



## Oriskany Creek Watershed (0202000402)

### Water Index Number

H-240-223  
H-240-223  
H-240-223  
H-240-223-10  
H-240-223-24  
H-240-223-34  
H-240-223-45  
H-240-223-P1044  
H-240-223-P1051  
H-240-223-P1052/P1053

### Waterbody Segment

Oriskany Creek, Lower, and minor tribs (1204-0008)  
Oriskany Creek, Middle, and minor tribs (1204-0010)  
Oriskany Creek, Upper, and tribs (1204-0011)  
Deans Creek and tribs (1204-0001)  
White Creek, Upper, and tribs (1204-0012)  
Big Creek and tribs (1204-0005)  
Barker/Eli Creek and tribs (1204-0013)  
Lyons Pond (1204-0014)  
Madison Lake (1204-0006)  
Leland Pond (1204-0007)

### Category

MinorImpacts  
NoKnownImpct  
NoKnownImpct  
MinorImpacts  
NoKnownImpct  
NoKnownImpct  
UnAssessed  
UnAssessed  
NoKnownImpct  
Threatened

# Oriskany Creek, Lower, and minor tribs ( 1204-0008)

# MinorImpacts

## Waterbody Location Information

Revised: 04/02/2010

**Water Index No:** H-240-223  
**Hydro Unit Code:** 02020004/040      **Str Class:** B(T)  
**Waterbody Type:** River (Low Flow)      **Reg/County:** 6/Oneida Co. (33)  
**Waterbody Size:** 39.4 Miles      **Quad Map:** ORISKANY (I-19-2)  
**Seg Description:** stream and tribs, from mouth to Clarks Mills

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
PUBLIC BATHING	Impaired	Suspected
AQUATIC LIFE	Impaired	Suspected
RECREATION	Impaired	Suspected
Habitat/Hydrology	Stressed	Suspected

### Type of Pollutant(s)

Known: PATHOGENS  
Suspected: NUTRIENTS (phosphorus), Silt/Sediment, Thermal Changes  
Possible: - - -

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

Known: MUNICIPAL (Clark Mills WWTP), OTHER SANITARY DISCH  
Suspected: AGRICULTURE, URBAN/STORM RUNOFF, Habitat Modification  
Possible: - - -

## 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

Recreational uses (fishing, swimming), aquatic life support and natural resources (fishery) habitat in Oriskany Creek are known to experience minor impacts due to pathogens, silt and sediment loads, thermal stresses and other pollutants attributed to municipal wastewater discharges, urban encroachment and residential development, and agricultural runoff in the watershed. These impacts may affect the trout fishery that the stream supports.

### Water Quality Sampling

NYSDEC Rotating Integrated Basin Studies (RIBS) Intensive Network monitoring of Oriskany Creek in Oriskany, Oneida County, (at Utica Street) was conducted in 2005 and 2006. Intensive Network sampling typically includes macroinvertebrate community analysis, water column chemistry, toxicity testing, sediment assessment and macroinvertebrate tissue analysis. Biological (macroinvertebrate) sampling indicated the lower range of slightly impacted conditions. In such samples some replacement of sensitive ubiquitous species by more tolerant species occurs, although the sample also includes a balanced distribution of all expected species. Aquatic life is considered to be fully supported in the stream, however the community composition and nutrient biotic evaluation suggest conditions including high levels of

enrichment that are sufficient to cause stress to aquatic life. Impact source determination found the fauna to be most similar to communities influenced by various nonpoint sources. Water column chemistry indicates levels of pathogen (total and fecal coliform) to be present at levels that constitute parameters of concern. Toxicity testing using water from this location detected no significant mortality or reproductive effects on the test organism. Sediment screening for acute toxicity indicated some sediment toxicity and no porewater toxicity was indicated. Bottom sediments analysis based on sediment quality guidelines developed for freshwater ecosystems revealed overall sediment quality is not likely to cause chronic toxicity to sediment-dwelling organisms. (DEC/DOW, BWAM/RIBS, January 2010)

NYSDEC Rotating Intensive Basin Studies (RIBS) Intensive Network monitoring of Oriskany Creek in Oriskany (at Utica Street) was also conducted in 2001. Sampling of the water column, sediments, and invertebrate tissues was conducted, as well as macroinvertebrate community analysis (see below). Water column sampling found elevated coliform values, but no other parameters of concern in the water column. Sediments were found to contain slightly elevated levels of cadmium, but no other metals or organic compounds in concentrations above levels of concern. No toxicity was found to occur in tests conducted on 3 different water samples, and no organic compounds or metals were found above levels of concern in invertebrate tissues. (DEC/DOW, BWAR/RIBS, April 2003)

