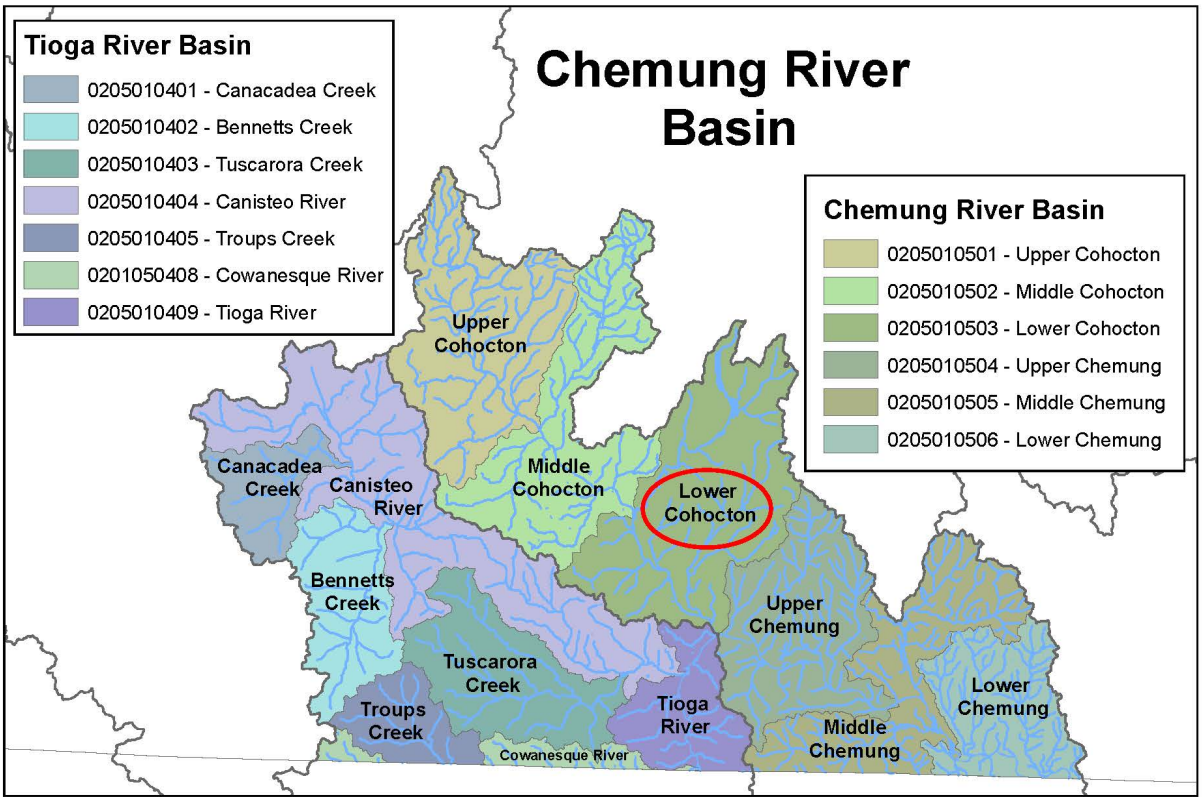

Chemung River/Lower Cohocton Watershed

(0205010503)

Water Index Number	Waterbody Segment	Category
Pa 3-58 (portion 1)	Cohocton River, Lower, and minor tribs (0502-0010)	Need Verific
Pa 3-58- 3	Meads Creek, Lower, and minor tribs (0502-0008)	MinorImpacts
Pa 3-58- 3	Meads Creek, Upper, and tribs (0502-0019)	MinorImpacts
Pa 3-58- 3- 3	Dry Run and tribs (0502-0020)	MinorImpacts
Pa 3-58- 3- 3-P38	Cinnamon Lake (0502-0021)	UnAssessed
Pa 3-58- 8	Wolf Run and tribs (0502-0022)	UnAssessed
Pa 3-58-11	Michigan Creek and tribs (0502-0023)	UnAssessed
Pa 3-58-11-P40	Thurston Pond (0502-0024)	UnAssessed
Pa 3-58-15	Mud Creek and tribs (0502-0025)	Need Verific
Pa 3-58-15- 4-P42	Peterson Lake (0502-0026)	UnAssessed
Pa 3-58-15- 5-P43,P45,P46	Sanford, Van Keuren, Round Lakes (0502-0027)	UnAssessed
Pa 3-58-15-P47	Lamoka Lake and Mill Pond (0502-0001)	Impaired Seg
Pa 3-58-15-P47-	Tribs to Lamoka Lake and Mill Pond (0502-0028)	UnAssessed
Pa 3-58-15-P47- 4-P48	Waneta Lake (0502-0002)	Impaired Seg
Pa -58-15-P47- 4-P48-	Tribs to Waneta Lake (0502-0029)	UnAssessed
Pa 3-58-15-P47- 6	Tobehanna Creek and tribs (0502-0007)	Need Verific

Cohocton River, Lower, and minor tribs (0502-0010) Need Verific

Waterbody Location Information

Revised: 02/02/2007

Water Index No: Pa 3-58 (portion 1)
Hydro Unit Code: 02050105/120 **Str Class:** C
Waterbody Type: River
Waterbody Size: 65.9 Miles
Seg Description: stream and selected tribs, from mouth to Savona

Drain Basin: Chemung River
Chemung River
Reg/County: 8/Steuben Co. (51)
Quad Map: CAMPBELL (M-12-1)

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: NUTRIENTS (phosphorus)
Suspected: Silt/Sediment
Possible: Pathogens

Source(s) of Pollutant(s)

Known: - - -
Suspected: AGRICULTURE, Streambank Erosion
Possible: Hydro Modification, On-Site/Septic Syst

Resolution/Management Information

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

Further Details

Aquatic life support in this portion of the Cohocton River is thought to experience threats due to nutrient enrichment from nonpoint sources in the surrounding watershed.

