

Fox Creek Watershed (0202000505)

Water Index Number

H-240- 82- 67 H-240- 82- 67 H-240- 82- 67 H-240- 82- 67-10-P605 H-240- 82- 67-24 H-240- 82- 67-24-10-P605a,P605b H-240- 82- 67-24-P608 H-240- 82- 67-26 H-240- 82- 67-33-1-P609

Waterbody Segment

Fox Creek, Lower, and tribs (1202-0008) Fox Creek, Middle, and minor tribs (1202-0041) Fox Creek, Upper, and tribs (1202-0004) Echo Pond (1202-0042) Switz Kill and tribs (1202-0007) White Birch Pond, Fawn Lake (1202-0006) Onderdonk Lake (1202-0005) Beaverdam Creek and tribs (1202-0043) Warners Lake (1202-0044)

Category

NoKnownImpct NoKnownImpct UnAssessed NoKnownImpct UnAssessed MinorImpacts NoKnownImpct NoKnownImpct

Fox Creek, Lower, and tribs (1202-0008)

Waterbody Location Information

Water Index No: H-240-82-67 Drain Basin: Mohawk River **Hydro Unit Code:** 02020005/090 Str Class: Α Schoharie Creek Waterbody Type: River (Low Flow) **Reg/County:** 4/Schoharie Co. (48) Waterbody Size: 43.7 Miles **Quad Map:** SCHOHARIE (K-23-2) Seg Description: stream and tribs, from mouth to Gallupville 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:

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

Possible:

Water Quality Sampling

NYSDEC Rotating Intensive Basin Studies (RIBS) Intensive Network monitoring of Fox Creek in Schoharie (at State Route 30) was conducted in 2001. Sampling of the water column, sediments, and invertebrate tissues was conducted, as well as macroinvertebrate community analysis. Biological sampling results indicated non- to slightly impacted conditions, and overall good water quality. The only parameter of concern in the water column found in 10 sampling events in 2001 was iron, which was measured in concentrations above the assessment criterion in 20% of the samples. Sediment and macroinvertebrate tissue analysis showed no compounds present at concentrations above levels of concern. No acute or chronic toxicity was indicated in the water column on three dates of testing. (DEC/DOW, BWAR/RIBS, April 2003)

Biological (macroinvertebrate) assessments of Fox Creek near the mouth in Vroman Corners/Schoharie and above this reach in West Berne were conducted in 2000 as part of the RIBS effort. The downstream Schoharie site was assessed as slightly impacted and the West Berne site was assessed as non-impacted. No source for the downstream impact was indicated, as the impact was judged to be very minor. The Schoharie site was also assessed as slightly impacted in 2001 sampling, with nutrient enrichment as the likely cause. In spite of these minor impacts, aquatic life is considered to be fully supported in the stream, and there are no other apparent water quality impacts. (DEC/DOW, BWAR/SBU, April 2003)

Revised: 08/14/2002

Watershed Management

The Fox Creek watershed is primarily agricultural but farming activity has declined in recent years. Best management practices have been and are being implemented at many farms through USDA EQIP. The are areas of significant streambank erosion along the creek. (Schoharie County SWCD/WQCC, April 2002)

The Village of Schoharie uses a reservoir on the creek as a backup water supply (infiltration gallery).

Segment Description

This segment includes the portion of the stream and all tribs from the mouth to the Gallupville Bridge. The waters of this portion of the stream are Class B from the mouth to trib -b and Class A for the remainder of the reach. Tribs to this reach/segment, including King Creek (-10), are primarily Class C, C(TS); some smaller tribs are designated Class A.

