contaminant Levels (MCL) for finished drinking water.				

The relationship between drinking water supply advisories, monitoring data, SWAP determinations and other information and the level of *Drinking Water Supply* use support is outlined in Table 2.

### Shellfishing Use

Support of *Shellfishing* use is assessed for Class SA marine waters only. These assessments reflect the level of certification of the waters for the taking of shellfish as determined by DEC Division of Fish, Wildlife and Marine Resources and based on NYSDEC regulations (6NYCRR, Part 47, *Certification of Shellfish Lands*) and National Shellfish Sanitation Program requirements. Shellfishing waters that are not certified may be closed year-round, seasonally, or conditionally (after rainfalls events of a specific magnitude). Other restrictions on the use include requirements to transplant the shellfish to certified waters for cleansing prior to harvesting for human consumption. More information regarding the NYSDEC Shellfishing program can be found at <http://www.dec.ny.gov/outdoor/345.html>.

<b>Table 3 Shellfishing Use Assessment Criteria</b>		
<b>Use Assessment Criteria</b>	<b>WI/PWL Use Impact</b>	
	<b>Severity</b>	<b>Documentation</b>
<p><b>Frequent/Persistent Conditions Prevent Use</b></p> <ul style="list-style-type: none"> <li>NYSDEC Division of Fish, Wildlife and Marine Resources (DFWMR) has designated more than 25% of the waterbody area as uncertified year-round for shellfishing based on water quality conditions and contaminants, or</li> <li>DFWMR has designated more than 10% of the area as uncertified year-round AND shellfishing in remaining area is restricted (i.e., only <i>seasonally</i> or <i>conditionally</i> certified) based on water quality conditions..</li> </ul>	Precluded	Known
<p><b>Occasional Conditions Prevent Use</b></p> <ul style="list-style-type: none"> <li>DFWMR has designated 10 to 25% of the waterbody area as uncertified year-round based on water quality conditions, or</li> <li>DFWMR has designated more than 25% of the waterbody area as restricted (i.e., only <i>seasonally</i> or <i>conditionally</i> certified) based on water quality conditions.</li> </ul>	Impaired	Known
<p><b>Occasional Conditions Discourage Use</b></p> <ul style="list-style-type: none"> <li>DFWMR has designated up to 25% of the waterbody area as restricted (i.e., only <i>seasonally</i> or <i>conditionally</i> certified) based on water quality conditions, or</li> <li>DFWMR has designated more than 10% of the waterbody area as uncertified based on administrative guidelines (nearby outfall, marina).</li> </ul>	Stressed	Known
<p><b>Conditions Support Use, but Threats Noted</b></p> <ul style="list-style-type: none"> <li>DFWMR has designated &lt; 10% of the waterbody area as uncertified, or</li> <li>DFWMR has designated the entire waterbody as certified, but significant trib waters are uncertified due to water quality conditions.</li> </ul>	Threatened	Known or Suspected
<p><b>No Known Impairment or Imminent Threat</b></p> <ul style="list-style-type: none"> <li>DFWMR has designated the entire waterbody as certified for the taking of shellfish and all significant trib waters are also certified.</li> </ul>	No Known Impact	Assessment Level: <i>Monitored</i>
<p>* For large estuary segments where 10-25% of the waterbody area represents a significant closure or restriction, a greater severity of use impact may be assigned to the waterbody.</p>		

Shellfishing restrictions may be driven by either water quality or by administrative requirements. Water quality-based closures are the result of actual bacteriological monitoring and subsequent findings that the waters do not support safe consumption of shellfish. Administrative closures are precautionary; they are not necessarily reflective of water quality conditions but are issued for areas where the *potential* for contamination of shellfish exists. Administrative closures are generally issued for areas in close proximity to WWTP discharges and for waters around marinas. Generally closures based on actual water quality monitoring correspond to *Precluded/Impaired* uses, depending on the type of restriction (year-round, seasonal, conditional) and the percent of waterbody area affected. If the area affected by a water quality-based closure is relatively small, the severity of impact may be listed as *Stressed*. Administrative closures – because they are more precautionary in nature – correspond to *Shellfishing* that is *Stressed* or *Threatened*. The relationship between certification and level of *Shellfishing* use support is reflected in Table 3.

Generally, closures based on actual water quality monitoring correspond to *Precluded/Impaired* uses. Administrative closures – because they are more precautionary in nature – correspond to a *Shellfishing* use that is *Stressed* or *Threatened*.

Waters that are designated Class SB or SC are not assessed for *Shellfishing* use support, even if they have been evaluated by the National Shellfish Sanitation Program. However, because shellfishing is arguably the most sensitive of the uses assessed, if any Class SB, SC waters are certified for shellfishing they will be assessed as having *No Known Impairment* to other uses (unless additional/other water quality data indicates an impairment). If these waters are uncertified (due to water quality) then *Public Bathing/Recreation* are considered to be *Stressed*. A more severe level of impact to *Public Bathing/Recreation* requires monitoring data corresponding to those uses.

## Public Bathing and Recreation Uses

Swimming and other recreational activities are important and popular uses for the waters of the state. The assessment of these activities involves two separate use categories: *Public Bathing* and *Recreation*. While the assessment of both *Public Bathing* and *Recreation* uses rely on similar water quality indicators, these two distinct uses are evaluated separately.

Evaluation of *Public Bathing* use is limited to those waters classified by New York State for primary contact recreation (i.e., Class B, SB, A, AA, A/AA-Special and SA). This classification applies to waters specifically designated as suitable for public beaches and bathing areas, which see an increased level of swimming use and are more regularly monitored by public health agencies.

As a practical matter, not all waters of the state are regularly monitored to assess swimming use support to the degree that designated public bathing areas are. Therefore, general precautions should be taken regarding recreation in these other waters.

State and local/county health departments conduct regular bacteriological sampling programs and perform sanitary surveys at designated public bathing areas. Based on the findings of these surveys, bathing use may be restricted either permanently or periodically. Localized closings may also occur due to contamination by spills, waterfowl, or runoff from wet-weather events. It should be noted although Class C, D and SC waters also include primary contact recreation as a specified designated use, because of their natural physical characteristics, these waters are generally not suitable as public beaches and bathing areas.

Evaluation of the *Public Bathing* use focuses primarily on public health concerns, particularly bacteriological contamination and water clarity. Consequently the Public Bathing Use Assessment Criteria are linked primarily to these parameters as well as beach closures.

The relationship between bathing restrictions, water quality monitoring and other indicators (including the closely-related *Recreation* use assessment) and the level of *Public Bathing* use support is reflected in 4.

**Table 4 Public Bathing Use Assessment Criteria**

Use Assessment Criteria	WI/PWL Use Impact	
	Severity	Documentation
<b>Frequent/Persistent Conditions Prevent Use</b> • NYS/local Health Department has closed the waterbody to swimming for the entire season, based on water quality (bacteriological ) monitoring data.	Precluded	Known
<b>Periodic/Occasional Conditions Prevent Use</b> • NYS/local Health Department has issued temporary closures of the waterbody to swimming, based on water quality (bacteriological) monitoring data, or • Sufficient stream flow/water level necessary to support swimming uses are artificially restricted.	Impaired	Known
<b>Frequent/Persistent Conditions Discourage Use</b> • Swimming use requires additional measures (e.g., aquatic weed harvesting/control). • Monitoring data show exceedence of <i>Impaired</i> criteria* (bacteriological, clarity) more than 10% ( <i>suspected</i> ) or 25% ( <i>known</i> ) of time.	Impaired	Known or Suspected
<b>Occasional (Other) Conditions Discourage Use</b> • <i>Recreation</i> uses are assessed as <i>Impaired/Precluded</i> <sup>1</sup> , or • Monitoring data show exceedence of <i>Stressed</i> criteria* (clarity) more than 10% ( <i>suspected</i> ) or 25% ( <i>known</i> ) of time.	Stressed	Known or Suspected <sup>1</sup>
<b>Conditions Support Use, but Threats Noted</b> • Monitoring data show exceedence of <i>Threatened</i> criteria* (clarity, phosphorus) more than 10% ( <i>suspected</i> ) or 25% ( <i>known</i> ) of time.	Threatened	Known or Suspected
<b>No Known Impairment or Imminent Threat</b> • NYS/local Health Department has not restricted swimming, and • Swimming use does not require any additional measures, and • Monitoring data does not exceed criteria* (>10% of time), and • <i>Recreation</i> uses are not <i>Impaired/Precluded</i> .	No Known Impact	Assessment Level: <i>Monitored</i>

* Monitoring Data Criteria	<i>Impaired</i>	<i>Stressed</i>	<i>Threatened</i>
Coliform, Total (geometric mean)	2,400	–	– per 100 ml
Coliform, Fecal (geometric mean)	200	–	– per 100 ml
Enterococci (geometric mean)	See below <sup>2</sup>		
Clarity (Secchi Disc)	1.2	1.5	2.0 meters
Total Phosphorus <sup>3,4</sup>	–	–	20 µg/l

<sup>1</sup> *Public Bathing* assessments based on *Recreation* use support should be listed as *suspected*.

<sup>2</sup> For marine waters (excluding tributaries), the enterococci criteria is 35/100 ml. For Great Lakes waters (excluding tributaries), the enterococci criteria is 126/100 ml.

<sup>3</sup> Application of the Total Phosphorus criteria is limited to lakes and ponded waters.

<sup>4</sup> Based on current New York State criteria indicative of elevated nuisance conditions and slight impacts to recreation; other state/national nutrient criteria currently being developed will be incorporated into the Assessment Methodology once adopted.

**Table 5 Recreation Use Assessment Criteria**

Use Assessment Criteria	WI/PWL Use Impact	
	Severity	Documentation
<b>Frequent/Persistent Conditions Prevent Use</b> • NYS/local Health Department has closed the waterbody to swimming, boating or other recreational use for the entire season, due to water quality concerns.	Precluded	Known
<b>Periodic/Occasional Conditions Prevent Use</b> • NYS/local Health Department has issued temporary closures of the waterbody or portions of the waterbody to swimming, boating or other recreational use due to water quality concerns, or • Sufficient stream flow/water level necessary to support recreational uses are artificially restricted.	Impaired	Known
<b>Frequent/Persistent Conditions Discourage Use</b> • Recreational uses of water require additional measures (e.g., weed harvesting/control), or • <i>Public Bathing</i> uses are assessed as <i>Impaired/Precluded</i> , or • Monitoring data show exceedence of <i>Impaired</i> criteria* more than 10% ( <i>suspected</i> ) or 25% ( <i>known</i> ) of time, or • Observational criteria* indicating restricted recreational uses are noted more than 50% of the time.	Impaired	Known or Suspected <sup>4</sup>
<b>Occasional (Other) Conditions Discourage Use</b> • <i>Public Bathing</i> uses are assessed as <i>Stressed</i> , or • Monitoring data shows exceedence of <i>Stressed</i> criteria* more than 10% ( <i>suspected</i> ) or 25% ( <i>known</i> ) of time, or • Observational criteria** indicating restricted recreational uses are noted more than 25% of the time.	Stressed	Known or Suspected <sup>4</sup>
<b>Conditions Support Use, but Threats Noted</b> • Monitoring data shows exceedence of <i>Threatened</i> criteria* more than 10% ( <i>suspected</i> ) or 25% ( <i>known</i> ) of time. • Observational criteria** indicating restricted recreational uses are noted more than 10% of the time.	Threatened	Known or Suspected <sup>4</sup>
<b>No Known Impairment or Imminent Threat</b> • <i>Public Bathing</i> uses are not <i>Stressed, Impaired, Precluded</i> , and • Recreation uses not restricted, nor require additional measures, and • Monitoring data does not exceed criteria* (>10% of time), and • Observational criteria** for restricted use not noted (>10% of time).	No Known Impact	Assessment Level: <i>Monitored</i>

* Monitoring Data Criteria	<i>Impaired</i>	<i>Stressed</i>	<i>Threatened</i>		
Total Phosphorus <sup>1,2</sup>	—	20	—	µg/l	
Chlorophyl a <sup>1</sup>	15	12	8	µg/l	
Clarity (Secchi Disc) <sup>1</sup>	1.2	1.5		2.0	meters

**\*\* Observational Data Criteria <sup>3, 4</sup>**

Swimming/recreation slightly (or more) restricted by specifically identified causes (algae, clarity, etc).

<sup>1</sup> Application of the Total Phosphorus criteria is limited to lakes and ponded waters.