NYSDEC Rotating Intensive Basin Studies (RIBS) Intensive Network monitoring of Cohocton River in Curtis, Steuben County, (at Route 4) was conducted in 2003. Intensive Network sampling typically includes macroinvertebrate community analysis, water column chemistry, sediment and invertebrate tissues analysis and toxicity evaluation. The biological (macroinvertebrate) assessment for the site indicated slightly impacted water quality conditions. The fauna retains a high diversity of mayflies and caddisflies, but productivity is very high and the stream bottom is inundated with diatoms and filamentous algae. Crayfish collected for tissue analysis did not show metals, organochlorine pesticides, PCBs, or PAHs above levels of concern. Water column sampling revealed iron to be a parameter of concern. However, iron is considered to be naturally occurring and not a source of water quality impacts. Coliform levels varied widely, with some very high counts. Mercury was present above the assessment criterion in one of ten samples collected. Bottom sediment sampling found indications of some toxicity but not at a level sufficient to cause chronic impacts to aquatic life. Toxicity testing of the water column showed no significant mortality or reproductive impacts. (DEC/DOW, BWAM/RIBS, January 2005)

Biological (macroinvertebrate) assessment of the Cohocton River in Painted Post (at Canada Road), Coopers Plains (at

Smith Hill Road), Curtis (at Route 4) and Savona (at Route 12) were also conducted in 2002 as part of the RIBS Biological Screening effort. Most sampling results indicated non-impacted water quality conditions, though slightly impacted conditions were noted occasionally. These and other sites along the Cohocton River have been sampled at various times since 1973 and since 1992 all samples have shown water quality to range between slightly and non-impacted. Sites are generally dominated by clean-water mayflies. However midges, filter-feeding caddisflies and algal-scraping riffle beetles are typically numerous as well, reflecting abundant algae and some nutrient enrichment. Nutrient biotic evaluation determined that conditions at these sites also straddled the line between mesotrophic and eutrophic conditions. The most recent sampling shows improved water quality at these downstream sites and lower levels of nutrient enrichment. Although aquatic life support is considered to be fully supported in the stream, sampling results along the total length of the river also suggest that the level of nutrient enrichment creates a threat to aquatic life support that warrants continued monitoring. (Biological Stream Assessment of the Cohocton River, DEC/DOW, BWAM/SBU, December 2005)

The river runs through broad flat valley that is intensively farmed and contains a number of concentrated residential populations (Bath, Savona, Campbell, Coopers Plains and Long Acres). These communities are connected by a major highway (NYS 17/US 15) that follows the river. A variety of sources have the potential to contribute pollutants to and impact water quality in the stream. In addition to agricultural and other nonpoint sources, industrial sites/discharges located along this reach of the river have also been cited. Possible other sources/causes of impairment include barnyard runoff and other agricultural activities. There are many dairy farms located in this area and many have small tributaries running through barnyards. Pasture fields running across the streams with cattle in the streams are also a problem. The county ACP is looking at the barnyard problems. The county also cites failing on-site septic systems as a possible source. (Steuben County WQCC, August 2004)

Silt and sedimentation from streambank erosion and sedimentation, the result of flashy flow in steep gradient streams and tribs is thought to negatively impact the stream habitat and limit the fishery in the river tribs. Annual air photographs of the stream by Steuben County SWCD have documented the erosion. A road ditch assessment of this watershed by Upper Susquehanna Coalition/SWCD also documents road bank erosion. (Steuben County WQCC, August 2004)

The stream is classified as a warmwater fishery and DEC Fisheries staff report that it is primarily a small mouth bass fishery.

This segment includes the portion of the stream and selected/smaller tribs from the confluence with the Tioga River in Painted Post to Mud Creek (-15) in Savona. The waters of this portion of the stream are Class C. Tribs to this reach/segment, including Erwin Hollow Brook (-1), Curtis Run (-6), Stoney Run (-7) and Green Hill Creek (-13), are Class C,C(TS). Meads Creek (-3), Wolf Run (-8), Michigan Creek (-11), Mud Creek (-15) and Middle/Upper Cohocton River are listed separately.

Meads Creek, Lower, and minor tribs (0502-0008) MinorImpacts

Waterbody Location Information

Revised: 02/05/2007

Water Index No: Pa 3-58- 3
Hydro Unit Code: 02050105/110 **Str Class:** C(T)
Waterbody Type: River
Waterbody Size: 27.0 Miles
Seg Description: stream and selected tribs, from mouth to Meads Creek

Drain Basin: Chemung River
Chemung River
Reg/County: 8/Steuben Co. (51)
Quad Map: CAMPBELL (M-12-1)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

Known: SILT/SEDIMENT
Suspected: Water Level/Flow, Thermal Changes
Possible: - - -

Source(s) of Pollutant(s)

Known: HABITAT MODIFICATION, STREAMBANK EROSION, Roadbank Erosion
Suspected: Hydro Modification
Possible: Agriculture

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

Hydrologic/habitat uses in this portion of Meads Creek are thought to experience minor impacts due to silt/sedimentation related to streambank erosion and habitat modification.