Biological (macroinvertebrate) assessments of Oriskany Creek at multiple sites were conducted in 2000 and 2001 as part of the RIBS effort. Sampling results indicated slightly impacted water quality conditions at the Oriskany RIBS site in 2001, the result of nonpoint nutrient enrichment. Assessments of Oriskany Creek at upstream locations were also conducted in 2000, as part of the RIBS Screening Network. Sampling results indicated non-impacted water quality conditions at Oriskany Falls, and slightly impacted conditions at Colemans Mills. In spite of some/these minor impacts, aquatic life is considered to be fully supported in the stream. (DEC/DOW, BWAR/SBU, April 2003)

The 2000-2001 biomonitoring results are consistent with conditions reported in a 1990 biological survey of Oriskany Creek. This survey found non to slightly impacted water quality along the reach from the mouth to Oriskany Falls and no significant water quality problems were indicated. (Oriskany Creek Biological Assessment Report, Bode et al., DEC/DOW, BWAR/SBU, December 1990)

#### Source Assessment

During high flow events (e.g., rain storms, snowmelt) the Clark Mills Sewer District collection system experiences sanitary sewer overflows as well as hydrologic limitations at the treatment plant. The Clark Mills WWTP has a design flow of 0.2 mgd, however during severe wet weather, excessive infiltration and inflow into the system results in flows as high as 1.0 mgd into the plant. These high flows can result in inadequate treatment and/or discharges of raw wastewater to the receiving stream. The Town of Kirkland has developed a Flow Management Plan and Growth Management Plan schedules for the Clark Mills WWTP that were approved by DEC Region 6. (Stearns & Wheeler Engineering Report, November 2008 and DEC/DOW/Region 6, March 2009)

#### Section 303(d) Listing

Oriskany Creek is not currently included on the Section 303(d) List of Impaired/TMDL Waters. However additional monitoring and assessment is suggested to verify whether the known impacts to the waterbody rise to the level of impairment and if the waterbody should be considered for future listing. Until such a determination is made, the waterbody will be assessed as having minor impacts to uses, but specific uses may be noted as suspected of being impaired. (DEC/DOW, BWAM/WQAS, April 2010)

#### Segment Description

This segment includes the portion of the stream and selected/smaller tribs from the mouth to unnamed trib -15 near Clarks Mills. The waters of this portion of the stream, are Class B(T). Tribs to this reach/segment are Class C,C(T). Deans Creek (-10) is listed separately.

# Oriskany Creek, Middle, and minor tribs ( 1204-0010) NoKnownImpct

## Waterbody Location Information

Revised: 02/10/2010

**Water Index No:** H-240-223  
**Hydro Unit Code:** 02020004/040      **Str Class:** B(TS)  
**Waterbody Type:** River (Low Flow)      **Reg/County:** 6/Oneida Co. (33)  
**Waterbody Size:** 123.0 Miles      **Quad Map:** CLINTON (I-19-4)  
**Seg Description:** stream and tribs, from Clarks Mills to Solsville

## 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 Oriskany Creek in Kirkland (at Route 5) was conducted as part of the RIBS biological screening effort in 2005. Sampling results indicated slightly impacted conditions. In such samples the community is slightly altered from natural conditions. Some sensitive species are not present and the overall abundance of macroinvertebrates is lower. However, the effects on the fauna are relatively insignificant and water quality is considered to be good. The nutrient biotic index and impact source determination indicate elevated enrichment in the stream but a fauna that is most similar to natural communities. These results are consistent with results from sampling conducted at multiple sites on Oriskany Creek in 2000 and 2001. Aquatic life support is considered to be fully supported in the stream, and there are no other apparent water quality impacts to designated uses. (DEC/DOW, BWAM/SBU, January 2010)

These results are also consistent with conditions reported in a 1990 biological survey of Oriskany Creek. This survey found non to slightly impacted water quality along the reach from the mouth to Oriskany Falls and no significant water quality problems were indicated. (Oriskany Creek Biological Assessment Report, Bode et al., DEC/DOW, BWAM/SBU, December 1990)

### Previous Assessment

Concerns were previously raised regarding threats to natural resources (fishery) habitat in this trout stream due to silt and sediment loads, thermal stresses and some nutrient enrichment attributed to agricultural activities and urban encroachment and residential development in the watershed. However more recent sampling suggests these threats are not atypical of many other streams in the state.