<sup>2</sup> State/national nutrient criteria to be developed and incorporated into the Assessment Methodology.

<sup>3</sup> *Observational Criteria* refers to responses on **CSLAP Field Observation Forms**. Specifically, *Condition of Lake* notes presence of algae, *Suitability for Recreation* notes some impacts/impairment, and *Opinion of Recreational Use* notes weeds and/or clarity problems.

<sup>4</sup> Impacts/impairments based on observational criteria should be listed as *suspected*.

The category of *Recreation* tracks impacts and impairments to a more expansive list of recreational activities, such as fishing, boating, water skiing, rafting, wading and other primary/secondary contact activities, including swimming. The requirement of all waters to support *Recreation* uses addresses the federal Clean Water Act goal that all waters be *swimmable*.<sup>6</sup> However, while all waters of the state are to be swimmable, as a practical matter not all waters of the state are regularly monitored to assess swimming use support to the same degree that designated public bathing areas are. As a result of differing criteria and the varying levels of monitoring, *Public Bathing* (Class B, SB, A, AA, A/AA-Special and SA) waters are evaluated more rigorously than other *Recreation* use waters.

Whereas the *Public Bathing* use assessment has a greater focus on public health concerns, *Recreation* uses are assessed more broadly. The evaluation of *Recreation* use support places emphasis on excessive weed growth, silty/muddy lake bottoms, color, odors and other conditions that discourage recreational activity. In those cases where certain Class C, D, and SC waters have been assessed for bacteria, these results will be incorporated into the overall assessment of the *Recreation* use for these waters.

Excessive nutrient levels – which may increase turbidity, lower dissolved oxygen, and promote aquatic plant and algal growth – may also discourage the use of lakes, ponds and reservoirs for recreation activities. Recognizing this, NYSDEC derived a total phosphorus criterion of 20 µg/l for the protection of recreational uses in lakes. However the criterion is based on lake user surveys and was developed to be indicative of *elevated nuisance conditions and slight impacts to recreation*. Such impacts are more closely aligned with Stressed/Threatened uses than with Impaired uses. Because of its basis, the criterion is more appropriate in assessing more general *Recreation* use support than *Public Bathing* use. However, since conditions resulting from elevated nutrients and weed/algal growth also may threaten swimming, this indicator is included in the *Public Bathing* use assessment as indicating *Threatened* uses.

The relationship between water quality monitoring and other indicators and the severity and documentation of an impact to *Recreation* use is reflected in Table 5. For various nutrient parameters, Table 5 refers to “*state/national criteria to be developed and incorporated into the Assessment Methodology*.” This flexibility of language reflects a need to accommodate the ongoing efforts by NYSDEC (and USEPA) to develop and implement nutrient criteria, including the use of different ecoregion-specific criteria for various regions of the state. Once these criteria are established, the Assessment Methodology will be revised to reflect them. Until then the surrogate indicators outlined in Table 5 will be used to assess recreational use support.

## **Fish Consumption Use**

The assessment of *Fish Consumption* use is based on NYSDOH advisories regarding the catching and eating of sportfish, and contaminant monitoring in fish tissue, other biological tissue and surficial bottom sediments. The advisories reflect federal government standards for chemicals in food that is sold commercially, including fish. The NYSDEC Division of Fish Wildlife and Marine Resources routinely monitors contaminant levels in fish and game. Based on this monitoring data, NYSDOH issues advisories for specific waterbodies and species when contaminant levels in sportfish exceed the federal standards.

These advisories are updated and published annually. In addition to the waterbody-specific advisories, a general advisory recommends eating no more than one meal (one-half pound) per week of fish taken from New York

---

<sup>6</sup> In order to meet the federal Clean Water Act goal that all waters be “swimmable,” water quality of New York State waters Class C, SC (and above) “shall be suitable for primary and secondary contact recreation.” However, other factors (such as flow/depth, access, conflicting use) may limit this use. (See NYS Classifications for Surface Waters, Part 701.1 thru 701.14.)

State freshwaters and some marine water at the mouth of the Hudson River. These general advisories are to protect against eating large amounts of fish that have not been tested or that may contain unidentified contaminants. Because the general statewide and marine waters advisories are precautionary and not based on any actual contaminant monitoring data, it does not represent any documented impairment of *Fish Consumption* use. Consequently, the general statewide advisories are not reflected in the assessment of *Fish Consumption* use. Current statewide advisories regarding snapping turtles and wild waterfowl are not reflected in the methodology for similar reasons.

Other general advisories recommend limiting the consumption of striped bass, bluefish and eels taken from marine waters due to specific habits or characteristics that make these species more likely to accumulate contaminants (particularly PCBs). Because these marine water advisories (outside of New York Harbor and Western Long Island Sound) are also more precautionary in nature and no more significant than the statewide advisory for freshwaters, they correspond to *Stressed* rather than *Impaired* use.

The relationship between the waterbody-specific fish consumption advisories and the severity and documentation of an impact/impairment to *Fish Consumption* use is reflected in Table 6.

<b>Table 6 Fish Consumption Use Assessment Criteria</b>		
<b>Use Assessment Criteria</b>	<b>WI/PWL Use Impact</b>	
	<b>Severity</b>	<b>Documentation</b>
<b>Frequent/Persistent Conditions Prevent Use</b> <ul style="list-style-type: none"> <li>• NYSDOH advisory recommends eating no fish (or none of sub-species) from a specific waterbody.</li> </ul>	Precluded	Known
<b>Periodic/Occasional Conditions Prevent Use</b> <ul style="list-style-type: none"> <li>• NYSDOH advisory recommends limiting consumption of fish (no more than one meal per month) from a specific waterbody.</li> </ul>	Impaired	Known
<b>Occasional (Other) Conditions Discourage Use</b> <ul style="list-style-type: none"> <li>• Monitoring of fish tissue shows contaminant levels that exceed levels of concern, but NYSDOH advisory has not been issued.</li> <li>• NYSDOH general advisory recommends limiting consumption of fish (no more than one meal per week) from certain marine waters.</li> <li>• Monitoring of macroinvertebrate tissue or surficial bottom sediment shows contaminant levels that exceed levels of concern.</li> </ul>	Stressed	Known or Suspected
<b>Conditions Support Use, Threats Noted</b> <ul style="list-style-type: none"> <li>• Monitoring of fish (known) or macroinvertebrate tissue/bottom sediment (suspected) shows contaminant levels present but not exceeding levels of concern.</li> </ul>	Threatened	Known or Suspected
<b>No Known Impairment or Imminent Threat</b> <ul style="list-style-type: none"> <li>• No fish consumption advisory beyond the NYSDOH <i>General Advisory for Eating Gamefish</i>, and</li> <li>• Monitoring data revealing no contaminants in fish, macroinvertebrate tissue or surficial bottom sediment above background levels.</li> </ul>	No Known Impact	Assessment Level: <i>Monitored</i>

## Aquatic Life Use Support

A primary focus of the Statewide Waters Monitoring Program (SWMP) involves determining the degree to which waters support aquatic life. There are a number of reasons for this emphasis:

- *Aquatic Life* use support must be maintained in all waters, regardless of classification, and
- *Aquatic Life* use support is one of the most sensitive of national use support categories, and
- *Aquatic Life* use support can be assessed easily and economically using biological sampling techniques.

The evaluation of *Aquatic Life* use support represents a recent change to the WI/PWL. Prior to 1999, the WI/PWL tracked waterbody support of *Fish Propagation* and *Fish Survival* rather than *Aquatic Life* use support. This was a reflection of the designated uses outlined in New York State standards. However, the change to the broader category of *Aquatic Life* use support better represents the results of the macroinvertebrate sampling used to assess water quality. The change from *Fish Propagation/Survival* to *Aquatic Life* use support also provides greater flexibility in reporting water quality and allows tracking of aquatic impacts that are not sufficiently severe as to be apparent in the fishery. The revised category also corresponds more closely to the USEPA national use support category.

Different types of monitoring data may be used to determine *Aquatic Life* use support use. The SWMP relies on biological sampling. The assemblage most frequently used is macroinvertebrates, however the program has recently incorporated some periphyton and, to a lesser degree, fish community assessments. The relationship between biological (macroinvertebrate) assessment, as described in the *Quality Assurance Work Plan for Biological Stream Monitoring in New York State* (Bode, et.al., 2002) and the impact/impairment to *Aquatic Life* use support is shown in Table 7.

<b>Table 7 Aquatic Life Use Support Assessment Criteria</b>			
<b>Biological (Macroinvertebrate) Assessment</b>		<b>WI/PWL Use Impact</b>	
		<b>Severity</b>	<b>Documentation</b>
<i>Severely Impacted</i> (Very Poor)		Precluded	Known
<i>Moderately Impacted</i> (Poor)		Impaired	Known
<i>Slightly Impacted*</i> (Good)	Other indications of impact present	Stressed	Suspected or Known
	No other indications of impact	No Known Impact	Assessment Level: <i>Evaluated</i>
<i>Non-Impacted</i> (Very Good)		No Known Impact	Assessment Level: <i>Monitored</i>

\* *Slightly Impacted* represents a broad category ranging from generally good water quality to conditions causing minor impacts, but still providing adequate support of aquatic life.

### Independent Applicability and Weight of Evidence

A comprehensive evaluation of *Aquatic Life* use support must consider all available biological, physical/chemical and toxicity monitoring data. Biological assessment of the macroinvertebrate community is a good integrator of these monitoring components. Consequently, when biological macroinvertebrate community assessment data is available and considered definitive, *Aquatic Life* use support is generally determined as outlined in Table 7. For instances in which assessment of the macroinvertebrate community is inconclusive and/or other indicators suggest different levels of use support, aquatic life use support determination is made by further consideration of all available monitoring data and comparison of monitoring data results against the applicable water quality standards and criteria for the protection of aquatic life.

To address the possibility of conflicting results, USEPA developed a policy of *Independent Applicability*. This policy states that where there are conflicting and equally valid data sets no one type of assessment (biological, physical/chemical, toxicity) can be used to override a finding of water quality impact/impairment that is based on another type of assessment. However, while no one assessment type routinely takes precedence over others, the evaluation of conflicting assessments must take into account levels of documentation, quality and overall confidence in the data, other artifacts of monitoring data (e.g., analytic methods, sampling techniques, etc.), how representative the sampling is of conditions in the larger waterbody segment and the relationship of the indicator to the actual use being assessed. These considerations (or *weight of evidence*) may, in fact, lead to favoring one assessment over others in arriving at an assessment for a specific waterbody. Because biological sampling is a good integrator of water quality conditions and it is a direct measurement of aquatic life use support, it is often the deciding factor in assessment decisions for this use.

### **Assessment of Naturally Occurring Low Dissolved Oxygen Waters**

NYS water quality standards for dissolved oxygen for the protection of aquatic life specify that dissolved oxygen in waters should not be less than the standard “at any time.” In some instances this “never less than” condition is qualified to except waters where low dissolved oxygen is the result of natural conditions (Class AA-Special, AA, A, B and C trout spawning waters); for other waters, the natural conditions exception is not explicit. However, whether explicitly stated or not, assessments of use support based on dissolved oxygen should recognize that low dissolved oxygen at lower depths of non-flowing waters (i.e., lakes and impoundments) or in areas of poor aeration, circulation or natural organic loadings are likely to occur.

A review of the assessment methodologies of other northeastern states finds that most recognize and allow for natural conditions of low dissolved oxygen that do not result in designation of the water as not supporting uses.<sup>7</sup> These states allow for the application of “best professional judgment” in determining whether low dissolved oxygen values are naturally occurring, whether they are representative of the waterbody as a whole, and how they should be considered in light of biological sampling results and other available information. In fact, USEPA in earlier *Guidelines for the Preparation of the Comprehensive State Water Quality Assessments (305(b) Reports) and Electronic Updates* (USEPA, 1997) includes low dissolved oxygen (and low pH) caused by poor aeration or natural organic materials among its examples of what might be considered naturally occurring conditions.