Silt and sedimentation from chronic flooding, streambank erosion and sedimentation is thought to negatively impact the stream habitat and limit the fishery. Silty soils and the absence of riparian buffer zones make river banks highly susceptible to erosion from flashy flow in steep gradient streams and tribs. Embankment failures result in the deposition of excessive sediment loads as well as trees and other debris. Municipalities in the watershed have periodically removed gravel from the channel in an effort to alleviate flooding. Extensive channel clearing was conducted in portions of the stream in response to major flooding in 1996. This repeated channel clearing with heavy equipment has disrupted aquatic habitat and may be contributing ongoing channel instability. Annual air photographs of the stream by Steuben County SWCD have documented the erosion. A road ditch assessment of this watershed by Upper Susquehanna Coalition/SWCD also documents road bank erosion. The Steuben County SWCD has implemented numerous stream stabilization projects in the watershed, however many unstable reaches and unprotected banks remain. A Meads Creek Watershed Citizens Committee has been formed to address the flooding issues and develop and watershed management plan. (Steuben County WQCC, August 2004)

A biological (macroinvertebrate) assessment of Meads Creek in Coopers Plains (at Route 417) was conducted in 2002.

Sampling results indicated non-impacted water quality conditions. The fauna was diverse and all screening criteria for waters having no known impacts were met. Sampling on this stream in East Campbell in 1997 and 1998 also indicated non-impacted conditions. Mayflies, stoneflies and caddisflies were present in these samples and Impact Source Determination indicated that the sample was most similar to natural communities. (DEC/DOW, BWAM/SBU, June 2005)

Within Schuyler County, the Meads Creek valley is primarily rural agricultural and forested, however development pressure is growing. The density of residential and commercial development increases downstream in Steuben County. The watershed also includes a NYS Corrections shock incarceration facility.

Other sources of water quality information include: Schuyler County's Water Quality Strategy Plan: Guidance for the Future, Edition 5, Schuyler County WQCC, Montour Falls, New York, 1996; and Mapping Stressed Stream Segments in the Upper Susquehanna Basin, Mini-Grant Project Final Report, NYSSWCC, Albany, New York, submitted by Steuben County WQCC, 1997.

This segment includes the portion of the stream and selected/smaller tribs from the mouth to/including unnamed trib (-7a) in Meads Creek. The waters of this portion of the stream are Class C(T). Tribs to this reach/segment, including Frog Hollow Brook (-2), are Class C. Dry Run (-3) and Upper Meads Creek are listed separately.

Meads Creek, Upper, and tribs (0502-0019) MinorImpacts

Waterbody Location Information

Revised: 02/05/2007

Water Index No: Pa 3-58- 3
Hydro Unit Code: 02050105/110 **Str Class:** C(T)
Waterbody Type: River
Waterbody Size: 60.7 Miles
Seg Description: stream and tribs, above Meads Creek

Drain Basin: Chemung River
Chemung River
Reg/County: 8/Schuyler Co. (49)
Quad Map: BRADFORD (L-12-3)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

Known: HABITAT MODIFICATION, STREAMBANK EROSION, Roadbank Erosion
Suspected: Hydro Modification
Possible: Agriculture

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

Hydrologic/habitat uses in this portion of Meads Creek are thought to experience minor impacts due to silt/sedimentation related to streambank erosion and habitat modification.

Silt and sedimentation from chronic flooding, streambank erosion and sedimentation is thought to negatively impact the stream habitat and limit the fishery. Silty soils and the absence of riparian buffer zones make river banks highly susceptible to erosion from flashy flow in steep gradient streams and tribs. Embankment failures result in the deposition of excessive sediment loads as well as trees and other debris. Municipalities in the watershed have periodically removed gravel from the channel in an effort to alleviate flooding. Extensive channel clearing was conducted in portions of the stream in response to major flooding in 1996. This repeated channel clearing with heavy equipment has disrupted aquatic habitat and may be contributing ongoing channel instability. Annual air photographs of the stream by Steuben County SWCD have documented the erosion. A road ditch assessment of this watershed by Upper Susquehanna Coalition/SWCD also documents road bank erosion. The Steuben County SWCD has implemented numerous stream stabilization projects in the watershed, however many unstable reaches and unprotected banks remain. A Meads Creek Watershed Citizens Committee has been formed to address the flooding issues and develop and watershed management plan. (Steuben County WQCC, August 2004)

Though primarily agricultural and/or forested, a wide range of development pressures and other activities in this steep

topography watershed are also potential (or actual) sources of sediment loads. Logging in state and private lands, natural gas exploration and drilling, auto recycling operations, ATV trails and residential construction all contribute sediment loads to the streams. Encroachment into stream riparian areas and floodplains has impacts on water quality as well as wildlife protection. Support exists to address flooding problems through stream/hydrologic modification but this needs to be balanced to protect stream morphology and wildlife needs. (Scuyler County WQCC, January 2007)

This segment includes the portion of the stream and selected/smaller tribs above unnamed trib (-7a) in Meads Creek. The waters of this portion of the stream are Class C(T). Tribs to this reach/segment, including Pine Creek (-11), are Class C. Lower Meads Creek is listed separately.