A concern was also raised about occasional bypasses of wastewater from the Clinton WWTP into the creek during storm events. However regional staff have indicated that such discharges have occurred only once in the last 20 years and are not considered a likely source of impact. (DEC/DOW, Region 6, January 2003)

### Segment Description

This segment includes the portion of the stream and selected/smaller tribs from unnamed trib -15 near Clarks Mills to Solsville Pond (P1050) in Solsville. The waters of this portion of the stream are Class B(TS). Tribs to this reach/segment, including Sherman Brook (-16), Lower White Creek (-24), Kirkland Glen (-25), Turkey Creek (-28), Whitney Brook (29), Keys Brook (-30), Brothertown Brook (-35), Buckley Mill Creek (-42) and Cold Brook (-48) are Class C,C(T),C(TS). Upper Whites Creek (24) and Big Creek (-34) are listed separately.

# Oriskany Creek, Upper, and tribs ( 1204-0011)

NoKnownImpct

## Waterbody Location Information

Revised: 08/08/2002

<b>Water Index No:</b>	H-240-223	<b>Drain Basin:</b>	Mohawk River
<b>Hydro Unit Code:</b>	02020004/040	<b>Str Class:</b>	C
<b>Waterbody Type:</b>	River (Low Flow)	<b>Reg/County:</b>	6/Oneida Co. (33)
<b>Waterbody Size:</b>	17.8 Miles	<b>Quad Map:</b>	VERONA (I-18-2)
<b>Seg Description:</b>	stream and tribs, above Solsville		

## 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

Biological (macroinvertebrate) assessments of Oriskany Creek at multiple sites were conducted in 2000 and 2001. Sampling results indicated non-impacted water quality conditions in Oriskany Falls in 2000. (DEC/DOW, BWAR/SBU, July 2002)

These results are consistent with conditions reported in a 1990 biological survey of Oriskany Creek. This survey found non to slightly impacted water quality along the reach from the mouth to Oriskany Falls and no significant water quality problems were indicated. (Oriskany Creek Biological Assessment Report, Bode et al., DEC/DOW, BWAR/SBU, December 1990)

### Segment Description

This segment includes the portion of the stream and selected/smaller tribs above Solsville Pond (P1050) in Solsville. The waters of this portion of the stream are Class C,C(T). Tribs to this reach/segment are Class C,C(T),C(TS). Barker/Eli Creek (-45) is listed separately.

# Deans Creek and tribs ( 1204-0001)

# MinorImpacts

## Waterbody Location Information

Revised: 04/02/2010

<b>Water Index No:</b>	H-240-223-10	<b>Drain Basin:</b>	Mohawk River
<b>Hydro Unit Code:</b>	02020004/040	<b>Str Class:</b>	C
<b>Waterbody Type:</b>	River (Low Flow)	<b>Reg/County:</b>	6/Oneida Co. (33)
<b>Waterbody Size:</b>	57.2 Miles	<b>Quad Map:</b>	HUBBARDSVILLE (J-19-4)
<b>Seg Description:</b>	entire stream and tribs		

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

### Type of Pollutant(s)

Known: NUTRIENTS (phosphorus), PATHOGENS  
Suspected: Silt/Sediment  
Possible: - - -

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

Known: ON-SITE/SEPTIC SYST (Westmoreland)  
Suspected: AGRICULTURE, Urban/Storm Runoff  
Possible: - - -

## 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/BWAM	<b>Resolution Potential:</b> Medium
<b>TMDL/303d Status:</b>	n/a	

## Further Details

### Overview

Aquatic life support and recreational uses in Deans Creek are known to experience minor impacts due to pathogens and other pollutants from failing and/or inadequate on-site septic systems. Agricultural activity in the watershed causes increases in silt/sedimentation in the stream and is likely contributing to nutrient loads.

### Source Assessment

A Comprehensive Wastewater Management Study conducted in the 1980s documented failing and/or inadequate on-site septic systems within the hamlet of Westmoreland along Stone Road from Route 233 to beyond Town Barn Road. At the time of the study, 26% of the lots investigated were confirmed to have, or were "strongly suspected" of having wastewater disposal problems. These problems are primarily due to severe lot size limitations and, to a lesser degree, poor soil conditions. Although isolated failures were identified in other areas of the hamlet, such problems were not widespread and lots sizes and soil conditions appeared to be suitable for on-site systems. (DEC/DOW, Region 6, April 2002)