Water quality assessment for the determination of *Aquatic Life* use support applies an approach to the evaluation of dissolved oxygen results that recognizes that morphology and other natural conditions may contribute to the occurrence of low dissolved oxygen in some waters. Specifically, data will be evaluated on a case-by-case basis to determine whether impacts result in impairments to aquatic life and/or other uses, and the degree to which natural conditions contribute to the impacts. This evaluation will be made using best professional judgement, with attention to other available physical/chemical indicators and particular emphasis on biological assessments which are a more direct measurement of aquatic life use support. As the triennial water quality standards rule-making effort moves forward, NYSDEC will evaluate the current dissolved oxygen standards for freshwater in light of available research and adopt a criterion that might better reflect the natural occurrence of low dissolved oxygen in deeper waters and its impact on use support. (See also *Impacts Due to Natural Conditions/Conflicting Uses* in the Listing Methodology.) A general relationship between dissolved oxygen data, water chemistry and aquatic biology and assessed impacts to aquatic life use support is shown in Table 8.

---

<sup>7</sup> Both Vermont and Pennsylvania allow for seasonal and periodic variations in hypolimnetic dissolved oxygen (perhaps as low as 0 mg/l) if biological sampling reveals a healthy aquatic (macroinvertebrate, fish) community. Rhode Island also recognizes that D.O. measurements should not exceed the criteria “except as naturally occurs.” And New Hampshire states that “exceedances of most water quality criteria due to naturally occurring conditions are not considered violations of water quality standards.”

**Impacts from Low/High pH on Aquatic life Use Support**

One important chemical indicator for evaluating *Aquatic Life* use support is pH. Specific criteria regarding the use of pH data to determine *Aquatic Life* use support is applied to waterbodies, particularly lakes and ponds, that are subject to atmospheric deposition/acid rain. Because of the extent and significance of this issue, extensive chemical sampling efforts to monitor the pH of streams, lakes and ponds in the state have long been in place. The *Aquatic Life* use support/pH criteria takes advantage of the considerable amount of study and available chemical (pH) data. These efforts provide strong evidence that pH levels that fall somewhat outside the 6.5 to 8.5 range specified in NYS water quality standards are still supportive of aquatic life. As is the case with low dissolved oxygen (cited above), other states as well as USEPA have recognized the occurrence of natural conditions that may result in low pH levels.

<b>Table 8 Aquatic Life Use Support/D.O. Assessment Criteria</b>		
<b>Lake/River Conditions (Dissolved Oxygen, Water Chemistry, Aquatic Biology)</b>	<b>WI/PWL Use Impact</b>	
	<b>Severity</b>	<b>Documentation</b>
Dissolved Oxygen not meeting standards is consistent over depth, season and/or area.	Impaired	Known
Dissolved Oxygen not meeting standards periodically and/or not consistent over depth, season and/or area, and other indicators (water chemistry, aquatic biology) suggest impairment.	Impaired	Known
Dissolved Oxygen not meeting standards periodically and/or not consistent over depth, season and/or area, and no other indicators or use support/impairment are available.	Stressed *	Possible *
Dissolved Oxygen not meeting standards periodically and/or not consistent over depth, season and/or area, and other indicators more representative of conditions suggest no impairment. Possible natural condition	Stressed or No Known Impact	Known Suspected, or Possible
Dissolved Oxygen typically meets standards (> 90%), and other indicators (chemistry, aquatic biology) suggest no impairment.	No Known Impact	Known, or Suspected
Dissolved Oxygen not meeting standards, but limited data (single sampling event or single point not representing whole waterbody)	Stressed *	Possible *
Dissolved Oxygen standards are consistently met.	No Known Impact	Assessment: <i>Monitored</i>

\* Waters assessed as Stressed/Possible are listed as *Waters Needing Verification of Impact* and reported as *Integrated Reporting Category 3 - Waters with Insufficient Data*.

Water quality assessment for the determination of *Aquatic Life* use support with regard to pH results also relies on best professional judgment. As with dissolved oxygen data, pH data will be evaluated in light of all other available data (including biological assessments) on a case-by-case basis using best professional judgment. (See also *Natural Conditions* in the Listing Methodology.)

The general relationship between pH monitoring data and the assessed impacts to aquatic life is shown in Table 9. Note that waters having pH between 6.0 and the minimum pH water quality standard of 6.5, but where biological sampling suggests that aquatic life is supported, may be listed as *Waters Needing Verification of Impact*. This is consistent with the *weight of evidence* approach (outlined above) and recognizes that because biological samples represent an integrator of all water quality conditions and are also a direct measurement of aquatic life, biological assessments are often given more weight in evaluating *Aquatic Life* use support.

<b>Table 9 Aquatic Life Use Support/pH Assessment Criteria</b>		
<b>Lake pH/Fishery Assessment</b>	<b>WI/PWL Use Impact</b>	
	<b>Severity</b>	<b>Documentation</b>
pH values less than 5.0 or greater than 10.0	Precluded	Known
pH values between 5.0 and 6.0 or between 9.0 and 10.0	Impaired	Known
pH values between 6.0 and 6.5 or between 8.5 and 9.0, and fish/biological surveys indicate a fishery/aquatic life impact.	Impaired	Known or Suspected
pH values between 6.0 and 6.5 or between 8.5 and 9.0, but fish/biological surveys indicate no fishery/aquatic life impact	Stressed	Known Suspected, or Possible *
pH values greater than 6.5 and less than 8.5	No Known Impact	Assessment: <i>Evaluated</i>

\* Waters that have pH above 6.0 and below 6.5 and where biological sampling suggests that aquatic life is supported may be listed as *Waters Needing Verification of Impact*.

**Note about *Episodic Acidification***  
 Episodic Acidification refers to short-term decreases in acid neutralizing capacity (ANC) that may occur during high streamflow events (i.e., spring runoff, snowmelt). Although these events are periodic, bioassays and other fish studies show that the impact on the fishery can be significant and longer lasting. The severity of the impact may result in precluded—rather than merely *impaired*—aquatic life, even though episodic acidification occurs over a short time period. This situation represents an exception to the strict application of the Priority Waterbodies List (PWL) definitions for a precluded use (frequent/persistent water quality condition) and an impaired use (occasional water quality conditions).

**Site Specific Factors**

The USEPA policy also recognizes the difficulty and time involved in resolving conflicting results that might be due to site-specific environmental factors. In these cases, site-specific criteria, use attainability analysis or re-evaluation of a standard may be needed to determine use support. Because these efforts may require additional monitoring, USEPA suggests use of an assessment category of *Monitoring Insufficient to Determine Impairment*. This category corresponds to the WI/PWL category of *Segments Needing Verification of Impact/Impairment*, and allows for the deferring of a use support decision until appropriate evaluation is complete.

**Natural Resources Habitat/Hydrologic Uses**

In an effort to better incorporate wetlands and other natural resources concerns into the water quality assessments, the water use category of *Natural Resources Habitat/Hydrology* uses was recently added to the list of uses to be assessed. This category recognizes that, in some waterbodies, water quality may be appropriate to support uses, but various other conditions, such as habitat, streamflow, invasive species, and so on, result in degradation of natural resources (i.e., fish and wildlife populations). Additionally, hydrologic conditions can have a negative impact on wetland uses such as flood protection, erosion control, nutrient recycling and surface and groundwater recharge. This category may also be used to capture impacts to various water quantity and flooding/flood plain issues including excessively low flows, increased peak flows, alterations to the frequency, duration and timing of floods and loss of flood storage.

For many impacts to *Natural Resources Habitat/Hydrology* use support, the situation is more clearly defined by the cause or source of the problem, than by the use affected. Such causes/sources include dredging, draining, excavation and/or filling of wetlands, stream channels, lakes/ponds; stream widening; stream downcutting; sediment embedded-ness; other losses of wetlands; habitat fragmentation; loss of riparian vegetation or upland buffer zones. Generally, *Natural Resources Habitat/Hydrology* use impacts and impairments are more likely attributed to “*pollution*” (i.e., a condition related to the waterbody) rather than a “*pollutant*” (i.e., a substance/contaminant in the waterbody).

While waterbody assessments include impacts to *Natural Resources Habitat/Hydrology*, specific criteria for *Natural Resources Habitat/Hydrology* use support have not yet been developed.

## **Aesthetics**

An evaluation of waterbody support of *Aesthetics* is much more subjective than those for the other assessed uses. Because of this subjectivity and the difficulty in assigning a level of severity of impacts to aesthetics, available choices for the assessment of aesthetics are limited to *No Known Impact* and *Stressed*. Due to the subjectivity and the limitations on the level of severity, there is no specific assessment criteria to determine support of aesthetics. Instead, the assessment of *Aesthetics* use support should reflect available objective information (CSLAP Lake Perception Surveys, preponderance of citizen complaints, etc).

## **Presumed Assessments**

While the great majority of waters in New York State are thought to support a variety of uses, because of limited monitoring resources and the emphasis on monitoring in priority/problem waters documentation of good quality waters has been generally lacking. This shortcoming was addressed in previous 305(b) assessments by assuming that waterbodies were fully supporting uses, unless there was information to the contrary. However, USEPA has determined such “presumed” assessments to be unacceptable. NYSDEC also recognizes the need to increase efforts to document water quality in the great number of waterbodies that do support uses in order to provide a more balanced picture of water quality in the state.

Recent modifications to the NYSDEC Division of Water Statewide Waters Monitoring Program (SWMP) include an expanded biological screening component. This effort uses a fairly simple but effective set of on-site assessment criteria based on the presence/absence of key macroinvertebrate indicator species. Where the assessment criteria are met, the waterbody is assessed as having *No Known Impacts*. Where the criteria are not met, possible water quality problems are evaluated using more intensive sampling methods to collect more complete data.

A similar effort is being developed and implemented to evaluate all currently unassessed lakes in the state. This effort relies on basic water chemistry sampling in conjunction with visual assessments of aesthetics and recreational use support.

These screening efforts, which greatly increase the number of sites assessed in a basin study area, reflect the incorporation of a “census” approach into the SWMP and are key components in the state’s goal of providing a comprehensive assessment of its waters.

## **Pollutants (Causes) and Sources of Water Quality Impacts**

In addition to providing assessments of designated use support, the WI/PWL assessments also includes information regarding the likely pollutants/causes and sources that are responsible for water use impacts. These pollutant and source identifications are derived from a number of information sources including Impact Source Determinations conducted during biological sampling, water chemistry data collected during Intensive Network Monitoring, or other available monitoring data. In many cases, monitoring focused on the specific pollutants and sources is not available. In the absence of any such data, best professional judgment based on surrounding land use may be used to identify possible causes and sources.

The listing of specific pollutants and sources includes an indication of the degree to which they are thought to contribute to water quality problems. The impact of all listed pollutants and sources are characterized as being *Known, Suspected, or Possible*. Since it is common for multiple pollutants and sources to be indicated as contributing to a water quality impact, each identified pollutant and source is also listed as either a *major* or *minor* contributor to the impact, based on best professional judgment. Note that the designation *major* is assigned to pollutants and sources that significantly contribute to the most severe water quality impacts/impairments affecting the segment; pollutants and sources contributing to lesser impacts are listed as *minor*.

National (USEPA) reporting guidance suggests that state databases specify which uses are affected by which pollutants, and which sources contribute each pollutant. However the New York Statewide Water Monitoring Program does not routinely focus on pollutant identification and source trackdown to a degree that this level of precision is known for most waters. Pollution identification and source trackdown is typically a more resource-intensive effort reserved for special situations. In its national reporting to USEPA, New York State provides data that links sources to pollutants and pollutants to use impacts. But these linkages are usually broadly interpreted and typically reflect that most sources contribute varying degrees of each pollutant and each pollutant has some influence on all impacted uses.

### **Resolution/Management Information**

The WI/PWL database also allows for the tracking of information relating to management and status regarding the resolution of water quality impacts for each waterbody. This information includes:

- Resolvability indicates where a waterbody needs additional study, the development of a strategy, implementation of a strategy, or verification of the effectiveness of an implemented strategy. In some cases a water quality impact may be deemed *Not Resolvable* at this time due to technical and/or economic limitations or if the impact is the result of natural conditions or conflicting uses.
- Status of Verification refers to the specific aspect of the waterbody that needs further study. The verification effort may need to focus on the existence of an impact, the pollutant/cause of a known impact, the source of a known pollutant, or the development of a management strategy to address the problem.
- Lead Agency/Office indicates the specific government agency, office or other group that has primary responsibility for managing/addressing the impact to the waterbody.
- Resolution Potential is used to reflect the degree to which the expenditure of available NYSDEC resources on the waterbody or water quality issue is appropriate. Resolution Potential reflects the level of public interest, the expectation that measurable improvements can be reasonably achieved, and the appropriate role for NYSDEC.
- TMDL Note indicates the status of planned and/or ongoing Total Maximum Daily Load activities, if any.