Fox Creek, Middle, and minor tribs (1202-0041)

Water Index No: H-240-82-67 Drain Basin: Mohawk River **Hydro Unit Code:** 02020005/090 Str Class: С Schoharie Creek Waterbody Type: River (Low Flow) **Reg/County:** 4/Schoharie Co. (48) Waterbody Size: 61.0 Miles Quad Map: GALLUPVILLE (K-24-1) Seg Description: stream and selected tribs, from Gallupville to Berne 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

Waterbody Location 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

Further Details

Water Quality Sampling

A biological (macroinvertebrate) assessment of Fox Creek in West Berne (at Route 443) was conducted as part of the RIBS biological screening effort in 2005. Sampling results indicated non-impacted conditions. Such samples are dominated by clean-water species and are 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 samples reveal no, or only incidental, anomalies. These results are consistent with sampling conducted at the site in 2000. Aquatic life community is fully supported. (DEC/DOW, BWAM/SBU, January 2010)

These results are also consistent with conditions reported in a 1992 biological survey of Fox Creek. This survey found good to excellent water quality along the reach from West Berne to East Berne, and in Switz Kill. (Fox Creek Biological Assessment Report, Bode et al., DEC/DOW, BWAR/SBU, May 1993)

Watershed Management

The Fox Creek watershed is primarily agricultural but farming activity has declined in recent years. Best management practices have been and are being implemented at many farms through USDA EQIP. The are areas of significant streambank erosion along the creek. (Schoharie County SWCD/WQCC, April 2002)

Revised: 01/29/2010

NoKnownImpct

Resolution Potential: n/a

Segment Description

This segment includes the portion of the stream and selected/smaller tribs from the Gallupville Bridge to Beaverdam Creek (-26) in Berne. The waters of this portion of the stream are Class C. Tribs to this reach/segment are also Class C. Switz Kill (-24) and Beaverdam Creek (-26) are listed separately.

Fox Creek, Upper, and tribs (1202-0004)

Waterbody Location Information

Water Index N	No:	H-240- 82- 67			Drain Basin:	Mohawk River
Hydro Unit C	ode:	02020005/090	Str Class:	C(T)		Schoharie Creek
Waterbody Ty	ype:	River (Low Flow)			Reg/County:	4/Albany Co. (1)
Waterbody Si	ize:	42.1 Miles			Quad Map:	WESTERLO (K-24-3)
Seg Descriptio	on:	stream and tribs, ab	ove Berne			
Water Qual	lity Pr	oblem/Issue Inf	ormation		(CAPS indicated)	ate MAJOR Use Impacts/Pollutants/Sources)
Use(s) Impact NO USE IMI	e d PAIRM	NT	Severity		Proble	em Documentation
Type of Pollut	tant(s)					
Known:						
Suspected:						
Possible:						
Source(s) of P	ollutan	t(s)				
Known:						
Suspected:						
Possible:						

Resolution/Management Information

8 (No Known Use Impairment)
(Not Applicable for Selected RESOLVABILITY)
n/a
n/a

Resolution Potential: n/a

Further Details

Water Quality Sampling

A biological (macroinvertebrate) assessment of Fox Creek in West Berne (at Route 443) was conducted as part of the RIBS biological screening effort in 2005. Sampling results indicated non-impacted conditions. Such samples are dominated by clean-water species and are 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 samples reveal no, or only incidental, anomalies. These results are consistent with sampling conducted at the site in 2000. Aquatic life community is fully supported. (DEC/DOW, BWAM/SBU, January 2010)

These results are also consistent with conditions reported in a 1992 biological survey of Fox Creek. This survey found good to excellent water quality along the reach from West Berne to East Berne, and in Switz Kill. (Fox Creek Biological Assessment Report, Bode et al., DEC/DOW, BWAR/SBU, May 1993)

Watershed Management

The Fox Creek watershed is primarily agricultural but farming activity has declined in recent years. Best management practices have been and are being implemented at many farms through USDA EQIP. There are areas of significant streambank erosion along the creek. (Schoharie County SWCD/WQCC, April 2002)

NoKnownImpct

Revised: 02/10/2010

The Village of Berne is under order to construct a wastewater treatment plant to serve homes that currently have on-site septic systems. Construction is scheduled to be complete by July 2011. (DEC/DOW, Region 4, April 2010)

Previous Assessment

Concerns were previously raised regarding threats to natural resources (fishery) habitat in this trout stream due to thermal stresses attributed to agricultural activities and in the watershed. Agricultural activity contributes to the loss of riparian vegetation necessary to cool the stream. However more recent sampling suggests these threats are not atypical of many other streams in the state. Trout Unlimited has undertaken a long-term project with area farmers to improve the trout fishery. Trout have been documented in the headwaters of the stream.