Dry Run and tribs (0502-0020) MinorImpacts

Waterbody Location Information

Revised: 02/05/2007

Water Index No: Pa 3-58- 3- 3
Hydro Unit Code: 02050105/110 **Str Class:** C(TS)
Waterbody Type: River
Waterbody Size: 32.5 Miles
Seg Description: entire stream and tribs

Drain Basin: Chemung River
Chemung River
Reg/County: 8/Steuben Co. (51)
Quad Map: CORNING (M-12-2)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

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

Type of Pollutant(s)

Known: SILT/SEDIMENT, Restricted Passage
Suspected: - - -
Possible: - - -

Source(s) of Pollutant(s)

Known: STREAMBANK EROSION, Roadbank Erosion
Suspected: Hydro Modification
Possible: Agriculture

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

Hydrologic/habitat uses in Dry Run are thought to experience minor impacts due to silt/sedimentation and restricted passage related to streambank erosion.

Silt and sedimentation from the erosion of stream banks is thought to negatively impact the stream habitat and limit the fishery. Silty soils and the absence of riparian buffer zones make river banks highly susceptible to erosion from flashy flow in steep gradient streams and tribs. Embankment failures result in the deposition of excessive sediment loads as well as trees and other debris. Trout occur in the upper reaches off the stream, but passage into Meads Creek is frequently blocked by a dry streambed along the lower reach of Dry Run. Annual air photographs of the stream by Steuben County SWCD have documented the erosion. A road ditch assessment of this watershed by Upper Susquehanna Coalition/SWCD also documents road bank erosion. (Steuben County WQCC, August 2004)

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 Staton Creek (-1), are Class C.

Cinnamon Lake (0502-0021) UnAssessed

Waterbody Location Information

Revised: 05/26/2004

Water Index No: Pa 3-58- 3- 3-P38
Hydro Unit Code: 02050105/110 **Str Class:** C
Waterbody Type: Lake
Waterbody Size: 22.7 Acres
Seg Description: entire lake

Drain Basin: Chemung River
Chemung River
Reg/County: 8/Steuben Co. (51)
Quad Map: BRADFORD (L-12-3)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted **Severity** **Problem Documentation**

UnAssessed Water

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

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

Resolution/Management Information

Issue **Resolvability:** ()
Verification Status: (Not Applicable for Selected RESOLVABILITY)
Lead Agency/Office:
Resolution Potential: n/a
TMDL/303d Status: n/a

Further Details

Wolf Run and tribs (0502-0022) UnAssessed

Waterbody Location Information

Revised: 05/26/2004

Water Index No: Pa 3-58- 8
Hydro Unit Code: 02050105/120 **Str Class:** C
Waterbody Type: River
Waterbody Size: 23.6 Miles
Seg Description: entire stream and tribs

Drain Basin: Chemung River
Chemung River
Reg/County: 8/Steuben Co. (51)
Quad Map: SAVONA (L-12-4)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
UnAssessed Water		

Type of Pollutant(s)
Known: - - -
Suspected: - - -
Possible: - - -

Source(s) of Pollutant(s)
Known: - - -
Suspected: - - -
Possible: - - -

Resolution/Management Information

Issue **Resolvability:** ()
Verification Status: (Not Applicable for Selected RESOLVABILITY)
Lead Agency/Office:
Resolution Potential: n/a
TMDL/303d Status: n/a

Further Details

This segment includes the entire stream and all tribs. The waters of the stream are Class C. Tribs to this reach/segment, including McNutt Run (-1), are also Class C.

Michigan Creek and tribs (0502-0023) UnAssessed

Waterbody Location Information

Revised: 05/26/2004

Water Index No: Pa 3-58-11
Hydro Unit Code: 02050105/120 **Str Class:** C
Waterbody Type: River
Waterbody Size: 35.3 Miles
Seg Description: entire stream and tribs

Drain Basin: Chemung River
Chemung River
Reg/County: 8/Steuben Co. (51)
Quad Map: CAMPBELL (M-12-1)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
UnAssessed Water		

Type of Pollutant(s)
Known: - - -
Suspected: - - -
Possible: - - -

Source(s) of Pollutant(s)
Known: - - -
Suspected: - - -
Possible: - - -

Resolution/Management Information

Issue **Resolvability:** ()
Verification Status: (Not Applicable for Selected RESOLVABILITY)
Lead Agency/Office:
Resolution Potential: n/a
TMDL/303d Status: n/a

Further Details

Recent residential development has occurred around Tanglewood Lake, an impoundment of Michigan Creek near Forty Dollar Road in the Town of Campbell. Residents report some impacts due to aquatic weed growth. There has been no sampling or assessment of the lake conducted by NYSDEC to date.

This segment includes the entire stream and all tribs. The waters of the stream are Class C. Tribs to this reach/segment, including Burr Hollow Brook (-3), are Class C,C(T).