### Water Quality Sampling

NYSDEC Rotating Integrated Basin Studies (RIBS) Intensive Network monitoring of Deans Creek in Westmoreland, Oneida County, (at East Main Street) was conducted in 2005 and 2006. Intensive Network sampling typically includes

macroinvertebrate community analysis, water column chemistry, toxicity testing, sediment assessment and macroinvertebrate tissue analysis. Biological (macroinvertebrate) sampling indicated the lower range of slightly impacted conditions. In such samples some replacement of sensitive ubiquitous species by more tolerant species occurs, although the sample also includes a balanced distribution of all expected species. Aquatic life is 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 stress to aquatic life. Impact source determination found the fauna to be most similar to communities influenced by organic loads and low dissolved oxygen from sewage or animal wastes. Water column chemistry indicates levels of pathogen (total and fecal coliform) to be present at levels that constitute parameters of concern. Toxicity testing using water from this location detected no significant mortality or reproductive effects on the test organism. Sediment screening for acute toxicity indicated some sediment toxicity and no porewater toxicity was indicated. Bottom sediments analysis based on sediment quality guidelines developed for freshwater ecosystems revealed overall sediment quality is not likely to cause chronic toxicity to sediment-dwelling organisms. (DEC/DOW, BWAM/RIBS, January 2010)

A biological (macroinvertebrate) survey/assessment of Deans Creek in Westmoreland (at Route 233) was conducted as part of the RIBS biological screening effort in 2005. Sampling results indicated slightly impacted conditions. In such samples some replacement of sensitive ubiquitous species by more tolerant species occurs, although the sample also includes a balanced distribution of all expected species. Aquatic life is 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 the fauna to be most similar to communities influenced by organic wastes (sewage, animal waste). These results are consistent with results found during sampling at this site in 2000. (DEC/DOW, BWAM/SBU, January 2010)

#### Section 303(d) Listing

Deans Creek is not currently included on the Section 303(d) List of Impaired/TMDL Waters. However additional monitoring and assessment is suggested to verify whether the known impacts to the waterbody rise to the level of impairment and if the waterbody should be considered for future listing. Until such a determination is made, the waterbody will be assessed as having minor impacts to uses, but specific uses may be noted as suspected of being impaired. (DEC/DOW, BWAM/WQAS, April 2010)

#### Segment Description

This segment includes the entire stream and all tribs. The waters of the stream are Class C,C(TS). Tribs to this reach/segment, including Sucker Brook (-6), are also Class C.



# White Creek, Upper, and tribs ( 1204-0012)

NoKnownImpct

## Waterbody Location Information

Revised: 02/04/2010

<b>Water Index No:</b>	H-240-223-24	<b>Drain Basin:</b>	Mohawk River
<b>Hydro Unit Code:</b>	02020004/040	<b>Str Class:</b>	AA
<b>Waterbody Type:</b>	River (Low Flow)	<b>Reg/County:</b>	6/Oneida Co. (33)
<b>Waterbody Size:</b>	8.3 Miles	<b>Quad Map:</b>	UTICA WEST (I-19-3)
<b>Seg Description:</b>	stream and tribs, above Franklin Springs		

## 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 White Creek in Franklin Springs (at Grant Street) was conducted as part of the RIBS biological screening effort in 2005. Sampling results indicated slightly impacted conditions. In such samples the community is slightly altered from natural conditions. Some sensitive species are not present and the overall abundance of macroinvertebrates is lower. However, the effects on the fauna are relatively insignificant and water quality is considered to be good. The nutrient biotic index and impact source determination indicate low enrichment in the stream and fauna that is most similar to 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 2010)

### Segment Description

This segment includes the portion of the stream and selected/smaller tribs above unnamed trib -3 near Franklin Springs. The waters of this portion of the stream are Class AA. Tribs to this reach/segment are also Class AA. Lower Whites Creek (24) is listed with the Middle Oriskany Creek segment.

# Big Creek and tribs ( 1204-0005)

NoKnownImpct

## Waterbody Location Information

Revised: 02/03/2010

<b>Water Index No:</b>	H-240-223-34	<b>Drain Basin:</b>	Mohawk River
<b>Hydro Unit Code:</b>	02020004/040	<b>Str Class:</b>	C
<b>Waterbody Type:</b>	River (Low Flow)	<b>Reg/County:</b>	6/Oneida Co. (33)
<b>Waterbody Size:</b>	37.1 Miles	<b>Quad Map:</b>	HUBBARDSVILLE (J-19-4)
<b>Seg Description:</b>	entire stream and tribs		