Segment Description

This segment includes the portion of the stream and all tribs above Beaverdam Creek (-26) in Berne. The waters of this portion of the stream are Class C(T). Tribs to this reach/segment are Class C, C(T). Beaverdam Creek (-26) is listed separately.

Switz Kill and tribs (1202-0007)

02020005/090

Waterbody Location Information Water Index No: H-240-82-67-24 Drain Basin: Mohawk River

Str Class: C(T)

Waterbody Type: River (Low Flow) **Reg/County:** 4/Albany Co. (1) Waterbody Size: 65.7 Miles Quad Map: **RENNSELAERVILLE (K-24-4)** Seg Description: 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

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

Further Details

Hydro Unit Code:

Water Quality Sampling

A biological (macroinvertebrate) assessment of Switz Kill in Berne (at Ravine Road) was conducted as part of the RIBS biological screening effort in 2005. Sampling results indicated non-impacted conditions. Such samples are dominated by clean-water species and conditions that reflect a natural community with minimal, if any, human impacts. Aquatic life community is clearly fully supported. These results are consistent with sampling conducted at this site in 2000. (DEC/DOW, BWAM/SBU, January 2010)

These results are also consistent with conditions reported in a 1992 biological survey of Fox Creek. This survey found good to excellent water quality along the reach from West Berne to East Berne, and in Switz Kill. (Fox Creek Biological Assessment Report, Bode et al., DEC/DOW, BWAR/SBU, May 1993)

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 are also Class C, C(T).

Schoharie Creek

Revised: 02/01/2010

Resolution Potential: n/a

Onderdonk Lake (1202-0005)

Waterbody Location Information

Water Index N	No: H-240- 82- 67-24-Pe	508	Drain Basin:	Mohawk River
Hydro Unit Co	ode: 02020005/090	Str Class: B		Schoharie Creek
Waterbody Type:Lake (EutrophWaterbody Size:65.5 Acres			Reg/County:	4/Albany Co. (1)
			Quad Map:	WESTERLO (K-24-3)
Seg Descriptio	n: entire lake			
Water Qual	ity Problem/Issue Info	ormation	(CAPS indic	ate MAJOR Use Impacts/Pollutants/Sources)
Use(s) Impacte	ed	Severity	Proble	em Documentation
Recreation		Stressed	Knov	wn
Aesthetics		Stressed	Knov	wn
Type of Pollut	ant(s)			
Known:	NUTRIENTS (phosphorus	5)		
Suspected: Algal/Weed Growth				
Possible:	Pesticides			
Source(s) of Po	ollutant(s)			
Known:				
Suspected:	ON-SITE/SEPTIC SYST			
Possible:				

Resolution/Management Information

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

Further Details

Overview

Recreational (fishing, boating) uses and aesthetics in Onderdonk Lake are known to experience minor impacts due to nutrient loads and reduced water clarity. On-site septic systems and lawn runoff from homes along the lake are considered the most likely source. Some weed growth is reported, but neither aquatic weed nor algal growth appears to reach the threshold of impairing uses.