Thurston Pond (0502-0024) UnAssessed

Waterbody Location Information

Revised: 05/26/2004

Water Index No: Pa 3-58-11-P40
Hydro Unit Code: 02050105/120 **Str Class:** C
Waterbody Type: Lake
Waterbody Size: 23.8 Acres
Seg Description: entire lake

Drain Basin: Chemung River
Chemung River
Reg/County: 8/Steuben Co. (51)
Quad Map: RATHBONE (M-11-2)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted **Severity** **Problem Documentation**

UnAssessed Water

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

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

Resolution/Management Information

Issue **Resolvability:** ()
Verification Status: (Not Applicable for Selected RESOLVABILITY)
Lead Agency/Office:
Resolution Potential: n/a
TMDL/303d Status: n/a

Further Details

Mud Creek and tribs (0502-0025) Need Verific

Waterbody Location Information

Revised: 05/09/2007

Water Index No: Pa 3-58-15
Hydro Unit Code: 02050105/100 **Str Class:** C
Waterbody Type: River
Waterbody Size: 54.5 Miles
Seg Description: entire stream and tribs, mouth to Lamoka Lake

Drain Basin: Chemung River
Chemung River
Reg/County: 8/Steuben Co. (51)
Quad Map: SAVONA (L-12-4)

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 (phosphorus), PATHOGENS
Possible: - - -

Source(s) of Pollutant(s)

Known: - - -
Suspected: AGRICULTURE
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
TMDL/303d Status: n/a

Resolution Potential: Medium

Further Details

Aquatic life support and recreational in Mud Creek uses may experience minor impacts due to excessive nutrients and pathogens from agricultural and various other nonpoint sources. Additional monitoring of the stream is recommended to verify water quality conditions.

NYSDEC Rotating Intensive Basin Studies (RIBS) Intensive Network monitoring of Mud Creek in Savona, Steuben County, (at Route 415) was conducted in 2003. Intensive Network sampling typically includes macroinvertebrate community analysis, water column chemistry, sediment and invertebrate tissues analysis and toxicity evaluation. The biological (macroinvertebrate) assessment for the site indicated slightly impacted water quality conditions. The fauna retains a high diversity of mayflies and caddisflies, but productivity is very high and the stream bottom is inundated with diatoms and filamentous algae. Crayfish collected for tissue analysis did not show metals, organochlorine pesticides, PCBs, or PAHs above levels of concern. Water column sampling revealed mercury to be a parameter of concern, exceeding the assessment criterion in three of ten samples collected. Coliform levels varied widely but some high counts were noted. Bottom sediment sampling found indications of some toxicity but not at a level sufficient to cause chronic impacts to aquatic life. Toxicity testing of the water column showed no significant mortality or reproductive impacts. (DEC/DOW, BWAM/RIBS, January 2005)

A biological (macroinvertebrate) assessment of Mud Creek in Savona (at Route 415) was also conducted in 2002 as part of the RIBS Biological Screening effort. Sampling results indicated slightly impacted water quality conditions. The fauna was dominated by filter-feeding midges and caddisflies indicating nonpoint source enrichment. However, nutrient biotic evaluation determined these effects on the fauna to be minor. Aquatic life support is considered to be fully supported in the stream. (DEC/DOW, BWAM/SBU, June 2005)

Sampling results from a 2006 Susquehanna River Basin Chemung River Subbasin Survey indicated slight impacts, but these may have been partly the result of degraded habitat conditions rather than water quality conditions. (SRBC, March 2007)

This segment includes the entire stream and all tribs. The waters of the stream are Class C. Tribs to this reach/segment, including Birdseye Hollow Brook (-9), are also Class C.

Peterson Lake (0502-0026) UnAssessed

Waterbody Location Information

Revised: 05/26/2004

Water Index No: Pa 3-58-15- 4-P42
Hydro Unit Code: 02050105/100 **Str Class:** C
Waterbody Type: Lake
Waterbody Size: 9.1 Acres
Seg Description: entire lake

Drain Basin: Chemung River
Chemung River
Reg/County: 8/Steuben Co. (51)
Quad Map: SAVONA (L-12-4)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
UnAssessed Water		

Type of Pollutant(s)
Known: - - -
Suspected: - - -
Possible: - - -

Source(s) of Pollutant(s)
Known: - - -
Suspected: - - -
Possible: - - -

Resolution/Management Information

Issue **Resolvability:** ()
Verification Status: (Not Applicable for Selected RESOLVABILITY)
Lead Agency/Office:
Resolution Potential: n/a
TMDL/303d Status: n/a

Further Details

Sanford, Van Keuren, Round Lakes (0502-0027) UnAssessed

Waterbody Location Information

Revised: 05/26/2004

Water Index No: Pa 3-58-15- 5-P43,P45,P46
Hydro Unit Code: 02050105/100 **Str Class:** C
Waterbody Type: Lake
Waterbody Size: 62.4 Acres
Seg Description: total area of all three lakes

Drain Basin: Chemung River
Chemung River
Reg/County: 8/Steuben Co. (51)
Quad Map: SAVONA (L-12-4)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
UnAssessed Water		

Type of Pollutant(s)
Known: - - -
Suspected: - - -
Possible: - - -

Source(s) of Pollutant(s)
Known: - - -
Suspected: - - -
Possible: - - -

Resolution/Management Information

Issue **Resolvability:** ()
Verification Status: (Not Applicable for Selected RESOLVABILITY)
Lead Agency/Office:
Resolution Potential: n/a
TMDL/303d Status: n/a