Such information allows NYSDEC to better prioritize monitoring, restoration and protection activities, target the expenditure of limited resources to those waters where there is greatest public interest and/or the expectation that measurable improvements can be achieved, and track progress toward water quality improvement and problem resolution.

## Waterbody Inventory Data Sheet Background Information

### Waterbody Location Information

Water Index Number (WIN): The stream identification number used in the Stream Classification Regulations (Title 6 - Conservation, Vols. B-F of the Official Compilation of Codes, Rules and Regulations for the State of New York).

Hydrologic (Watershed) Unit Code: Eleven digit code found on USDA-SCS (NRCS) *Hydrologic Watershed Unit Map - 1980 State of New York*.

Waterbody Type: River, Canal, Lake, Lake(Reservoir), Bay, Great Lake Shoreline, Estuary, or Ocean Coastline.  
NOTE: Bays refer to freshwater bays, saltwater bays and tidal waters should be designated as *Estuary*.

Affected Length/Area: The estimated length of segment with the noted impairment in miles (rivers, canals), Shore/coastal miles (great lakes, ocean) or acres (lakes, bays, reservoirs, estuaries).

Describe Waterbody Segment: Narrative description locating the beginning and endpoint (from downstream to upstream) of the segment.

Waterbody Classification: Current classification of the waterbody as specified in the Stream Classification Regulations (Title 6 - Conservation, Vols. B-F of the Official Compilation of Codes, Rules and Regulations for the State of New York).

Flow Category: Minimum Average Seven Consecutive Day Flow-10 year recurrence (MA7CD/10) flow range, from table.

<u>Category</u>	<u>MA7CD/10 Range</u>
H (for high)	Streams/Rivers over 150 cfs
M (for medium)	Stream/Rivers between 20-150 cfs
L (for Low)	Streams/Rivers under 20 cfs
0	Not Applicable (lake, estuary, shore/coastline, etc.)

Drainage Basin and Sub-Basin: One of 17 major hydrologic basins in New York and the associated sub-basin.

Region: NYSDEC Region in which the waterbody is located.

County: Primary county (and county ID number) of waterbody location. NOTE: Waterbody segments which form the border between or cross two or more counties are listed only once. This is done to avoid double counting the number of segments and/or the length/affected area of the segment. PWL segments that are located in more than one county are indicated by “...” after the *primary* county name. (Listings of PWL segments within each county are included as Appendix C.)

Quad Map: The name of the primary topographic quadrangle map on which the segment appears. NOTE: PWL segments that are located in more than one quadrangle are indicated by “...” after the *primary* quad map name.

## Water Quality Problem Information

### Use Impacts/Impairments:

All specific uses that are restricted by water quality impacts/impairments are listed.

Problem Severity: For each waterbody use impairment, the degree of severity of water quality problem/diminished use (i.e., use precluded, impaired, stressed, or threatened) is listed. The severity is determined using the following criteria.

#### PRECLUDED (P):

Frequent/persistent water quality, or quantity, conditions and/or associated habitat degradation prevents all aspects of the waterbody use (e.g., the Health Department does not allow swimming at the Onondaga Lake Outlet public park beach - *bathing precluded*; consumption advisory recommends eating no fish from Upper Hudson due to PCB contamination - *fish consumption precluded*; Sacandaga River below the dam is periodically dry and devoid of benthic organisms due to flow extremes from power dam releases - *fish propagation precluded*)

#### IMPAIRED (I):

Occasional water quality, or quantity, conditions and/or habitat characteristics periodically prevent the use of the waterbody (e.g., beaches in marine waters are closed after storm events due to high coliform levels from CSOs's and stormwater runoff - *bathing impaired*) or;

Waterbody uses are not precluded, but some aspects of the use are limited or restricted (e.g., a fish consumption advisory for lake trout from Canandaigua Lake recommends eating no more than one meal per month - *fish consumption impaired*) or;

Waterbody uses are not precluded, but frequent/persistent water quality, or quantity, conditions and/or associated habitat degradation discourage the use of the waterbody (algal blooms and heavy rooted aquatic vegetation deter swimming in Oneida Lake - *bathing/swimming impaired*) or;

Support of the waterbody use requires additional/advanced measures or treatment (e.g., the City of Rochester is to build a filtration plant due to high turbidity in the Hemlock Lake water supply - *water supply impaired*, aquatic vegetation control--mechanical harvesting, herbicides--are required in Upper Cassadaga Lake to allow swimming and boating - *bathing/ swimming and boating impaired*).

#### STRESSED (S):

Waterbody uses are not significantly limited or restricted, but occasional water quality, or quantity, conditions and/or associated habitat degradation periodically discourage the use of the waterbody (e.g., high turbidity that occurs after rains reduce clarity and deter swimmers in Babcock Lake - *bathing/ swimming stressed*, ambient water column analyses indicate occasional aquatic standard violations but impaired use not evident - *fish survival/ propagation stressed*; localized areas of debris along the shore - *aesthetic stressed*)

#### THREATENED (T):

Water quality currently supports waterbody uses and the ecosystem exhibits no obvious signs of stress, however existing or changing land use patterns may result in restricted use or ecosystem disruption (e.g., numerous proposals for residential development in the Schoharie Creek headwaters create a concern - *fish propagation, aesthetics threatened*) or,

Water quality currently supports waterbody uses and the ecosystem exhibits no obvious signs of stress, however monitoring data reveals a declining trend in water quality which, if it continues, would result in a use impairment, or

Waterbody uses are not restricted and no water quality problems exists, but the support of a specific and distinctive use or uses make the waterbody more susceptible to water quality threats. Note: Such situations are the only instances where a threatened use can have a documentation level of *possible*, other threatened waterbodies (i.e., those related to changing land use activities) must correspond to *known* or *suspected* (planned) land use changes.

Problem Documentation: Each diminished/impacted use is listed according to the level of documentation for the problem/impairment. The level of problem documentation is determined using the following criteria.

Known (K): Water quality monitoring data and/or studies (biologic macro-invertebrate surveys, fishery studies, water column chemistry, beach closures, fish consumption advisories, shellfishing restrictions) have been completed and conclude that the use of the waterbody is restricted to the degree indicated by the listed *severity*.

Suspected (S): Anecdotal evidence, public perception and/or specific citizen complaints indicate that the use of the waterbody may be restricted. However, water quality data/studies that establish an impairment have not been completed or there is conflicting information.

Possible (P): Land use or other activities in the watershed are such that the use of the waterbody could be affected. However, there is currently very little, if any, documentation of an actual water quality problem.

Type of Pollutant: Each pollutant contributing to the water quality problem is listed according to the level of documentation for the pollutant. The criteria for *known*, *suspected*, or *possible* pollutants the same as outlined above. Those pollutants that contribute to the most significant impact/impairment are “major” pollutants and are listed in CAPITAL LETTERS.

Source(s) of Pollutant: Each source of pollution contributing to the water quality problem is listed according to the level of documentation for the source. The criteria for *known*, *suspected*, or *possible* pollutants the same as outlined above. Those sources that contribute to the most significant impact/impairment are “major” sources and are listed in CAPITAL LETTERS.

Waterbody Problem Description/Documentation/History/Notes: This narrative description contains more detailed information about the waterbody segment and its water quality problem/impairment. This section may include:

- 1) a detailed description of the waterbody and surrounding area,
- 2) specific examples/instances of water use impairments, e.g., what water supply is affected? how often are beaches closed? what species of fish are restricted for consumption?
- 3) details regarding the specific pollutant and source of the impairment, and
- 4) references for specific reports, studies, monitoring data and/or other documentation that supports the impairment, pollutant and source information.

For some segments, an expected date of completion for a sampling effort, report, facility or other activity that will affect the segment or provide additional segment information may be noted in the **Next Update** field. The **Next Update** information will help ensure the segment information is kept up-to-date.

## Resolution/Management Information

(to be completed by NYSDEC staff)

18. Resolvability: Note with an "X" the one most appropriate *resolvability* class for the segment from the list below.
1. Needs Verification/Study (see Status): The confirmation of a use impairment, the evaluation of possible solutions and/or the development of management action (tailored specifically to the segment) need to be completed. See also *Status of Problem Verification/Study*.)
  2. Strategy Exists, Funding/Resources Needed: Study of the problem is complete, but funding or other resources are needed to implement the management strategy.
  3. Strategy Being Implemented: The recommended strategy for the remediation of the segment is currently underway.
  4. Problem Not Resolvable (technical/economic limitations): Technical, legal, social, political concerns preclude resolution of the impairment for the foreseeable future (e.g., low pH in lakes due to acid rain).
  5. Problem Not Resolvable (natural condition): Limitations to use of a waterbody is attributed to naturally occurring characteristics of the water/watershed (e.g., high sediment load in the Genesee River).
  6. Problem Thought to be Abated, Needs Verification: The prime cause of the use impairment to the waterbody has been brought under control but the expected improvement to the waterbody needs to be confirmed.
  7. Problem Abated, Waterbody Deleted: The waterbody use has been restored and the segment has been marked as *deleted*. Although deleted and not included in the list, the segment and information will remain in the Waterbody Inventory.
19. Status of Problem Verification/Study: Note with an "X" the one most appropriate *status* class for the segment from the list below.
1. Waterbody Nominated, but Problem Not Verified: It has been suggested that a waterbody use impairment exists for the segment, however there is insufficient (or no) available information to confirm that the use is being affected to the degree indicated.
  2. Problem Verified/Documented, Cause Unknown: The waterbody use impairment (and severity) is sufficiently documented, however identification of the cause (pollutant) requires more study.
  3. Cause of Problem Identified, Source Unknown: The specific pollutant(s) causing the use impairment have been sufficiently documented, however the source of the pollutant requires more study.
  4. Source of Problem Identified, Management Strategy Needed: Most details about the problem (use impairment, cause, source) are known/sufficiently documented. A management strategy to address the situation and restore the designated use of the waterbody needs to be developed.
  5. Management Strategy has been Developed: Necessary study of the situation is complete.

20. Lead Agency/Office: Indicate the primary party, either within DEC (division and bureau or office) or outside/external to DEC, responsible for the next steps in the study/strategy implementation concerning the segment. (e.g., DOW/BWAR, DOW/Reg6, DEC/F&W, DOH/PWS, ext/WQCC, ext/SWCD, etc)

21. Resolution Potential: Indicate as *High*, *Medium*, or *Low*, using the following criteria.

High: The waterbody or water quality issue has been deemed to be worthy of the expenditure of available resources (time and dollar) because of the level of public interest and the expectation that the commitment of these resources will result in either a measurable improvement in the situation or additional information necessary for the management of the water resource.

Medium: The resources necessary to address the problem are beyond what are *currently* available. With additional resources, these segments could become *High resolution potential* segments.

Low: Segments with water quality problems so persistent/intractable that improvements are expected to require an unrealistically high commitment of resources, not likely to become available (e.g., acid rain lakes).

NOTE: This field may be left blank if further verification/study of the impairment, pollutant and/or source is necessary to determine the *Resolution Potential* of the segment.

22. Total Maximum Daily Load (TMDL)/303d Status: Note with an “X” the most appropriate *TMDL* note (or notes) for the segment from the list below.

Impaired Water, TMDL Development Needed

Part 1 - High Priority for TMDL

Part 2 - Multiple Segment/Categorical TMDL Waters

- o Acid Rain Waters
- o Fish Consumption Waters
- o Restricted Shellfishing Waters

Part 3 - Water Requiring Re-Evaluation

Impaired Water, TMDL Development NOT Needed

Part 4a - TMDL Complete, being Implemented

Part 4b - *Pollution* Impairment, Not *Pollutants*

Part 4c - Other Controls More Suitable.

This page intentionally left blank.