## 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 Big Creek in Deansboro (at California Road) was conducted as part of the RIBS biological screening effort in 2005. Sampling results indicated slightly impacted conditions. In such samples the community is slightly altered from natural conditions. Some sensitive species are not present and the overall abundance of macroinvertebrates is lower. However, the effects on the fauna are relatively insignificant and water quality is considered to be good. The nutrient biotic index and impact source determination indicate some enrichment in the stream with fauna that is most similar to communities influenced by nonpoint sources. These results are consistent with field sampling results at the site in 2000 which satisfied field screening criteria as a non-impacted stream. Aquatic life support is considered to be fully supported in the stream, and there are no other apparent water quality impacts to designated uses. (DEC/DOW, BWAM/SBU, January 2010)

### Segment Description

This segment includes the entire stream and all tribs. The waters of the stream are Class C,C(T). Tribs to this reach/segment, including McAdam Brook (-2), Tower Brook (-6), Fuess Brook (-7) and Waterman Brook (-9), are also Class C,C(T).

# Madison Lake ( 1204-0006)

NoKnownImpct

## Waterbody Location Information

Revised: 01/29/2010

<b>Water Index No:</b>	H-240-223-P1051	<b>Drain Basin:</b>	Mohawk River
<b>Hydro Unit Code:</b>	02020004/040	<b>Str Class:</b>	C
<b>Waterbody Type:</b>	Lake (Mesotrophic)	<b>Reg/County:</b>	7/Madison Co. (27)
<b>Waterbody Size:</b>	34.5 Acres	<b>Quad Map:</b>	MUNNSVILLE (J-18-2)
<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

Madison Lake has been sampled as part of the NYSDEC Citizen Statewide Lake Assessment Program (CSLAP) in 1992, 1993, 1998 and from 2001 through 2008. An Interpretive Summary report of the findings of this sampling was published in 2009. These data indicate that the lake continues to be best characterized as mesotrophic, or moderately unproductive. Phosphorus levels in the lake consistently fall below state guidance values indicating impacted/stressed recreational uses, though levels have been somewhat higher in recent years. 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 weakly to moderately colored, but this is considered to reflect natural conditions and does not limit water transparency. (DEC/DOW, BWAM/CSLAP, February 2009)

### 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." The lake itself is most often described as "not quite crystal clear." Assessments have noted that aquatic plants occasionally grow to the lake surface, and have been cited more frequently as impacting recreational uses. (DEC/DOW, BWAM/CSLAP, February 2009)

### Lake Uses

This lake waterbody is designated class C, suitable for use as a general recreation water and aquatic life support, but not for water supply use or public bathing. 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 the entire lake.

# Leland Pond ( 1204-0007)

**Threatened**

## Waterbody Location Information

Revised: 10/30/2002

<b>Water Index No:</b>	H-240-223-P1052/P1053	<b>Drain Basin:</b>	Mohawk River
<b>Hydro Unit Code:</b>	02020004/040	<b>Str Class:</b>	C
<b>Waterbody Type:</b>	Lake (Unknown Trophic)	<b>Reg/County:</b>	7/Madison Co. (27)
<b>Waterbody Size:</b>	9.9 Acres	<b>Quad Map:</b>	HAMILTON (J-18-3)
<b>Seg Description:</b>	entire pond		

## Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

<b>Use(s) Impacted</b>	<b>Severity</b>	<b>Problem Documentation</b>
Recreation	Threatened	Known

### Type of Pollutant(s)

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

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

Known: ---  
Suspected: ---  
Possible: ON-SITE/SEPTIC SYST, Agriculture, Other Source (Waterfowl)

## Resolution/Management Information

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

## Further Details

### Overview

Recreational (swimming, fishing, boating) uses in Leland Pond are threatened by slightly elevated nutrient levels. On-site septic systems serving homes along the shoreline, agricultural activity in the lake watershed and waterfowl are considered possible sources of nutrients.

### Water Quality Sampling

Leland Pond were included in the NYSDEC Citizens Statewide Lake Assessment Program (CSLAP) volunteer monitoring effort from 1992 through 1996. Results of this study indicated that phosphorus readings in both ponds approach the criteria associated with threatened waters on a regular (>10% of all sampling sessions, respectively) basis, and the criteria for slightly impacted conditions in the lower segment. These conditions support a listing of threatened for recreational uses for at least the lower segment. (DEC/DOW, BWM/Lake Services, August 2002)

The upper pond has a year round public access from a DEC boat launching site. The lake has a year round brown trout population.

### Segment Description

This segment includes the total area of both lower (P1052) and upper (P1053) ponds.