Further Details

Lamoka Lake and Mill Pond (0502-0001) Impaired Seg

Waterbody Location Information

Revised: 06/04/2007

Water Index No: Pa 3-58-15-P47
Hydro Unit Code: 02050105/100 **Str Class:** A
Waterbody Type: Lake
Waterbody Size: 573.4 Acres
Seg Description: entire lake

Drain Basin: Chemung River
Chemung River
Reg/County: 8/Schuyler Co. (49)
Quad Map: WAYNE (L-12-2)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Public Bathing	Stressed	Known
Aquatic Life	Stressed	Suspected
RECREATION	Impaired	Known

Type of Pollutant(s)

Known: ALGAL/WEED GROWTH (Eurasian milfoil, other), Aesthetics
Suspected: D.O./Oxygen Demand, Nutrients
Possible: Pathogens, Silt/Sediment

Source(s) of Pollutant(s)

Known: HABITAT MODIFICATION
Suspected: Agriculture, On-Site/Septic Syst, Other Source (nutrient-rich sediment)
Possible: Roadbank Erosion, 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 **Resolution Potential:** Medium
TMDL/303d Status: 4c, B (Impaired by Pollution, Not Pollutant(s), Not Listed, more)

Further Details

Recreational uses of Lamoka Lake are considered impaired by excessive aquatic weed growth. The predominant plant species of concern is Eurasian milfoil. Public bathing is also considered stressed by these and other conditions in the lake. Aquatic life support may also be affected.

Lamoka Lake has been sampled by NYSDEC Region 8 staff as part of Citizens Statewide Lake Assessment Program (CSLAP) from 1988 to 1990 and by Regional Fisheries staff from the mid-1990s through the present. These data indicate that phosphorus levels in the lake occasionally (about 30% of samples) exceed the state guidance values indicating impacted/stressed recreational uses. Transparency measurements generally meet what is recommended for swimming beaches, with less than 5% of samples showing clarity to be less than 1.2 meters. Summer anoxic conditions (low dissolved oxygen) were consistently measured in the hypolimnion (below 20 feet), though such conditions are not unusual and resulting impact on the fishery has not been demonstrated. Readings for pH in the lake are typically within the state water quality standard range of 6.5 to 8.5, with less than 10% of readings exceeding 8.5. (DEC/DOW, BWAM/CSLAP, November 2005)

Recreational uses (swimming, boating, fishing) in the lake are limited by dense rooted vegetation which extends from

the shoreline to a depth of 6-12 feet. The predominant problem plant species is Eurasian water milfoil (Myriophyllum spicatum) with Curly-leafed Pondweed (Potamogeton crispus) also present to a lesser extent. Mechanical weed harvesting in the lake to control emergent aquatic vegetation has been conducted by Schuyler County in the past but has been discontinued. An experimental "spot treatment" of fluridone (Sonar) in 2005 in Fleets Cove was conducted in response to the nuisance aquatic plant populations. The lake association has supported a broader lakewide herbicide application to address the nuisance weed problems throughout the lake, however lingering concerns about such extensive treatment and the potential impacts throughout the Waneta-Lamoka Lakes ecosystem resulted in the smaller scale approach to aquatic plant management in the lake. This treatment effort and the ecological response in the lake has been closely monitored by NYSDEC, Cornell University, ENSR and the lake association. (DEC/DOW, BWAM/Lakes, November 2005)

Lamoka Lake (including Mill Pond) is a relatively shallow (<50 feet) lake. About 400 seasonal and year-round houses dot the shoreline. Recreational activities include boating, fishing and swimming. NYS-DEC maintains a boat launch site at the northern end of the lake. The waters of the lake are not used for a public drinking water supply, and no known withdrawals occur for private use. In general, DEC Fisheries staff cite the lake as an excellent warm water fishery.

A number of other pollutants contribute to the various impacts on uses of the lake. Inadequate and/or failing on-site septic systems that serve shoreline cottages and from local dairy farms and other agricultural activities in the watershed are thought to contribute excessive nutrient loads. Many seasonal cottages along the lake are being enlarged, completely remodeled/renovated and in some cases going to year-round use. The onsite wastewater systems are being updated accordingly. A septic tank inspection program has been established by the Lamoka Waneta Lakes Association within the Lamoka Lake Protection and Rehabilitation District (a special taxing district) and tanks are required to be inspected every five years. Low dissolved oxygen in the hypolimnion (below 20 feet of depth) of the lake may affect the survival of fish. Extensive lake bottom sediment deposits, which restrict navigation and provide a source of nutrients for plant growth, have also been cited as a problem. A number of county reports (The Schuyler County Aquatic Vegetation Control Program Report, 1997; Schuyler County's Water Quality Strategy Plan
Guidance for the Future, Edition 5, Schuyler County WQCC, Montour Falls, New York, 1996) and university studies (Preliminary Report of Plant Biomass and Plant Species Diversity, Johnson, R.L. et al., Cornell University, Ithaca, New York, 1997) have documented these issues and concerns. (Schuyler County WQCC, 2000).