## Waterbody Inventory Data Sheets By County, Segment Name

Waterbody/Segment (ID)	Water Index Number	Category
<b>Clinton County</b>		
Ausable River, Lower, and minor tribs (1004-0015)	C- 25	NoKnownImpct
Ausable River, Upper, and minor tribs (1004-0020)	C- 25	NoKnownImpct
Behan Brook, Upper, and tribs (1003-0116)	C- 15-12-3	NoKnownImpct
Black Brook Pond (1004-0059)	C- 25-26- 4-P221	UnAssessed
Chazy Lake (1002-0009)	C- 3 (portion 6)/P20	NoKnownImpct
Cold Brook and tribs (1003-0056)	C- 15-22- 3	UnAssessed
Corbeau Creek and tribs (1002-0012)	C- 3- 2	MinorImpacts
Cranberry Pond (1003-0110)	C- 15-35-P 75	NoKnownImpct
Cumberland Bay (1001-0001)	C (portion 2a)	Impaired Seg
Davis Lake (1004-0048)	C- 21-P210c	UnAssessed
Dead Creek and minor tribs (1001-0019)	C- 14	UnAssessed
Fern Lake (1004-0060)	C- 25-26- 4-P222	UnAssessed
Graves Brook and tribs (1002-0016)	C- 3-25- 5	NoKnownImpct
Great Chazy River, Lower, Main Stem (1002-0010)	C- 3 (portion 1)	Need Verific
Great Chazy River, Lower, Main Stem (1002-0001)	C- 3 (portion 2)	Impaired Seg
Great Chazy River, Middle, and tribs (1002-0017)	C- 3 (portion 3)	NoKnownImpct
Great Chazy River, Upper, and tribs (1002-0018)	C- 3 (portion 5)	UnAssessed
Lake Alice (1002-0022)	C- 4- 4-P22	UnAssessed
Lake Champlain, Main Lake, Middle (1000-0002)	C (portion 2)	Impaired Seg
Lake Champlain, Main Lake, North (1000-0001)	C (portion 1)	Impaired Seg
Lake Roxanne (1002-0024)	C- 3-25- P6a	NoKnownImpct
Little Ausable River, Lower, and tribs (1004-0018)	C- 23	NoKnownImpct
Little Ausable River, Upper, and tribs (1004-0021)	C- 23	Need Verific
Little Chazy River, Lower, and tribs (1002-0003)	C- 4	MinorImpacts
Little Chazy River, Upper, and tribs (1002-0008)	C- 4	NoKnownImpct
Mead/Patterson Reservoirs (1003-0114)	C- 15- 5..P27,P30	NoKnownImpct
Mead/Sandburn Brooks, Upper, and tribs (1003-0051)	C- 15- 5, 5-3	NoKnownImpct
Military Pond (1004-0062)	C- 25-26- 4-P225	NoKnownImpct
Miner Lake (1002-0019)	C- 3 (portion 4)/P10b	UnAssessed
Minor Lake Tribs to Middle Saranac River (1003-0113)	C- 15-18,19..P 35 thru P 40	NoKnownImpct
Minor Tribs to Great Chazy River, Lower (1002-0011)	C- 3- 1 thru 22 (selected)	UnAssessed
Minor Tribs to Lake Champlain (1002-0023)	C- 1 thru 2 (selected)	UnAssessed
Minor Tribs to Middle Saranac River (1003-0053)	C- 15-11 thru 30 (selected)	UnAssessed
Minor Tribs to Saranac River, Lower (1003-0052)	C- 15- 1 thru 10	NoKnownImpct
Mud Pond (1003-0115)	C- 15-22- 2-P42	NoKnownImpct
Mud Pond Brook, Upper, and tribs (1003-0117)	C- 15-19	UnAssessed
Newberry Pond (1004-0064)	C- 25-26- 5-P227b	UnAssessed
North Branch, Lower, and minor tribs (1002-0013)	C- 3-25	NoKnownImpct
North Branch, Upper, and tribs (1002-0014)	C- 3-25	NoKnownImpct
Palmer Brook, Upper, and tribs (1004-0055)	C- 25-25	NoKnownImpct
Riley Brook and tribs (1001-0018)	C- 5 thru 13	UnAssessed
Riley Brook, Upper, and tribs (1004-0098)	C- 21- 2	UnAssessed
Salmon River, Lower, and tribs (1004-0010)	C- 21	NoKnownImpct
Salmon River, Upper, and tribs (1004-0047)	C- 21	Need Verific

<b>Waterbody/Segment (ID)</b>	<b>Water Index Number</b>	<b>Category</b>
<b>Cinton County (con't)</b>		
Saranac River, Lower, Main Stem (1003-0049)	C- 15 (portion 1)	NoKnownImpct
Saranac River, Lower, Main Stem (1003-0001)	C- 15 (portion 2)	NoKnownImpct
Saranac River, Main Stem, Tefft Pond (1003-0112)	C- 15 (portion 3a)/P74a	NoKnownImpct
Saranac River, Middle, Main Stem (1003-0021)	C- 15 (portion 3)	NoKnownImpct
Saranac River, Union Falls Reservoir (1003-0040)	C- 15 (portion 4)/P74	Impaired Seg
Silver Lake (1003-0068)	C- 15-28-P 73	NoKnownImpct
Slush Pond (1004-0061)	C- 25-26- 4-P224	NoKnownImpct
Stillwater Brook and tribs (1002-0020)	C- 3-35	NoKnownImpct
Taylor Pond (and Mud Pond) (1004-0063)	C- 25-26- 4-P227, P228	Need Verific
Tribes to Chazy Lake (1002-0021)	C- 3-P20-	UnAssessed
True Brook and tribs (1003-0055)	C- 15-18	NoKnownImpct
<b>Essex County</b>		
Augur Lake (1004-0050)	C- 25- 8-P213	MinorImpacts
Ausable River, Lower, and minor tribs (1004-0015)	C- 25	NoKnownImpct
Ausable River, Upper, and minor tribs (1004-0020)	C- 25	NoKnownImpct
Bartlett Brook, Upper, and minor tribs (1001-0025)	C- 86-3	NoKnownImpct
Bartlett, Mud, North Ponds (1001-0027)	C- 86-3-P338,P339,P340	Impaired Seg
Beaver Brook, Upper, and tribs (1001-0024)	C- 80	UnAssessed
Big Pond (1004-0087)	C- 48- 6-10-11-P288	NoKnownImpct
Black River and tribs (1004-0082)	C- 48-26	UnAssessed
Boquet River, Lower, and tribs (1004-0037)	C- 48	MinorImpacts
Boquet River, Middle, and minor tribs (1004-0039)	C- 48	MinorImpacts
Boquet River, Middle, and minor tribs (1004-0046)	C- 48	MinorImpacts
Boquet River, Upper, and tribs (1004-0081)	C- 48	NoKnownImpct
Buck Mountain, Worcester Ponds (1005-0022)	C-100-P364,P365	NoKnownImpct
Bullpout Pond (1001-0031)	C- 93-P348	NoKnownImpct
Butternut Pond (1004-0053)	C- 25- 8-P218	NoKnownImpct
Chapel Pond (1004-0076)	C- 25-27-38-P274	NoKnownImpct
Chubb River and tribs (1004-0028)	C- 25-26-35	Need Verific
Connery Pond (1004-0066)	C- 25-26-28-P243	NoKnownImpct
East Br Ausable, Lower, and minor tribs (1004-0014)	C- 25-27	MinorImpacts
East Br Ausable, Middle, and tribs (1004-0071)	C- 25-27	MinorImpacts
East Br Ausable, Upper, and tribs (1004-0072)	C- 25-27	MinorImpacts
Fivemile Run and tribs (1005-0021)	C-100	MinorImpacts
Frances Lake (1004-0086)	C- 48- 6- 9-5-P286	NoKnownImpct
Hadley Pond (1004-0083)	C- 43-2-P278	UnAssessed
Haymeadow Pond (1006-0019)	C-101- 1-P354a	NoKnownImpct
Highlands Forge Lake (1004-0084)	C- 43-P282	NoKnownImpct
Housington Brook and tribs (1001-0023)	C- 73	NoKnownImpct
Johns Brook and tribs (1004-0074)	C- 25-27-36	NoKnownImpct
Lake Champlain, Main Lake, Middle (1000-0002)	C (portion 2)	Impaired Seg
Lake Champlain, Main Lake, South (1000-0003)	C (portion 3)	Impaired Seg
Lake Champlain, South Lake (1000-0004)	C (portion 4)	Impaired Seg
Lake Flower (1003-0046)	C- 15-P 86	NoKnownImpct
Lake George (1006-0016)	C-101-P367	Impaired Seg
Lake Placid (1004-0068)	C- 25-26-35-5-P254	NoKnownImpct
Lincoln Pond (1004-0090)	C- 48-26-P315	Impaired Seg
Little Pond (1004-0092)	C- 48-45-P326	NoKnownImpct
Little Trout Brook and tribs (1004-0095)	C- 37	NoKnownImpct

<b>Waterbody/Segment (ID)</b>	<b>Water Index Number</b>	<b>Category</b>
<b>Essex County (con't)</b>		
Locklaird, Killkenny Brooks and tribs (1004-0096)	C- 48-36,37	UnAssessed
Long Pond (1004-0085)	C- 43-P284	UnAssessed
Lower Cascade, Upper Cascade (1004-0075)	C- 25-27-25-P270,P271	Need Verific
Lower/Upper Ausable Lakes (1004-0077)	C- 25-27-P276, P277	NoKnownImpct
McKenzie Pond (1003-0072)	C- 15-P 86-59-P 88	NoKnownImpct
Mill Brook Tributary (1001-0026)	C- 86-5	NoKnownImpct
Mill Brook and minor tribs (1001-0017)	C- 86	NoKnownImpct
Mill Pond (1001-0028)	C- 86-P335	UnAssessed
Mill/Russet/Tanaher Ponds (1004-0091)	C- 48-26..P318,P316,P319	NoKnownImpct
Minor Lake Tribs to Lower Ausable (1004-0052)	C- 25- P212 thru P217 (selected)	UnAssessed
Minor Lake Tribs to Upper North Branch (1004-0088)	C- 48- 6..P289 thru P310	NoKnownImpct
Minor Lakes Trib to West Br Ausable, Mid (1004-0065)	C- 25-26..P232 thru P251 (selected)	NoKnownImpct
Minor Lakes Trib to West Br Ausable, Upp (1004-0070)	C- 25-26..P258 thru P265	UnAssessed
Minor Lakes in Mill Creek Watershed (1001-0029)	C- 86..P341 thru P347	NoKnownImpct
Minor Lakes in Upper Putnam Creek Wshed (1005-0019)	C- 96..P353 thru P361 (selected)	NoKnownImpct
Minor Tribs to Lake Champlain (1004-0019)	C- 16 thru 24 (selected)	MinorImpacts
Minor Tribs to Lake Champlain (1001-0022)	C- 49 thru 99 (selected)	NoKnownImpct
Minor Tribs to Lake Champlain (1004-0099)	C- 26 thru 47 (selected)	UnAssessed
Minor Tribs to Lake Flower/Oseetah Lake (1003-0075)	C- 15-P 86/P 90-57 thru 64 (select)	UnAssessed
Minor Tribs to Lake Placid (1004-0069)	C- 25-26-35-5-P254-	UnAssessed
Mirror Lake (1004-0067)	C- 25-26-35-3-P250	NoKnownImpct
Moose Creek and tribs (1003-0118)	C- 15-54	UnAssessed
Moose Pond, Grass Pond (1003-0069)	C- 15-54-P 83,P 84	NoKnownImpct
Mud Pond (1005-0060)	C- 96- 8-P352	NoKnownImpct
Nichols Pond (1004-0089)	C- 48-26-32-P314	NoKnownImpct
North Branch Boquet, Lower, and tribs (1004-0078)	C- 48- 6	MinorImpacts
North Branch Boquet, Upper, and tribs (1004-0036)	C- 48- 6	NoKnownImpct
Oncio Pond (1004-0094)	C- 25-26- 4-P227a	NoKnownImpct
Penfield Pond (1005-0017)	C- 96-P351a	NoKnownImpct
Putnam Creek, Lower, and tribs (1005-0011)	C- 96	NoKnownImpct
Putnam Creek, Upper, and tribs (1005-0015)	C- 96	UnAssessed
Putnam/North Ponds (1005-0018)	C- 96-P355/P360	Need Verific
Ray Brook Tribs (1004-0097)	C- 15-P 86-P 90-60-	NoKnownImpct
Ray Brook and tribs (1003-0074)	C- 15-P 86-P 90-60	NoKnownImpct
Rocky Branch, Upper, and tribs (1004-0073)	C- 25-27- 9	NoKnownImpct
Round Pond (1004-0093)	C- 48-67-3-P329	NoKnownImpct
Saranac River, Franklin Falls Pond (1003-0045)	C- 15 (portion 5)/P76	Impaired Seg
Saranac River, Upper, Main Stem (1003-0044)	C- 15 (portion 6)	NoKnownImpct
Sherman Lake (Goosepuddle/Burris Pond) (1005-0016)	C- 96..P351 (P351b,P351c)	NoKnownImpct
Spruce Mill Brook, Lower, and tribs (1004-0079)	C- 48- 6-10	NoKnownImpct
Spruce Mill Brook, Upper, and tribs (1004-0080)	C- 48- 6-10	NoKnownImpct
The Branch (Boquet) and tribs (1004-0040)	C- 48-34	UnAssessed
Ticonderoga Creek (1006-0017)	C-101	MinorImpacts
Towbridge Brook and tribs (1003-0070)	C- 15-51	NoKnownImpct
Tribs to Butternut Pond (1004-0054)	C- 25- 8-P218-	UnAssessed
Trout Brook and tribs (1006-0018)	C-101- 1	NoKnownImpct
West Br Ausable, Lower, and minor tribs (1004-0042)	C- 25-26	MinorImpacts
West Br Ausable, Middle, and tribs (1004-0013)	C- 25-26	MinorImpacts
West Br Ausable, Upper, and tribs (1004-0056)	C- 25-26	NoKnownImpct
Willsboro Bay (1001-0015)	C (portion 2b)	Impaired Seg