Water Quality Sampling

Onderdonk Lake was sampled as part of the NYSDEC Lake Classification and Inventory (LCI) sampling effort, a component of the Rotating Intensive Basin Studies (RIBS) Program, in 2006. Nutrient, chlorophyl and clarity measurements taken at that time revealed the lake was best characterized as mesotrophic, or moderately productive. Results of this study confirm elevated phosphorus levels and reduced water clarity, but algae levels do not appear to be high enough to render the lake susceptible to frequent blooms or the production of toxins or taste and odor compounds (although these were not specifically analyzed in these samples). The plant community was dominated by native plants growing just below the lake surface, although this may have been the result of active management (with aquatic herbicides) rather than "natural" subsurface plant growth. Curly leafed pondweed (Potamogeton crispus), an exotic plant species, was found in the lake, but this early season plant did not appear to be growing sufficiently to impact recreational uses of the lake. (DEC/DOW, BWAM/RIBS, June 2010)

MinorImpacts

Revised: 07/02/2010

Resolution Potential: Medium

These results are consistent with a 2001 Lake Classification and Inventory study effort. Results of this study also indicated elevated phosphorus levels and reduced water clarity in the lake. Significant rooted aquatic plant growth was not observed. (DEC/DOW, BWM/Lake Services, August 2000)

Water Quality Management

Active weed management through herbicide application (diquat and copper sulfate) to reduce algal and weed growth has been undertaken. (Albany County WQCC, 2004)

Beaverdam Creek and tribs (1202-0043)

Waterbody Location Information

Water Index No	H-240- 82- 67-26			Drain Basin:	Mohawk River
Hydro Unit Cod	le: 02020005/090	Str Class:	С		Schoharie Creek
Waterbody Typ	e: River (Low Flow))		Reg/County:	4/Albany Co. (1)
Waterbody Size	23.7 Miles			Quad Map:	GALLUPVILLE (K-24-1)
Seg Description	entire stream and the	ribs			
Water Qualit	y Problem/Issue Int	formation		(CAPS indic	ate MAJOR Use Impacts/Pollutants/Sources)
Use(s) Impacted	l	Severity		Proble	em Documentation
NO USE IMPA	AIRMNT				
Type of Polluta	nt(s)				
Known: -					
Suspected: -					
Possible: -					
Source(s) of Pol	lutant(s)				
Known: -					
Suspected: -					
Possible: -					
Resolution/M	anagement Inform	ation			

8 (No Known Use Impairment)
(Not Applicable for Selected RESOLVABILITY)
n/a
n/a

Resolution Potential: n/a

Further Details

Water Quality Sampling

A biological (macroinvertebrate) assessment of Beaverdam Creek in Berne (at Route 156) 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 a 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 elevated enrichment in the stream, however the fauna is most similar to natural communities with some impoundment and nonpoint source influences. These results are consistent with results of a field assessment conducted at this site in 2000 which found a fauna that satisfied field screening criteria indicating non-impacted water quality. 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. Tribs to this reach/segment are also Class C.

Revised: 01/29/2010

Warners Lake (1202-0044)

Waterbody Location Information

H-240-82-67-33-1-P609

Water Index No:

тт

Hydro Unit C Waterbody Ty Waterbody Si Seg Descriptio	ode: 02 ype: La ize: 11 on: ent	020005/090 ke (Unknown 5.6 Acres ire lake	Str Class: n Trophic)	B(T)	Reg/County: Quad Map:	Schoharie Creek 4/Albany Co. (1) WESTERLO (K-24-3)
Water Qual	lity Prob	lem/Issue I	nformation		(CAPS indic	ate MAJOR Use Impacts/Pollutants/Sources)
Use(s) Impact NO USE IMI	e d PAIRMNT	,	Severity		Proble	em Documentation
Type of Pollut	tant(s)					
Known:						
Suspected:						
Possible:						
Source(s) of P	ollutant(s)				
Known:						
Suspected:						
Possible:						
Resolution/1	Manager	nent Inforr	nation			

Drain Basin: Mohawk River

8 (No Known Use Impairment) **Issue Resolvability: 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

Warners Lake was included in the 2001 Lake Classification and Inventory study effort. Results of this study found no evidence of water quality impairment. (DEC/DOW, BWM/Lake Services, August 2002)

Revised: 08/19/2002