This lake waterbody is designated class A, suitable for use as a water supply, public bathing beach, general recreation and aquatic life support. However the water quality monitoring results and assessment presented here focuses primarily on support of general recreation and aquatic life. Monitoring to assess potable water supply and public bathing use is generally the responsibility of state and/or local health departments.

Tribs to Lamoka Lake and Mill Pond (0502-0028) UnAssessed

Waterbody Location Information

Revised: 05/26/2004

Water Index No: Pa 3-58-15-P47-
Hydro Unit Code: 02050105/100 **Str Class:** C*
Waterbody Type: River
Waterbody Size: 24.7 Miles
Seg Description: total length of selected tribs to Lamoka Lake

Drain Basin: Chemung River
Chemung River
Reg/County: 8/Schuyler Co. (49)
Quad Map: WAYNE (L-12-2)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
UnAssessed Water		

Type of Pollutant(s)

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

Source(s) of Pollutant(s)

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

Resolution/Management Information

Issue **Resolvability:** ()
Verification Status: (Not Applicable for Selected RESOLVABILITY)
Lead Agency/Office:
Resolution Potential: n/a
TMDL/303d Status: n/a

Further Details

This segment includes the total length of selected/smaller tribs to Lamoka Lake. Tribs within this segment, including Little Tobehanna Creek (-5), are primarily Class C; the connecting channel between Waneta/Lamoka Lakes (-4) is designated as Class A. Tobehanna Creek (-6) is listed separately.

Waneta Lake (0502-0002) Impaired Seg

Waterbody Location Information

Revised: 02/07/2007

Water Index No: Pa 3-58-15-P47- 4-P48
Hydro Unit Code: 02050105/100 **Str Class:** A
Waterbody Type: Lake
Waterbody Size: 784.5 Acres
Seg Description: entire lake

Drain Basin: Chemung River
Chemung River
Reg/County: 8/Schuyler Co. (49)
Quad Map: WAYNE (L-12-2)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
Public Bathing	Stressed	Known
Aquatic Life	Stressed	Possible
RECREATION	Impaired	Known

Type of Pollutant(s)

Known: ALGAL/WEED GROWTH (Eurasian milfoil, other), Aesthetics
Suspected: D.O./Oxygen Demand, Nutrients
Possible: Pathogens, Silt/Sediment

Source(s) of Pollutant(s)

Known: HABITAT MODIFICATION
Suspected: Agriculture, On-Site/Septic Syst, Other Source (nutrient-rich sediment)
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: 4c, B (Impaired by Pollution, Not Pollutant(s), Not Listed, more)

Further Details

Recreational uses of Waneta Lake are considered impaired by excessive aquatic weed growth. The predominant plant species of concern are Eurasian milfoil and Curly-leaf pondweed. Public bathing is also considered stressed by these and other conditions in the lake. Aquatic life support may also be affected.

Waneta Lake has been sampled by NYSDEC Region 8 staff as part of the Finger Lakes Zebra Mussel Monitoring and Ecological Assessment Program beginning in 1995 and continuing through the present. These data indicate that phosphorus levels in the lake occasionally exceed the state guidance values indicating impacted/stressed recreational uses, however these are based on limited numbers of samples. Transparency measurements failed to meet what is recommended for swimming beaches about one-third of the time. Readings for pH in the lake varied considerably falling above the state water quality standard range of 6.5 to 8.5 in about 40% of samples taken and below the 6.5 minimum about 7% of the time. (DEC/DOW, BWAM/CSLAP, November 2005)

Recreational uses (swimming, boating, fishing) in the lake are limited by dense rooted vegetation which extends from the shoreline to a depth of 6-12 feet. The predominant problem plant species are Eurasian water milfoil (Myriophyllum spicatum) and Curly-leafed Pondweed (Potamogeton crispus). Mechanical weed harvesting by both Steuben and

Scuyler Counties to control emergent aquatic vegetation in the lake has been conducted in the past but has been discontinued. Waneta Lake was treated with Fluridone (Sonar) in the spring of 2003 in response to the nuisance populations for Eurasian milfoil. This treatment effort and the ecological response in the lake has been closely monitored by NYSDEC, Cornell University, ENSR and the lake association. The aquatic herbicide application was successful in reducing the populations of Eurasian milfoil, but the treatment also suppressed the growth of native plant communities as well. Herbicide treatment of Lamoka Lake (to control Eurasian milfoil and curtail the introduction of plants into Waneta Lake) was contingent on annual review of aquatic plant populations in Waneta Lake. Based on this review, a whole lake aquatic herbicide treatment of Lamoka Lake was denied in 2004, but a localized "spot treatment" of Lamoka Lake was allowed in 2005. (DEC/DOW, BWAM/Lakes, November 2005)

Waneta Lake is a relatively shallow (<30 feet) lake. About 700 seasonal and year-round houses and a Boy Scout camp dot the shoreline. Recreational activities include boating, fishing and swimming. NYS-DEC maintains a boat launch site on the lake. The waters of the lake are not used for a public drinking water supply, but some private residences are thought to draw drinking water from the lake.