<b>Waterbody/Segment (ID)</b>	<b>Water Index Number</b>	<b>Category</b>
<b>Franklin County</b>		
Buck Pond (1003-0063)	C- 15-22..P61	NoKnownImpct
Cold Brook and tribs (1003-0077)	C- 15-P 86-P 90-65	UnAssessed
Deer Pond (Altamont) (1003-0103)	C- 15-P114..P178	NoKnownImpct
Deer Pond (Santa Clara) (1003-0105)	C- 15-P114..P181	NoKnownImpct
East Pine Pond (1003-0096)	C- 15-P114..P147	UnAssessed
First/Second Ponds (1003-0078)	C- 15-P102/P103	NoKnownImpct
Fish Creek Pond, East (1003-0091)	C- 15-P114..P123	NoKnownImpct
Fish Creek Pond, West (1003-0092)	C- 15-P114..P124	NoKnownImpct
Floodwood Pond (1003-0095)	C- 15-P114..P142	UnAssessed
Follensby Clear Pond (1003-0088)	C- 15-P114..P116	NoKnownImpct
Green Pond (1003-0106)	C- 15-P114..P183	UnAssessed
Hoel Pond (1003-0099)	C- 15-P114..P161	UnAssessed
Horseshoe Pond (1003-0089)	C- 15-P114..P118	NoKnownImpct
Kiwassa Lake (1003-0076)	C- 15-P 86-P 90-64-P100	NoKnownImpct
Lake Clear (1003-0109)	C- 15-P114..P199	Need Verific
Lake Colby (1003-0079)	C- 15-P104-66-P106	NoKnownImpct
Lake Kushaqua (1003-0062)	C- 15-22..P55	NoKnownImpct
Little Clear Pond (1003-0107)	C- 15-P114..P191	UnAssessed
Little Green Pond (1003-0108)	C- 15-P114..P192	NoKnownImpct
Little Square Pond (1003-0094)	C- 15-P114..P140	UnAssessed
Long Pond (1003-0097)	C- 15-P114..P149	UnAssessed
Loon Lake (1003-0060)	C- 15-22-24-P48	Need Verific
Lower Saranac Lake (1003-0080)	C- 15-P104	Impaired Seg
McCauley Pond (1003-0081)	C- 15-P104-67-P107	NoKnownImpct
Middle Pond (1003-0111)	C- 15-P114..P143	NoKnownImpct
Middle Saranac Lake (incl Weller Pond) (1003-0083)	C- 15-P110, P207 thru P209	Impaired Seg
Minor Lakes Trib to Low/Mid Saranac Lak (1003-0085)	C- 15-P104/P110..P108 thru 113	UnAssessed
Minor Tribs to Saranac River, Upper (1003-0071)	C- 15-31 thru 47 (selected)	UnAssessed
Mountain Lake, Little Hope Lake (1003-0064)	C- 15-22..P57,P58	UnAssessed
Mud Lake (1003-0061)	C- 15-22..P52	NoKnownImpct
North Branch Saranac, Lower, minor tribs (1003-0038)	C- 15-22	NoKnownImpct
North Branch Saranac, Upper, and tribs (1003-0041)	C- 15-22	UnAssessed
Oregon Pond (1003-0120)	C- 15-22..P64	UnAssessed
Osetah Lake (1003-0073)	C- 15-P 86-P 90	UnAssessed
Polliwog Pond (1003-0090)	C- 15-P114..P120	Impaired Seg
Rainbow Lake and Inlet, Clear Pond (1003-0065)	C- 15-22..P65,P66,P70	UnAssessed
Rat Pond (1003-0122)	C- 15-P114..P186	UnAssessed
Rock Pond (1003-0101)	C- 15-P114..P170	UnAssessed
Rollins Pond (1003-0100)	C- 15-P114..P168	Need Verific
Slang Pond,Turtle Pond (1003-0098)	C- 15-P114..P159, P160	NoKnownImpct
Square Pond (1003-0093)	C- 15-P114..P125	UnAssessed
Tribs to Lower Saranac Lake (1003-0082)	C- 15-P104-66 thru 74	UnAssessed
Tribs to Middle Saranac Lake (1003-0121)	C- 15-P110- 1 thru 8	UnAssessed
Tribs to Upper Saranac Lake (1003-0087)	C- 15-P114- 1 thru 15	UnAssessed
Upper Saranac Lake (1003-0048)	C- 15-P114	MinorImpacts
West Pine Pond (1003-0102)	C- 15-P114..P173	NoKnownImpct
Whey Pond (1003-0104)	C- 15-P114..P180	NoKnownImpct

<b>Waterbody/Segment (ID)</b>	<b>Water Index Number</b>	<b>Category</b>
<b>Warren County</b>		
Butler Pond (1005-0050)	C-134- 4-19-19-P452	NoKnownImpct
Edgecomb Pond (1006-0028)	C-101-P367-56-P381	NoKnownImpct
English Brook and tribs (1006-0032)	C-101-P367-41	Impaired Seg
Glen Lake (1005-0009)	C-134- 4-19-19-P441	NoKnownImpct
Glen Lake Brook, Lower, and tribs (1005-0043)	C-134- 4-19-19	UnAssessed
Glen Lake Brook, Upper, and tribs (1005-0045)	C-134- 4-19-19	UnAssessed
Hague Brook and tribs (1006-0006)	C-101-P367-86	Impaired Seg
Halfway Creek Reservoir (1005-0051)	C-134- 4-19-23-P453	Need Verific
Halfway Creek, Upper, and tribs (1005-0063)	C-134- 4-19	MinorImpacts
Hidden Lake (1006-0026)	C-101-P367-38-P377	NoKnownImpct
Huddle/Finkle Brooks and tribs (1006-0003)	C-101-P367-53,56	Impaired Seg
Indian Brook and tribs (1006-0002)	C-101-P367-59	Impaired Seg
Jabe Pond (1006-0030)	C-101-P367-83-P394	NoKnownImpct
Lake George (1006-0016)	C-101-P367	Impaired Seg
Lake Sunnyside (1005-0047)	C-134- 4-19-19-P440	MinorImpacts
Minor Lakes in L.George (NW) Wshed (1006-0029)	C-101-P367-59..P382 thru P393 (sel)	NoKnownImpct
Minor Lakes in Lower Glen Lake Br Wshed (1005-0046)	C-134- 4-19-19..P439,P440a	NoKnownImpct
Minor Lakes in Middle Glen Lk Br Wshed (1005-0048)	C-134- 4-19-19..P442 thru P449	UnAssessed
Northwest Bay Brook and tribs (1006-0023)	C-101-P367-65	NoKnownImpct
Rush Pond/Butler Storage Reservoir (1005-0049)	C-134- 4-19-19-12-P450,P451a	UnAssessed
Tribs to L.George, Southeast Shore (1006-0021)	C-101-P367-27 thru 31	NoKnownImpct
Tribs to L.George, Town of Bolton (1006-0022)	C-101-P367-49 thru 73 (selected)	NoKnownImpcts
Tribs to L.George, Town of Hague (1006-0024)	C-101-P367-74 thru 89 (selected)	NoKnownImpct
Tribs to L.George, Town of Lake George (1006-0004)	C-101-P367-42 thru 48	NoKnownImpct
Tribs to L.George, Village of L George (1006-0008)	C-101-P367-32 thru 40	Impaired Seg
Trout Lake (1006-0027)	C-101-P367-53-P379	NoKnownImpct
Wilkie Reservoir (1005-0052)	C-134- 4-19-P455a	NoKnownImpct
Wintergreen Lake, North Lake (1006-0031)	C-101-P367..P395a,P395	NoKnownImpct
<b>Washington County</b>		
Big Creek and tribs (1005-0004)	C-134- 4-27	MinorImpacts
Bishop Brook, Lower, and tribs (1005-0064)	C-134- 4-19- 8	UnAssessed
Bishop Brook, Upper, and tribs (1005-0039)	C-134- 4-19- 8	UnAssessed
Charter Brook and tribs (1005-0023)	C-102	NoKnownImpct
Crossett Pond, Thurber Pond (1005-0032)	C-128-P414,P413	NoKnownImpct
Dolph/Beaver Pond (1005-0038)	C-134- 4-14-P424/P424a	NoKnownImpct
Greenland Pond, Fishbrook Pond (1005-0029)	C-128- 3-P406,P407	UnAssessed
Hadlock Pond (1005-0040)	C-134- 4-19- 8-P432	Need Verific
Halfway Creek, Lower, and tribs (1005-0013)	C-134- 4-19	MinorImpacts
Indian River and tribs (1005-0002)	C-134-22	MinorImpacts
Lake Champlain, East Bay and tribs (1005-0055)	C (portion 6)	UnAssessed
Lake Champlain, South Bay (1005-0014)	C (portion 5)	Impaired Seg
Lake Champlain, South Lake (1000-0004)	C (portion 4)	Impaired Seg
Lake George (1006-0016)	C-101-P367	Impaired Seg
Lake Nebo (1005-0041)	C-134- 4-19- 8-P436	NoKnownImpct
Lakes Pond (1005-0031)	C-128-P412	NoKnownImpct
Lapland Lake, Millman Lake (1005-0059)	C-119-P400,P402	UnAssessed
Mettawee River, Lower, and minor tribs (1005-0034)	C-134	NoKnownImpct
Mettawee River, Upper, and minor tribs (1005-0003)	C-134	MinorImpacts
Mill Brook and tribs (1005-0024)	C-106	UnAssessed

<b>Waterbody/Segment (ID)</b>	<b>Water Index Number</b>	<b>Category</b>
<b>Washington County</b>		
Minor Lakes in Big Creek Watershed (1005-0056)	C-134- 4-27..P456 thru P458	UnAssessed
Minor Lakes in Bishop Brook Watershed (1005-0042)	C-134- 4-19- 8..P425 thru P433	NoKnownImpct
Minor Lakes in Upper Mettawee Watershed (1005-0057)	C-134..P459 thru P464	UnAssessed
Minor Tribs to Lake Champlain (1005-0020)	C-103 thru 122 (selected)	UnAssessed
Minor Tribs to South Bay (1005-0027)	C-123 thru 133 (selected)	UnAssessed
Mount Hope Brook and tribs (1005-0033)	C-128	NoKnownImpct
Mud Brook and tribs (1005-0035)	C-134- 2	MinorImpacts
Mud Lake, Sheltered Lake, more (1006-0025)	C-101-P367- 1-P369,-10-P371	UnAssessed
Pike Brook, Upper, and tribs (1005-0028)	C-127	NoKnownImpct
Pine Lake (Long Pond) (1005-0025)	C-119-P398	NoKnownImpct
Poultney River, Lower, and tribs (1005-0053)	C-138	Impaired Seg
Poultney River, Upper, and tribs (1005-0054)	C-138	MinorImpacts
Sawmill Pond (1005-0037)	C-134- 4- 4-P419	UnAssessed
Sly Pond (1005-0058)	C-134- 4-19- 8-5-8-P428	NoKnownImpct
Tribs to L.George, East Shore (1006-0020)	C-101-P367- 1 thru 26	Impaired Seg
Upper Spectacle Pond, Bumps Pond (1005-0030)	C-128- 6-P409,P411	UnAssessed
Winchell Creek and tribs (1005-0061)	C-134- 4-17	Need Verific
Wood Cr/Champlain Canal and minor tribs (1005-0036)	C-134- 4	Impaired Seg

## Waterbody Inventory Data Sheets By Segment Name

<b>Waterbody/Segment (ID)</b>	<b>Water Index Number</b>	<b>Category</b>
Augur Lake (1004-0050)	C- 25- 8-P213	MinorImpacts
Ausable River, Lower, and minor tribs (1004-0015)	C- 25	NoKnownImpct
Ausable River, Upper, and minor tribs (1004-0020)	C- 25	NoKnownImpct
Bartlett Brook, Upper, and minor tribs (1001-0025)	C- 86-3	NoKnownImpct
Bartlett, Mud, North Ponds (1001-0027)	C- 86-3-P338,P339,P340	Impaired Seg
Beaver Brook, Upper, and tribs (1001-0024)	C- 80	UnAssessed
Behan Brook, Upper, and tribs (1003-0116)	C- 15-12-3	NoKnownImpct
Big Creek and tribs (1005-0004)	C-134- 4-27	MinorImpacts
Big Pond (1004-0087)	C- 48- 6-10-11-P288	NoKnownImpct
Bishop Brook, Lower, and tribs (1005-0064)	C-134- 4-19- 8	UnAssessed
Bishop Brook, Upper, and tribs (1005-0039)	C-134- 4-19- 8	UnAssessed
Black Brook Pond (1004-0059)	C- 25-26- 4-P221	UnAssessed
Black River and tribs (1004-0082)	C- 48-26	UnAssessed
Boquet River, Lower, and tribs (1004-0037)	C- 48	MinorImpacts
Boquet River, Middle, and minor tribs (1004-0039)	C- 48	MinorImpacts
Boquet River, Middle, and minor tribs (1004-0046)	C- 48	MinorImpacts
Boquet River, Upper, and tribs (1004-0081)	C- 48	NoKnownImpct
Buck Mountain, Worcester Ponds (1005-0022)	C-100-P364,P365	NoKnownImpct
Buck Pond (1003-0063)	C- 15-22..P61	NoKnownImpct
Bullpout Pond (1001-0031)	C- 93-P348	NoKnownImpct
Butler Pond (1005-0050)	C-134- 4-19-19-P452	NoKnownImpct
Butternut Pond (1004-0053)	C- 25- 8-P218	NoKnownImpct
Chapel Pond (1004-0076)	C- 25-27-38-P274	NoKnownImpct
Charter Brook and tribs (1005-0023)	C-102	NoKnownImpct
Chazy Lake (1002-0009)	C- 3 (portion 6)/P20	NoKnownImpct
Chubb River and tribs (1004-0028)	C- 25-26-35	Need Verific
Cold Brook and tribs (1003-0056)	C- 15-22- 3	UnAssessed
Cold Brook and tribs (1003-0077)	C- 15-P 86-P 90-65	UnAssessed
Connery Pond (1004-0066)	C- 25-26-28-P243	NoKnownImpct
Corbeau Creek and tribs (1002-0012)	C- 3- 2	MinorImpacts
Cranberry Pond (1003-0110)	C- 15-35-P 75	NoKnownImpct
Crossett Pond, Thurber Pond (1005-0032)	C-128-P414,P413	NoKnownImpct
Cumberland Bay (1001-0001)	C (portion 2a)	Impaired Seg
Davis Lake (1004-0048)	C- 21-P210c	UnAssessed
Dead Creek and minor tribs (1001-0019)	C- 14	UnAssessed
Deer Pond (Altamont) (1003-0103)	C- 15-P114..P178	NoKnownImpct
Deer Pond (Santa Clara) (1003-0105)	C- 15-P114..P181	NoKnownImpct
Dolph/Beaver Pond (1005-0038)	C-134- 4-14-P424/P424a	NoKnownImpct
East Br Ausable, Lower, and minor tribs (1004-0014)	C- 25-27	MinorImpacts
East Br Ausable, Middle, and tribs (1004-0071)	C- 25-27	MinorImpacts
East Br Ausable, Upper, and tribs (1004-0072)	C- 25-27	MinorImpacts
East Pine Pond (1003-0096)	C- 15-P114..P147	UnAssessed
Edgecomb Pond (1006-0028)	C-101-P367-56-P381	NoKnownImpct
English Brook and tribs (1006-0032)	C-101-P367-41	Impaired Seg

<b>Waterbody/Segment (ID)</b>	<b>Water Index Number</b>	<b>Category</b>
Fern Lake (1004-0060)	C- 25-26- 4-P222	UnAssessed
First/Second Ponds (1003-0078)	C- 15-P102/P103	NoKnownImpct
Fish Creek Pond, East (1003-0091)	C- 15-P114..P123	NoKnownImpct
Fish Creek Pond, West (1003-0092)	C- 15-P114..P124	NoKnownImpct
Fivemile Run and tribs (1005-0021)	C-100	MinorImpacts
Floodwood Pond (1003-0095)	C- 15-P114..P142	UnAssessed
Follensby Clear Pond (1003-0088)	C- 15-P114..P116	NoKnownImpct
Frances Lake (1004-0086)	C- 48- 6- 9-5-P286	NoKnownImpct
Glen Lake (1005-0009)	C-134- 4-19-19-P441	NoKnownImpct
Glen Lake Brook, Lower, and tribs (1005-0043)	C-134- 4-19-19	UnAssessed
Glen Lake Brook, Upper, and tribs (1005-0045)	C-134- 4-19-19	UnAssessed
Graves Brook and tribs (1002-0016)	C- 3-25- 5	NoKnownImpct
Great Chazy River, Lower, Main Stem (1002-0010)	C- 3 (portion 1)	Need Verific
Great Chazy River, Lower, Main Stem (1002-0001)	C- 3 (portion 2)	Impaired Seg
Great Chazy River, Middle, and tribs (1002-0017)	C- 3 (portion 3)	NoKnownImpct
Great Chazy River, Upper, and tribs (1002-0018)	C- 3 (portion 5)	UnAssessed
Green Pond (1003-0106)	C- 15-P114..P183	UnAssessed
Greenland Pond, Fishbrook Pond (1005-0029)	C-128- 3-P406,P407	UnAssessed
Hadley Pond (1004-0083)	C- 43-2-P278	UnAssessed
Hadlock Pond (1005-0040)	C-134- 4-19- 8-P432	Need Verific
Hague Brook and tribs (1006-0006)	C-101-P367-86	Impaired Seg
Halfway Creek Reservoir (1005-0051)	C-134- 4-19-23-P453	Need Verific
Halfway Creek, Lower, and tribs (1005-0013)	C-134- 4-19	MinorImpacts
Halfway Creek, Upper, and tribs (1005-0063)	C-134- 4-19	MinorImpacts
Haymeadow Pond (1006-0019)	C-101- 1-P354a	NoKnownImpct
Hidden Lake (1006-0026)	C-101-P367-38-P377	NoKnownImpct
Highlands Forge Lake (1004-0084)	C- 43-P282	NoKnownImpct
Hoel Pond (1003-0099)	C- 15-P114..P161	UnAssessed
Horseshoe Pond (1003-0089)	C- 15-P114..P118	NoKnownImpct
Housington Brook and tribs (1001-0023)	C- 73	NoKnownImpct
Huddle/Finkle Brooks and tribs (1006-0003)	C-101-P367-53,56	Impaired Seg
Indian Brook and tribs (1006-0002)	C-101-P367-59	Impaired Seg
Indian River and tribs (1005-0002)	C-134-22	MinorImpacts
Jabe Pond (1006-0030)	C-101-P367-83-P394	NoKnownImpct
Johns Brook and tribs (1004-0074)	C- 25-27-36	NoKnownImpct
Kiwassa Lake (1003-0076)	C- 15-P 86-P 90-64-P100	NoKnownImpct
Lake Alice (1002-0022)	C- 4- 4-P22	UnAssessed
Lake Champlain, East Bay and tribs (1005-0055)	C (portion 6)	UnAssessed
Lake Champlain, Main Lake, Middle (1000-0002)	C (portion 2)	Impaired Seg
Lake Champlain, Main Lake, North (1000-0001)	C (portion 1)	Impaired Seg
Lake Champlain, Main Lake, South (1000-0003)	C (portion 3)	Impaired Seg
Lake Champlain, South Bay (1005-0014)	C (portion 5)	Impaired Seg
Lake Champlain, South Lake (1000-0004)	C (portion 4)	Impaired Seg
Lake Clear (1003-0109)	C- 15-P114..P199	Need Verific
Lake Colby (1003-0079)	C- 15-P104-66-P106	NoKnownImpct
Lake Flower (1003-0046)	C- 15-P 86	NoKnownImpct
Lake George (1006-0016)	C-101-P367	Impaired Seg
Lake Kushaqua (1003-0062)	C- 15-22..P55	NoKnownImpct
Lake Nebo (1005-0041)	C-134- 4-19- 8-P436	NoKnownImpct
Lake Placid (1004-0068)	C- 25-26-35-5-P254	NoKnownImpct
Lake Roxanne (1002-0024)	C- 3-25- P6a	NoKnownImpct

<b>Waterbody/Segment (ID)</b>	<b>Water Index Number</b>	<b>Category</b>
Lake Sunnyside (1005-0047)	C-134- 4-19-19-P440	MinorImpacts
Lakes Pond (1005-0031)	C-128-P412	NoKnownImpct
Lapland Lake, Millman Lake (1005-0059)	C-119-P400,P402	UnAssessed
Lincoln Pond (1004-0090)	C- 48-26-P315	Impaired Seg
Little Ausable River, Lower, and tribs (1004-0018)	C- 23	NoKnownImpct
Little Ausable River, Upper, and tribs (1004-0021)	C- 23	Need Verific
Little Chazy River, Lower, and tribs (1002-0003)	C- 4	MinorImpacts
Little Chazy River, Upper, and tribs (1002-0008)	C- 4	NoKnownImpct
Little Clear Pond (1003-0107)	C- 15-P114..P191	UnAssessed
Little Green Pond (1003-0108)	C- 15-P114..P192	NoKnownImpct
Little Pond (1004-0092)	C- 48-45-P326	NoKnownImpct
Little Square Pond (1003-0094)	C- 15-P114..P140	UnAssessed
Little Trout Brook and tribs (1004-0095)	C- 37	NoKnownImpct
Locklaird, Killkenney Brooks and tribs (1004-0096)	C- 48-36,37	UnAssessed
Long Pond (1003-0097)	C- 15-P114..P149	UnAssessed
Long Pond (1004-0085)	C- 43-P284	UnAssessed
Loon Lake (1003-0060)	C- 15-22-24-P48	Need Verific
Lower Cascade, Upper Cascade (1004-0075)	C- 25-27-25-P270,P271	Need Verific
Lower Saranac Lake (1003-0080)	C- 15-P104	Impaired Seg
Lower/Upper Ausable Lakes (1004-0077)	C- 25-27-P276, P277	NoKnownImpct
McCauley Pond (1003-0081)	C- 15-P104-67-P107	NoKnownImpct
McKenzie Pond (1003-0072)	C- 15-P 86-59-P 88	NoKnownImpct
Mead/Patterson Reservoirs (1003-0114)	C- 15- 5..P27,P30	NoKnownImpct
Mead/Sandburn Brooks, Upper, and tribs (1003-0051)	C- 15- 5, 5-3	NoKnownImpct
Mettawee River, Lower, and minor tribs (1005-0034)	C-134	NoKnownImpct
Mettawee River, Upper, and minor tribs (1005-0003)	C-134	MinorImpacts
Middle Pond (1003-0111)	C- 15-P114..P143	NoKnownImpct
Middle Saranac Lake (incl Weller Pond) (1003-0083)	C- 15-P110, P207 thru P209	Impaired Seg
Military Pond (1004-0062)	C- 25-26- 4-P225	NoKnownImpct
Mill Brook Tributary (1001-0026)	C- 86-5	NoKnownImpct
Mill Brook and minor tribs (1001-0017)	C- 86	NoKnownImpct
Mill Brook and tribs (1005-0024)	C-106	UnAssessed
Mill Pond (1001-0028)	C- 86-P335	UnAssessed
Mill/Russet/Tanaher Ponds (1004-0091)	C- 48-26..P318,P316,P319	NoKnownImpct
Miner Lake (1002-0019)	C- 3 (portion 4)/P10b	UnAssessed
Minor Lake Tribs to Lower Ausable (1004-0052)	C- 25- P212 thru P217 (selected)	UnAssessed
Minor Lake Tribs to Middle Saranac River (1003-0113)	C- 15-18,19..P 35 thru P 40	NoKnownImpct
Minor Lake Tribs to Upper North Branch (1004-0088)	C- 48- 6..P289 thru P310	NoKnownImpct
Minor Lakes Trib to Low/Mid Saranac Lak (1003-0085)	C- 15-P104/P110..P108 thru 113	UnAssessed
Minor Lakes Trib to West Br Ausable, Mid (1004-0065)	C- 25-26..P232 thru P251 (selected)	NoKnownImpct
Minor Lakes Trib to West Br Ausable, Upp (1004-0070)	C- 25-26..P258 thru P265	UnAssessed
Minor Lakes in Big Creek Watershed (1005-0056)	C-134- 4-27..P456 thru P458	UnAssessed
Minor Lakes in Bishop Brook Watershed (1005-0042)	C-134- 4-19- 8..P425 thru P433	NoKnownImpct
Minor Lakes in L.George (NW) Wshed (1006-0029)	C-101-P367-59..P382 thru P393 (sel)	NoKnownImpct
Minor Lakes in Lower Glen Lake Br Wshed (1005-0046)	C-134- 4-19-19..P439,P440a	NoKnownImpct
Minor Lakes in Middle Glen Lk Br Wshed (1005-0048)	C-134- 4-19-19..P442 thru P449	UnAssessed
Minor Lakes in Mill Creek Watershed (1001-0029)	C- 86..P341 thru P347	NoKnownImpct
Minor Lakes in Upper Mettawee Watershed (1005-0057)	C-134..P459 thru P464	UnAssessed
Minor Lakes in Upper Putnam Creek Wshed (1005-0019)	C- 96..P353 thru P361 (selected)	NoKnownImpct
Minor Tribs to Great Chazy River, Lower (1002-0011)	C- 3- 1 thru 22 (selected)	UnAssessed