A number of other pollutants contribute to the various impacts on uses of the lake. Inadequate and/or failing on-site septic systems that serve shoreline cottages and from local dairy farms and other agricultural activities in the watershed are thought to contribute excessive nutrient loads. Low dissolved oxygen in the hypolimnion (below 15 feet of depth) of the lake may affect the survival of fish. Extensive lake bottom sediment deposits, which restrict navigation and provide a source of nutrients for plant growth, have also been cited as a problem. A number of county reports (The Schuyler County Aquatic Vegetation Control Program Report, 1997; Schuyler County's Water Quality Strategy Plan: Guidance for the Future, Edition 5, Schuyler County WQCC, Montour Falls, New York, 1996) and university studies (Preliminary Report of Plant Biomass and Plant Species Diversity, Johnson, R.L. et al., Cornell University, Ithaca, New York, 1997) have documented these issues and concerns. (Schuyler County WQCC, 2000).

This lake waterbody is designated class A, suitable for use as a water supply, public bathing beach, general recreation and aquatic life support. However the water quality monitoring results and assessment presented here focuses primarily on support of general recreation and aquatic life. Monitoring to assess potable water supply and public bathing use is generally the responsibility of state and/or local health departments.

Tribs to Waneta Lake (0502-0029) UnAssessed

Waterbody Location Information

Revised: 05/26/2004

Water Index No: Pa 3-58-15-P47- 4-P48-
Hydro Unit Code: 02050105/100 **Str Class:** C*
Waterbody Type: River
Waterbody Size: 12.0 Miles
Seg Description: total length of all tribs to Waneta Lake
Drain Basin: Chemung River
Chemung River
Reg/County: 8/Schuyler Co. (49)
Quad Map: WAYNE (L-12-2)

Water Quality Problem/Issue Information

(CAPS indicate MAJOR Use Impacts/Pollutants/Sources)

Use(s) Impacted	Severity	Problem Documentation
UnAssessed Water		

Type of Pollutant(s)
Known: - - -
Suspected: - - -
Possible: - - -

Source(s) of Pollutant(s)
Known: - - -
Suspected: - - -
Possible: - - -

Resolution/Management Information

Issue **Resolvability:** ()
Verification Status: (Not Applicable for Selected RESOLVABILITY)
Lead Agency/Office:
Resolution Potential: n/a
TMDL/303d Status: n/a

Further Details

This segment includes the total length of all tribs to Waneta Lake. Tribs within this segment are primarily Class C; the connecting channel between Waneta/Keuka Lakes (-4) is designated as Class A.

Tobehanna Creek and tribs (0502-0007) Need Verific

Waterbody Location Information

Revised: 05/11/2007

Water Index No: Pa 3-58-15-P47- 6
Hydro Unit Code: 02050105/100 **Str Class:** C
Waterbody Type: River
Waterbody Size: 30.6 Miles
Seg Description: entire stream and tribs

Drain Basin: Chemung River
Chemung River
Reg/County: 8/Schuyler Co. (49)
Quad Map: WAYNE (L-12-2)

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: ALGAL/WEED GROWTH, NUTRIENTS, Silt/Sediment
Possible: Aesthetics, D.O./Oxygen Demand

Source(s) of Pollutant(s)

Known: - - -
Suspected: AGRICULTURE
Possible: Landfill/Land Disp., On-Site/Septic Syst

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

Recreational uses and aesthetics in Tobehanna Creek may experience impacts from aquatic weed growth and nutrients due to agricultural and other nonpoint sources.

Excessive weed growth in Tobehanna Lake (which is part of the creek) makes boating difficult at some times during the year. Site visits by SWCD staff found large masses of floating vegetation at the southern end of the lake in Tyrone. Very turbid water and streambank erosion near the lake dam was also noted. The slowing of the water resulting from the damming of the creek has caused increased deposition of sediments and perhaps nutrients. The backed up water has a foul odor and is low in oxygen. (Schuyler County Water Quality Strategy Plan, 1996)

Upland agricultural activity is considered to be a possible source of nutrients and sediment. The watershed contains highly productive farming lands. Small, part-time farming operations are most common. Dairy and beef farms, some of which are in close proximity to the creek and tributaries, are also located in the area. Stream and road bank erosion is of concern along other parts of Tobehanna Creek and its tributaries. The Schuyler County SWCD has assisted with streambank stabilization efforts on one trib. (Schuyler Co SWCD, 4/98)

A small campground served by outhouses that was previously noted in the PWL has been closed. Bathing/swimming

is not included as an impaired use because the creek/lake classification of C is not appropriate for swimming. However, loadings from the watershed may contribute to restricted swimming use in Lamoka Lake, located downstream. See Lamoka Lake (segment ID 0502-0001). Because Tobehanna Lake is privately owned, no monitoring to document these possible problems has been conducted. The Schuyler County SWCD and WQCC are presently discussing possible future monitoring efforts. (Schuyler Co WQCC, 4/98)

Although the sits has not bee sampled by the NYSDEC RIBS monitoring program, sampling results from a 2006 Susquehanna River Basin Chemung River Subbasin Survey indicated non-impacted conditions with sensitive species present. Water chemistry results also suggested no indication of impacts at the time of sampling. (SRBC, March 2007)

An old landfill located next to Route 23 has been suggested as potential source of contamination to the creek and lake.

Additional information about water quality issues affecting this waterbody is discussed in Schuyler County's Water Quality Strategy Plan: Guidance for the Future, Edition 5, Schuyler County WQCC, Montour Falls, New York, 1996.

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