<b>Waterbody/Segment (ID)</b>	<b>Water Index Number</b>	<b>Category</b>
Minor Tribs to Lake Champlain (1002-0023)	C- 1 thru 2 (selected)	UnAssessed
Minor Tribs to Lake Champlain (1004-0019)	C- 16 thru 24 (selected)	MinorImpacts
Minor Tribs to Lake Champlain (1004-0099)	C- 26 thru 47 (selected)	UnAssessed
Minor Tribs to Lake Champlain (1001-0022)	C- 49 thru 99 (selected)	NoKnownImpct
Minor Tribs to Lake Champlain (1005-0020)	C-103 thru 122 (selected)	UnAssessed
Minor Tribs to Lake Flower/Oseetah Lake (1003-0075)	C- 15-P 86/P 90-57 thru 64 (select)	UnAssessed
Minor Tribs to Lake Placid (1004-0069)	C- 25-26-35-5-P254-	UnAssessed
Minor Tribs to Middle Saranac River (1003-0053)	C- 15-11 thru 30 (selected)	UnAssessed
Minor Tribs to Saranac River, Lower (1003-0052)	C- 15- 1 thru 10	NoKnownImpct
Minor Tribs to Saranac River, Upper (1003-0071)	C- 15-31 thru 47 (selected)	UnAssessed
Minor Tribs to South Bay (1005-0027)	C-123 thru 133 (selected)	UnAssessed
Mirror Lake (1004-0067)	C- 25-26-35-3-P250	NoKnownImpct
Moose Creek and tribs (1003-0118)	C- 15-54	UnAssessed
Moose Pond, Grass Pond (1003-0069)	C- 15-54-P 83,P 84	NoKnownImpct
Mount Hope Brook and tribs (1005-0033)	C-128	NoKnownImpct
Mountain Lake, Little Hope Lake (1003-0064)	C- 15-22..P57,P58	UnAssessed
Mud Brook and tribs (1005-0035)	C-134- 2	MinorImpacts
Mud Lake (1003-0061)	C- 15-22..P52	NoKnownImpct
Mud Lake, Sheltered Lake, more (1006-0025)	C-101-P367- 1-P369,-10-P371	UnAssessed
Mud Pond (1003-0115)	C- 15-22- 2-P42	NoKnownImpct
Mud Pond (1005-0060)	C- 96- 8-P352	NoKnownImpct
Mud Pond Brook, Upper, and tribs (1003-0117)	C- 15-19	UnAssessed
Newberry Pond (1004-0064)	C- 25-26- 5-P227b	UnAssessed
Nichols Pond (1004-0089)	C- 48-26-32-P314	NoKnownImpct
North Branch Boquet, Lower, and tribs (1004-0078)	C- 48- 6	MinorImpacts
North Branch Boquet, Upper, and tribs (1004-0036)	C- 48- 6	NoKnownImpct
North Branch Saranac, Lower, minor tribs (1003-0038)	C- 15-22	NoKnownImpct
North Branch Saranac, Upper, and tribs (1003-0041)	C- 15-22	UnAssessed
North Branch, Lower, and minor tribs (1002-0013)	C- 3-25	NoKnownImpct
North Branch, Upper, and tribs (1002-0014)	C- 3-25	NoKnownImpct
Northwest Bay Brook and tribs (1006-0023)	C-101-P367-65	NoKnownImpct
Oncio Pond (1004-0094)	C- 25-26- 4-P227a	NoKnownImpct
Oregon Pond (1003-0120)	C- 15-22..P64	UnAssessed
Oseetah Lake (1003-0073)	C- 15-P 86-P 90	UnAssessed
Palmer Brook, Upper, and tribs (1004-0055)	C- 25-25	NoKnownImpct
Penfield Pond (1005-0017)	C- 96-P351a	NoKnownImpct
Pike Brook, Upper, and tribs (1005-0028)	C-127	NoKnownImpct
Pine Lake (Long Pond) (1005-0025)	C-119-P398	NoKnownImpct
Polliwog Pond (1003-0090)	C- 15-P114..P120	Impaired Seg
Poultney River, Lower, and tribs (1005-0053)	C-138	Impaired Seg
Poultney River, Upper, and tribs (1005-0054)	C-138	MinorImpacts
Putnam Creek, Lower, and tribs (1005-0011)	C- 96	NoKnownImpct
Putnam Creek, Upper, and tribs (1005-0015)	C- 96	UnAssessed
Putnam/North Ponds (1005-0018)	C- 96-P355/P360	Need Verific
Rainbow Lake and Inlet, Clear Pond (1003-0065)	C- 15-22..P65,P66,P70	UnAssessed
Rat Pond (1003-0122)	C- 15-P114..P186	UnAssessed
Ray Brook Tribs (1004-0097)	C- 15-P 86-P 90-60-	NoKnownImpct
Ray Brook and tribs (1003-0074)	C- 15-P 86-P 90-60	NoKnownImpct
Riley Brook and tribs (1001-0018)	C- 5 thru 13	UnAssessed
Riley Brook, Upper, and tribs (1004-0098)	C- 21- 2	UnAssessed
Rock Pond (1003-0101)	C- 15-P114..P170	UnAssessed

<b>Waterbody/Segment (ID)</b>	<b>Water Index Number</b>	<b>Category</b>
Rocky Branch, Upper, and tribs (1004-0073)	C- 25-27- 9	NoKnownImpct
Rollins Pond (1003-0100)	C- 15-P114..P168	Need Verific
Round Pond (1004-0093)	C- 48-67-3-P329	NoKnownImpct
Rush Pond/Butler Storage Reservoir (1005-0049)	C-134- 4-19-19-12-P450,P451a	UnAssessed
Salmon River, Lower, and tribs (1004-0010)	C- 21	NoKnownImpct
Salmon River, Upper, and tribs (1004-0047)	C- 21	Need Verific
Saranac River, Franklin Falls Pond (1003-0045)	C- 15 (portion 5)/P76	Impaired Seg
Saranac River, Lower, Main Stem (1003-0049)	C- 15 (portion 1)	NoKnownImpct
Saranac River, Lower, Main Stem (1003-0001)	C- 15 (portion 2)	NoKnownImpct
Saranac River, Main Stem, Tefft Pond (1003-0112)	C- 15 (portion 3a)/P74a	NoKnownImpct
Saranac River, Middle, Main Stem (1003-0021)	C- 15 (portion 3)	NoKnownImpct
Saranac River, Union Falls Reservoir (1003-0040)	C- 15 (portion 4)/P74	Impaired Seg
Saranac River, Upper, Main Stem (1003-0044)	C- 15 (portion 6)	NoKnownImpct
Sawmill Pond (1005-0037)	C-134- 4- 4-P419	UnAssessed
Sherman Lake (Goosepuddle/Burriss Pond) (1005-0016)	C- 96..P351 (P351b,P351c)	NoKnownImpct
Silver Lake (1003-0068)	C- 15-28-P 73	NoKnownImpct
Slang Pond,Turtle Pond (1003-0098)	C- 15-P114..P159, P160	NoKnownImpct
Slush Pond (1004-0061)	C- 25-26- 4-P224	NoKnownImpct
Sly Pond (1005-0058)	C-134- 4-19- 8-5-8-P428	NoKnownImpct
Spruce Mill Brook, Lower, and tribs (1004-0079)	C- 48- 6-10	NoKnownImpct
Spruce Mill Brook, Upper, and tribs (1004-0080)	C- 48- 6-10	NoKnownImpct
Square Pond (1003-0093)	C- 15-P114..P125	UnAssessed
Stillwater Brook and tribs (1002-0020)	C- 3-35	NoKnownImpct
Taylor Pond (and Mud Pond) (1004-0063)	C- 25-26- 4-P227, P228	Need Verific
The Branch (Boquet) and tribs (1004-0040)	C- 48-34	UnAssessed
Ticonderoga Creek (1006-0017)	C-101	MinorImpacts
Towbridge Brook and tribs (1003-0070)	C- 15-51	NoKnownImpct
Tribs to Butternut Pond (1004-0054)	C- 25- 8-P218-	UnAssessed
Tribs to Chazy Lake (1002-0021)	C- 3-P20-	UnAssessed
Tribs to L.George, East Shore (1006-0020)	C-101-P367- 1 thru 26	Impaired Seg
Tribs to L.George, Southeast Shore (1006-0021)	C-101-P367-27 thru 31	NoKnownImpct
Tribs to L.George, Town of Bolton (1006-0022)	C-101-P367-49 thru 73 (selected)	NoKnownImpct
Tribs to L.George, Town of Hague (1006-0024)	C-101-P367-74 thru 89 (selected)	NoKnownImpct
Tribs to L.George, Town of Lake George (1006-0004)	C-101-P367-42 thru 48	NoKnownImpct
Tribs to L.George, Village of L George (1006-0008)	C-101-P367-32 thru 40	Impaired Seg
Tribs to Lower Saranac Lake (1003-0082)	C- 15-P104-66 thru 74	UnAssessed
Tribs to Middle Saranac Lake (1003-0121)	C- 15-P110- 1 thru 8	UnAssessed
Tribs to Upper Saranac Lake (1003-0087)	C- 15-P114- 1 thru 15	UnAssessed
Trout Brook and tribs (1006-0018)	C-101- 1	NoKnownImpct
Trout Lake (1006-0027)	C-101-P367-53-P379	NoKnownImpct
True Brook and tribs (1003-0055)	C- 15-18	NoKnownImpct
Upper Saranac Lake (1003-0048)	C- 15-P114	MinorImpacts
Upper Spectacle Pond, Bumps Pond (1005-0030)	C-128- 6-P409,P411	UnAssessed
West Br Ausable, Lower, and minor tribs (1004-0042)	C- 25-26	MinorImpacts
West Br Ausable, Middle, and tribs (1004-0013)	C- 25-26	MinorImpacts
West Br Ausable, Upper, and tribs (1004-0056)	C- 25-26	NoKnownImpct
West Pine Pond (1003-0102)	C- 15-P114..P173	NoKnownImpct
Whey Pond (1003-0104)	C- 15-P114..P180	NoKnownImpct
Wilkie Reservoir (1005-0052)	C-134- 4-19-P455a	NoKnownImpct
Willsboro Bay (1001-0015)	C (portion 2b)	Impaired Seg
Winchell Creek and tribs (1005-0061)	C-134- 4-17	Need Verific
Wintergreen Lake, North Lake (1006-0031)	C-101-P367..P395a,P395	NoKnownImpct
Wood Cr/Champlain Canal and minor tribs (1005-0036)	C-134- 4	Impaired Seg